ANNUAL REPORT

REPORTING PERIOD:
OCTOBER 15, 2010 TO OCTOBER 15, 2011

IDAHO TRANSPORTATION DEPARTMENT DISTRICT THREE

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)
EPA NPDES PERMIT NO. IDS-028177

JANUARY 13, 2012

SUBMITTED BY:
IDAHO TRANSPORTATION DEPARTMENT DISTRICT THREE

Idaho Transportation Department
District Three

2010-2011 Phase II MS4 Annual Report
Permit No. IDS-028177
January 13, 2012

Introduction

This report identifies the activities undertaken by the Idaho Transportation Department District 3 (ITD) during the current permit year of October 15, 2010 through October 15, 2011, in compliance with the National Pollutant Discharge Elimination System (NPDES) storm water permit issued by the Environmental Protection Agency (EPA), effective on October 15, 2009. This report addresses areas within the Boise and Nampa Urbanized Areas served by the municipal separate storm sewer system (MS4s) owned or operated by the ITD (permittee), which excludes the portion of the permittee's MS4 previously authorized to discharge under NPDES Permit #IDS-027561.

Purpose

The purpose of this report is to document progress toward achieving the minimum control measures identified by ITD's Storm Water Management Program (SWMP). This report is organized in the general order of the SWMP components as specified in the initial EPA permit, first discussion of the General Requirements then Minimum Control Measures. Each component is followed by a summary of how ITD has addressed it.

General Requirements

Part II.C- Due with the first Annual Report

Submit written description of how SWMP actions are targeted to control the discharge of pollutants of concern, and how permittee will evaluate the effectiveness of those actions. A description of how the activities in each of the minimum control measures in Part II.B are targeted to control the discharge of the pollutants of concern, and ensure to the maximum extent practicable that the MS4 discharges will not cause or contribute to an excursion above the applicable Idaho water quality standards. Where activities identified in Part II.B requires multiple years to develop and implement, the permittee must provide updates on progress to date.

The District is responsible for structural controls that include roadways and associated drainage facilities, bridges, roadsides, and traffic control devices. Drainage facilities include gutters, culverts, ditches, swales, pipes, poly drains, French drains, catch basins/inlets, sand and grease traps, edge drains, transverse drains, and retention/detention ponds. Criteria for the design, operation and maintenance of the structural controls that collect, convey, store, treat, or discharge storm water runoff are contained in the Department's *Design Manual, ITD Standard Specifications for Highway Construction, ITD Maintenance Operations Procedures Manual, ITD Maintenance Manual*, and the *2008 Erosion and Sediment Control-Best Management Practices Manual.* All of the aforementioned documents have been formally adopted. During the

last couple of years ITD has revised portions of the Erosion and Sediment Control Manual.

The Department's Design Manual, ITD Standard Specifications for Highway Construction, the Contract Administration Manual, and the 2008 Erosion and Sediment Control-Best Management Practices Manual contain sections devoted to erosion and pollution control measures for application on active construction sites. These BMPs help to minimize the erosion and sedimentation generated during the construction phase of a project. All of these documents have been formally adopted.

ITD maintains and updates the ITD Storm Water Pollution Prevention Plan (SWPPP) Template to account for any internal changes. ITD uses a template format that follows a similar model to that of the EPA revised October 2007 example. This template is intended to help operators by incorporating ITD policies, NPDES Construction General Permit Requirements, and other local, state, and federal rules and regulations into a comprehensive template that functions to help in achieving compliance. The Storm Water Pollution Prevention Plan (SWPPP) Template example was provided in the attachment section of the 2009-2010 annual report. ITD updated and modified its ITD-2802 Storm Water Compliance Inspection form. The revised form was provided in the attachment section of the 2009-2010 annual report. ITD will be moving toward using the October 2007 EPA SWPPP form for 2012.

Parts II.D- (Due with first Annual Report)
Conduct an annual review of SWMP implementation and submit an Annual Report to EPA and IDEQ. Include Storm Water Discharge Monitoring Report (SWDMR).

See Report Requirements at the end of the report for SWMP review and compliance analysis comments. ITD District 3 is currently working on locating the outfalls for the permit area. Once the outfall locations have been completed, monitoring will begin (spring 2012). The SWDMR will be included within this next permit year.

Part IV- Due at the first Annual Report
Develop a Monitoring Plan & Quality Assurance Plan for storm water discharge monitoring; provide written notice to EPA and IDEQ.

A Storm Water Monitoring Plan and Quality Assurance Program Plan (QAPP) for the permit area have been developed and are attached. Standard Operating Procedure including forms, designated laboratory, monitoring station, is pending. ITD will work to complete these tasks within this next permit year.

Storm Water Management Program (SWMP) Minimum Control Measures

Public Education and Outreach
Part II.B.1.a – Due within two years of the permit effective date
Implement an education program to educate the community about the impacts of storm water discharges on local water bodies and the steps that citizens and businesses can take to reduce pollutants in storm water runoff.

Many of the educational materials developed in Phase I can be used for Phase II. ITD Environmental Section has developed and maintains an online web site that contains information and links to NPDES/CGP/Storm water information. This site and corresponding information can be accessed through the following link: http://itd.idaho.gov/enviro/Storm%20water/default.htm

ITD and Clean Watershed Partners have established a storm water public education program which includes developing educational materials, public service announcements ("PSAs") which are aired on local television and radio stations; billboards; and advertising on busses serving inter-county bus routes between Ada and Canyon counties (collectively "Storm Water Education Media");

ITD participates in the educational activities by sharing in the costs of purchasing air time and advertising space for the Storm water Education Media developed and owned by the Partners.

Part II.B.1.b - Ongoing
Throughout the permit term, the permittee must continue to provide relevant and appropriate storm water management education and training for those ITD staff holding positions responsible for maintenance activity and/or field construction oversight. Such staff positions include, but are not limited to resident engineers, staff engineers, and environmental inspectors.

This component is in place. ITD incorporates storm water management into its in-house inspection certification and training courses. Courses include information on inspections to ensure proper BMP installation, maintenance, and use. In addition, federal and state laws as well as local ordinances are used as guides for ITD maintenance operations. The ITD provides a 3-day training course in storm water pollution control best management practices and national Pollutant Discharge Elimination System (NPDES) rules and regulations. This course is generally taken by any of the ITD staff involved with sediment and erosion control oversight and inspection working in the ITD maintenance section, construction inspection, project development or ITD contractors and consultants. The course is developed in accordance with the Transportation Technician Qualification Program (TTQP) and guidance from the Western Alliance for Quality Transportation construction (WAQTC). The course requires a pass/fail exist test (certification) and periodic eight-hour refresher session as required by way of ITD policy for ITD staff responsible for performing construction sites. The course is primarily open to ITD employees, but may also be requested by consultants and contractors involved with ITD projects. In this year's permit cycle ITD provided training to several individuals as follows:

Course Name	Hours/class	Number Trained
Resident Engineer Training	16	27
Environmental Inspector Initial Qualification	24	77
Environmental Inspector Requalification	8	210
Water Pollution Control Manager Training	16	118
Storm Water for Designer Training	16	15
NHI Water Quality Management of Highway Runoff	16	28

ITD has recently developed a specific course to train designers how to prepare Storm Water Pollution Prevention Plans (SWPPP) which provides hands on experience preparing SWPPP narratives and construction plan sheets. The course has been taught throughout 2011.

The District makes available at all project preconstruction conferences an educational brochure titled, "Storm Water Pollution Prevention Plan Questions & Answers That Relate to Ensuring Compliance." This brochure provides answers and information to Operators and contractors on some of the most commonly asked questions relating to Storm Water Pollution Prevention Plan requirements and compliance. See attachments.

ITD has developed and maintains an online web site that contains information and links to NPDES information. This site and corresponding information can be accessed through the following link: http://itd.idaho.gov/enviro/Storm%20water/default.htm

Part II.B.1.c- Due within two years of the permit effective date
Post storm water pollution prevention information on ITD's website

See Part II.B.2.a&b.

Public Involvement and Participation
Part II.B.2.a&b- Due within three years of the permit effective date
Post all SWMP documentation and Annual Reports on the permittee's website. Make hard copies of all SWMP documentation and Annual Reports publicly available at the ITD maintenance yard. Update documentation on website and in hard copy.

Annual Reports are currently being posted on the ITD's website. As the website is developed the materials that can be posted online will be expanded. Hardcopies of the Annual Reports will be made available at the ITD maintenance yard (District 3). Hardcopies and electronic copies will be updated as needed.

ITD also publishes a quarterly storm water newsletter to promote responsible storm water management practices throughout the Idaho Transportation Department. Newsletter articles describe recent storm water violations and settlements throughout Idaho as well as the latest updates in EPA policies. The newsletter provides information for pre-construction and post-construction activities. A different Best Management Practice (BMP) is highlighted in each newsletter and readers are given the chance to test their storm water management IQ with trivia questions.

Part II.B.2.c- Ongoing
The permittee must hold at least one public meeting to solicit public input for each major transportation construction project conducted/overseen by the permittee. A "major construction project" is one that disturbs one acre of land or more.

As a federally funded transportation agency, ITD is bound to implement an effective public involvement process that fulfills multiple legal responsibilities, such as those

required by the national Environmental Policy Act. ITD operates from the Statewide Transportation Improvement Program (STIP) which is a staged, multi-year intermodal program of transportation projects. The STIP is updated annually following a period of public availability. On a project specific basis, each ITD project must address public involvement goals and objectives and fulfill legal responsibilities. The STIP, with all the projects, are made available for public review and comment as part of the STIP process.

Part II.B.2.d-Ongoing
At least annually, the permittee must coordinate, promote and participate in the existing "Adopt a Highway" clean-up program.

ITD has participated in the Adopt a Highway" Program since 1988. The program allows volunteer groups to pick up trash and debris up along a designated segment of highway three times per year. ITD coordinates the logistics and provides trash bags to the group and picks up the bags for disposal in the land fill. This program is continuing.

Illicit Discharge Detection and Elimination
Part II.B.3.a-Due within three years from the permit effective date
Develop, implement and enforce a program to detect and eliminate illicit discharges into the MS4.

Existing ITD training developed for Phase I can be enhanced and taught statewide.

Part II.B.3.b &c- Due within three years from the permit effective date
Adopt an ordinance or other control measure to prohibit illicit discharges to the MS4(s); prohibit any specific non-storm water discharge, if necessary.

Within the ITD jurisdiction state statutes prohibit discharge and dumping into the state right-of-way. Additionally, ITD may require agreements with local jurisdictions or other Phase II Permittees for assistance with police actions in this regard. ITD will review the current policies to determine if further action is required to comply with the terms of the permit.

The Idaho Transportation Board is vested with authority, control, supervision and administration of the Department. Pursuant to Section 40-310 (3), the Board shall "locate, design, construct, reconstruct, alter, extend, repair and maintain state highways, and plan, design and develop statewide transportation systems".

The District controls third-party activities on District rights-of-way through the conditions associated with encroachment permits. IDAPA 39.03.42, "Rules Governing Highway Right-of-Way Encroachments on State Rights-of-Way," provides ITD with access control through a permitting process. The rule defines an encroachment as "any authorized or unauthorized use of highway right-of-way or easements or air space immediately above the highway right-of-way." (IDAPA 39.03.42, 010.30). Encroachment permit conditions require compliance with Federal and State of Idaho standard plans and specifications. Encroachment permits are also conditioned to require

environmental compliance, including implementation of applicable BMPs comparable to those required of ITD.

The rule contains specific provisions controlling drainage and storm water. When border area work is permitted, the rule requires "that adequate sight distance, proper drainage, desirable slopes for maintenance operations, and a pleasing appearance are provided." (IDAPA 39.03.42, 400.12). The rule provides ITD with additional drainage control through the requirement that "All approaches shall be graded so that private properties abutting the highway right-of-way do not drain onto the traveled way, do not impair the drainage within the right-of way, alter the stability of the roadway subgrade or materially alter the drainage of areas adjacent to the right-of-way. Post-development drainage flows shall not exceed predevelopment drainage flows." (IDAPA 39.03.42, 400.13.a.). ITD's addition of a Development Services Section provides a formal opportunity to review and provide comments from ITD to land use agencies and developers with input from the Environmental Section.

An approved right-of-way encroachment permit is required for irrigation or drainage within state highway right-of-way (IDAPA 39.03.42,600.01) and Best Management Practices (BMPs) are required to temporarily control for erosion and sediment (IDAPA 39.03.42, 600.04).

Unauthorized and nonstandard encroachments are prohibited and they may be removed or their use may be suspended (IDAPA 39.03.42, 800.02). It is this provision that gives ITD the authority to control illicit discharges and illegal connections to their MS4.

The District will coordinate with other permittees on storm water management responsibilities, especially when discharges from one permittees system flow to storm water systems owned and operated by another permittee. Coordination is implemented through formal and informal discussions, meetings, agreements and procedures. This coordination includes attending meetings, participating in special studies, identifying storm water run-on issues, reporting spills, etc.

Part II.B.3.d- Due within three years from the permit effective date
Develop/update a comprehensive storm sewer system map.

ITD is assessing options to acquire the information for mapping including using existing staff, consultants or partnering with other jurisdictions.

Part II.B.3.e- Due within three years from the permit effective date
Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

See Public Education and Outreach Section above. Much of this component has been developed under Phase I and is available in the Phase II permit area. ITD will work explore working with other permittees in the Phase II area.

Part II.B.3.e- Due within three years from the permit effective date
Begin dry weather screening of outfalls. 20% of outfalls screened for dry weather flows by the end of the permit expiration date.

No action has been taken for this component.

Part II.B.3.e- Due within three years from the permit effective date
Inventory the industrial facilities discharging storm water to the MS4.

No action has been taken for this component.

Construction Site Storm Water Runoff
Part II.B.4.a- Due within three years from the permit effective date
Develop, implement and enforce a construction site runoff control program for sites disturbing one or more acres of land.

This program is well on its way in the development process.

Part II.B.4.b- Ongoing
Provide oversight to ITD contractors regarding CGP.

ITD has oversight on all department construction projects. ITD D-3 conducts inspections of construction sites to ensure compliance. ITD D-3 has developed a database of all active and completed construction sites permitted within ITD jurisdiction.

Language addressing storm water control and Clean Water Act compliance is included in ITD construction project contracts. Specific information concerning contractor responsibility for the containment and management of storm water is included in the Special Provisions section of the construction contract.

Part II.B.4.c- Due within three years from the permit effective date
Adopt an ordinance or other control measure to require construction site operators to practice erosion, sediment and waste control.

ITD has contractual language in place which refers to compliance with the Clean Water Act and other local, state and federal laws. Exploration of additional control measures such are being considered within the authority of the State.

Part II.B.4.d- Due within three years from the permit effective date
Distribute written requirements for construction site best management practices for new building and service area construction.

ITD maintains an Erosion and Sediment Control Manual that is available to contractors and the public.

Part II.B.4.e &f- Due within three years from the permit effective date
Develop, or review and update as necessary, procedures for reviewing site plans and accepting public input.

No action has been taken on this component.

Part II.B.4.g- Due within three years from the permit effective date
Implement site inspection & enforcement procedures. Inspect all construction sites >5 acres at least once per construction season. Develop a written policy identifying how construction sites disturbing < 5 acres will be prioritized for inspection.

ITD District 3 has secured funding to create a Storm water Coordinator position at the district. Responsibilities and duties will include site inspection and developing storm water procedures relating to all ITD District 3 construction sites.

Part II.B.4.h- Due upon permit effectiveness
Ensure all permittee-owned construction projects comply with EPA's Construction General Permit.

ITD through contract language, training, and QA/QC procedures is being more vigilant in maintaining well controlled construction sites. A Clean Water Act Contractors Note (submitted with the 2009-2010 permit) has been revised to provide more clarity in the contracts regarding NPDES Construction General Permit Requirements. Efforts are made to document inspections accurately and get the changes required in the field within the limits of the permit and/or Consent Decrees. See also Part II.B.4 and Part II.C

Post Construction Storm Water Management
Part II.B.5.a-Due four years from the effective date of this permit.
Develop and implement a program to address post construction storm water runoff from new development and redevelopment projects.
No action has been taken for this component.

Part II.B.5.b-Due four years from the effective date of this permit.
Adopt an ordinance to address post-construction runoff from new development and redevelopment projects.

No action has been taken for this component.

Part II.B.5.c-Due no later than the permit expiration date.
Ensure proper long term operation and maintenance of post construction storm water BMPs.

No action has been taken for this component.

Part II.B.5.d-Due no later than the permit expiration date.
Develop and implement a site plan review process and inspection program to ensure proper installation and long-term operation and maintenance of post-construction storm water management controls.

No action has been taken for this component.

Pollution Prevention and Good Housekeeping
Part II.B.6.a-Due four years from the permit effective date.
Develop and implement an operation and maintenance program intended to prevent or reduce pollutant runoff from municipal operations.

No action has been taken for this component.

Part II.B.6.b- Due four years from the permit effective date and once per year thereafter.
Develop and conduct appropriate training for ITD personnel.

No action has been taken for this component.

Part II.B.6.c-Due four years from the permit effective date.
Develop SWPPP for ITD's maintenance yard/street department site.

No action has been taken for this component.

Report Requirements- IV.C.2.a
a) Assess compliance with the permit and progress towards achieving the identified actions and activities for each minimum control measure in Parts II.B and II.C.

After review of the SWMP and ITD's progress toward achieving actions and activities for the minimum control measures, ITD has not completed all things required for compliance due to the Storm Water Monitoring Plan and a QAPP not being finalized. Several elements of the plans need to be completed as discussed in Part IV under General Requirements above. In order to address those issues ITD has hired another person to work on NPDES which greatly increases our abilities to meet the conditions of the permit. An in depth assessment of the ITD resources for implementation is required. This will include consideration of the ITD's expertise and if there is a need to consult parts of the work out to get the work done by October 15, 2012. Investigation and field analysis to identify an appropriate outfall for monitoring and research for a laboratory to meet our needs is also required.

b) Results of any information collected and analyzed during the previous 12 month period, and any other information used to assess the success of the program at improving water quality to the maximum extent practicable;

There has been no information collected or analyzed during the previous 12 month period.

c) A summary of the number and nature of inspections, formal enforcement actions, and/or other similar activities performed by the permittee;

Within the current permit year, nine projects were managed by the District in the MS4 permit area (listed below). All of the projects listed regardless if completed or not have had ongoing inspections and monitoring to ensure temporary and final erosion and sediment control best management practices are working or that final stabilization measures have occurred. Ongoing

inspection monitoring provides a tool to help in obtaining compliance with the Construction General Permit and SWPPP requirements. ITD has conducted the following inspections on projects within the MS4 permit area:

- I-84 Franklin Blvd. To 11th Ave has had 47 inspections and is currently under construction
- Garrity Interchange, Nampa has had 65 weekly inspections conducted and is currently under construction.
- North Middleton Rd, Jct. SH-44 to Mill Slough and Int. Highland Rd, Middleton has had 22 total inspections conducted (this project was completed and terminated).
- 11th Ave Underpass, Nampa has had 54 weekly inspections conducted (this project was completed and terminated).
- Ten Mile Road Interchange has had 115 inspections conducted (this project was completed and terminated).
- Franklin Road and Cloverdale Road Intersection has had 51 inspections and is currently under construction.
- I-84 10th St. IC to Franklin Rd. IC has had 16 Inspection conducted (this project was completed and terminated).

Copies of inspection forms are kept on file in the District's Operation File. No citations, notice-of-violations, or stop work orders have been issued by the District with respect to NPDES or other erosion and sediment control issues. Educational materials and other outreach events relevant to the NPDES permit are cosponsored by ITD D3 and provided by Boise City.

d) A summary list of any water quality compliance-related enforcement actions received from regulatory agencies other than EPA. Such actions include, but are not limited to, formal warning letters, notices of violation, field citations, or similar actions. This summary should include dates, project synopsis, and actions taken to address the compliance issue(s);

There have been no water quality compliance-related enforcement actions to report.

e) Copies of education materials, ordinances (or other regulatory mechanisms), inventories, guidance materials, or other products produced as a result of actions or activities required by this permit;

See attached.

f) A description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable water quality standards to the maximum extent practicable;

Monitoring is scheduled to begin the spring of 2012.

g) Notice if the permittee is relying on another entity to satisfy any of the permit obligations, if applicable;

Not applicable at this time.

h) A description of the location, size, receiving water, and drainage area of any new MS4 outfall(s) owned or operated by the permittee added to the system since the previous annual reporting period.

There are none to report.

Annual Report Certification

Idaho Transportation Department District 3 Municipal Separate Storm Sewer System
NPDES Phase II 2010-2011 Permit Year
Permit No. IDS-028177

Boise and Nampa Urbanized Areas,
Ada and Canyon County, Idaho

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

Name/Title
Dave Jones, District 3 Engineer
Idaho Department of Transportation

1-13-12
Date

APPENCIES

A. Storm Water Monitoring Plan
B. Quality Assurance Program Plan (QAPP)

ATTACHEMENTS

1. Updated ITD 2802 Storm Water Compliance Inspection form
2. Informational Flyer

APPENDIX A

Storm Water Monitoring Plan

STORM WATER MONITORING PLAN
BOISE AND NAMPA URBANIZED AREAS
ADA AND CANYON COUNTY, IDAHO

NPDES PERMIT NO. IDS-028177

IDAHO TRANSPORTATION DEPARTMENT DISTRICT 3
MUNICIPAL SEPARATE STORM SEWER SYSTEM
NPDES PHASE II PERMIT

JANUARY 2012

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1 Site Description Documentation
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EXECUTIVE SUMMARY

This storm water monitoring plan outlines the Idaho Transportation Department's District 3 (ITD) approach for storm water quality monitoring as required by the National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Phase II Permit (Permit).

The Permit requires that a Storm Water Monitoring Plan (Plan) be developed. The Plan is designed to direct the collection and analysis of samples necessary to monitor the quality of storm water discharges from the Municipal Separate Stormwater Sewer System (MS4). The permittee must develop and implement a monitoring program to:

- Estimate the pollutant loading currently discharged from the MS4;
- Assess the effectiveness and adequacy of control measures implemented through the Permit; and
- Identify and prioritize those portions of the MS4 requiring additional controls.

Compliance with these permit conditions will be evaluated each year and the findings documented in each year's annual reports. Monitoring priorities and objectives will be updated based on the results of the evaluation. As the objectives of the program are updated during the five-year monitoring period, it is anticipated that portions of the monitoring plan will be adjusted to address these additional objectives.

To meet these objectives, one monitoring site will be selected and a Monitoring Plan developed. The monitoring site will be selected based on two sets of criteria: meet the objectives of the monitoring program and meet minimum technical and operational requirements to ensure the quality of the data collected and the safety of the Field Personnel.

The permit requires that a sample be collected from the site and analyzed for selected constituents that can be collected with manual grab sample methods. The sample should be collected within the first two hours of measured storm water runoff to capture the "first flush". Procedures for obtaining manual grab storm water sample are described briefly in Section 3.2 in this Plan. The site will be equipped with a flow meter that will be used to record flow during each storm event and dry weather monitoring.

As required by the permit, a minimum of four samples will be collected in each calendar year. The Permit has identified the following periods that should be sampled for storm water quality:

- March – April
- May – June
- July – August
- September – October

If extenuating circumstances occur (lack of rainfall, inaccurately forecasted storms, equipment malfunction…etc) and one or more of the targeted periods are not sampled, samples may be collected during other months of the water year to meet the minimum requirements of four sampled storm events in a calendar year.

The Plan also provides descriptions of storm selection procedures, weather forecasting, obtaining rainfall data, estimating runoff volumes and runoff coefficients, preparing for a sampling event,

managing a sampling event, and procedures for collecting and transferring samples to the laboratory.

Samples will be analyzed for the following constituents:

- Total Suspended Solids (TSS);
- Total Nitrogen;
    - TKN
    - Nitrate+Nitrite
- Total Phosphorus; and
- Bacteria: *E. coli*.

Each sampling effort will also include the collection of the following field parameters:

- Temperature;
- pH;
- Conductivity; and
- Dissolved Oxygen (DO).

Field and laboratory activities will be conducted according to the *Quality Assurance Program Plan for NPDES Phase II Storm Water Permit Monitoring, Boise and Nampa Urbanized Area, Ada and Canyon County, Idaho* (QAPP). Quality assurance and quality control (QA/QC) plans are integral parts of the monitoring program. Field QA/QC samples will be collected and analyzed to help identify potential sources of introduced error in the storm water sampling process. Water quality analysis will be performed by a qualified laboratory.

Data quality objectives are outlined in the QAPP. All data sampling, handling, results management, and interpretation will follow the established data quality objectives defined for this program. The data collected as part of the sampling program will include rainfall data, runoff volumes, runoff coefficients, field analytical data, laboratory analytical data, and QA/QC results. All data collected as part of this monitoring program will be stored in electronic format on a secure server with an associated portable document format of laboratory analytical reports and the data will be entered into a Microsoft Excel spreadsheet.

SECTION 1 INTRODUCTION

On September 4, 2009, the EPA issued a signed *Authorization to Discharge under the National Pollutant Discharge Elimination System*; permit number IDS–028177 to ITD, effective October 15, 2009. The Permit requires the development and implementation of a storm water quality monitoring program throughout the five-year term of the permit. This document is intended to briefly summarize the objectives of the monitoring program and provides detailed descriptions of the activities that will be performed to meet the requirements, outlined in Part IV of the Permit.

1.1 BACKGROUND

The Permit area is described as "all areas within the Boise and Nampa Urbanized Areas served by the MS4s owned or operated by ITD, excluding the portion of the permittee's MS4 previously authorized to discharge under NPDES Permit #IDS-027561." The permittee is required to develop and implement a Storm Water Management Program (SWMP) "to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), and to protect water quality in receiving waters". As part of this SWMP the permittee is required to conduct storm water discharge monitoring to determine whether storm water discharges are contributing constituents of concern, either directly or indirectly, to the Boise River or any associated tributaries. Part IV of the permit outlines the requirements for the storm water monitoring plan.

The Permit also requires the permittee to develop a *QAPP* for the monitoring program. The *QAPP* describes in detail the quality assurance and quality control (QA/QC) measures to be followed in the planning, sampling, analytical, and data management aspects of the program. A brief overview of the QA/QC procedures for the field sampling and data handling aspects of this program is included in Section 6.

1.2 MONITORING PLAN OBJECTIVES

This storm water monitoring plan is designed to direct data collection efforts to assist in meeting the following permit objectives:

- Estimate the pollutant loading currently discharged from ITD's MS4s;
- Assess the effectiveness and adequacy of control measures implemented through this permit; and
- Identify and prioritize those portions of the MS4 requiring additional controls.

SECTION 2 STORM WATER SAMPLING SITES

This section describes the methods used to select sites for flow measurements, storm water quality sampling, and rainfall quantity monitoring. This section also summarizes the characteristics of the selected monitoring sites.

2.1 SITE SELECTION

Lower Boise River Total Maximum Daily Loads (TMDLs) will be considered for the establishment of the selection criteria and site selection. Existing resources were reviewed and analyzed according to monitoring objectives including; existing mapping information; existing water quality monitoring data; available land use data; and future road work in the area according to the *ITD Five Year Work Plan (2011-2015)*.

A map identifying the tributaries to the Boise River, including Lake Lowell, that flow through the Phase II area and outfall locations will be developed and characteristics of the outfalls will be reviewed and screened (no mapping due or completed during this stage of the permit). Priority will be given to 303d listed tributaries. The following criteria will be used to refine the review process and limit the number of potential outfalls for consideration:

- Watershed area of 10 acres or less;
- Discharge to pond; and/or
- Discharge pipe size is smaller than 12 inches in diameter.

Outfall locations that met any of the preceding criteria will be eliminated as potential sampling sites due to difficult sampling conditions or the inability to fulfill the intention of the permit requirements.

Outfalls remaining after this review process will be subjected to additional selection criteria. The following is a list of additional selection criteria to be used in determining sites:

- Land use;
- Access – Private vs. ITD Right of Way;
- Pipe size;
- Pipe configuration;
- Water quality treatment;
- ITD roadway projects in the Watershed;
- Phase I monitoring waterbody;
- TMDL waterway; and
- Travel time to site.

Many of these criteria relate to ability to collect data and install equipment such as accessibility of the site for sampling and consideration of installation of equipment and/or suitability for accurate flow measurements.

2.2 SITE DESCRIPTIONS

A total of one compliance monitoring location will be identified. The site will be equipped with a dedicated flow meter that continuously collects flow data to help estimate total discharge from the sub watershed. Detailed site descriptions, location characteristics and sampling location for the site will be provided below. The general location of each monitoring site will be presented in the Figure section of the SWMP when determined. The Table section will provide a summary of the site location, land uses, drainage system types, approximate catchment areas, and receiving waters.

Station A(to be determined)

SECTION 3 SAMPLING EQUIPMENT

This section describes the sampling equipment that will be used to collect grab samples.

3.1 FLOW METERS

The sample location will be equipped with a permanently installed and maintained flow meter to measure continuous flow from the discharge pipes throughout the year. Flow is determined by measuring the depth and velocity of storm water through a pipe cross section. The flow meter uses the continuity equation to convert the depth and velocity to flow.

For storm sampling events, the flow meter will be downloaded and the battery checked for operational charge. The flow meter will then be restarted to record continuous flow during the storm event.

3.2 COLLECTING GRAB SAMPLES

As defined by the Permit, all storm water samples collected will consist of discrete grab samples. Grab samples will be collected using a swing sampler or approved equal. Quality assurance procedures require that transferring storm water samples from one sample container to another be minimized in the field. Storm water samples will be transferred between sample containers only in situations where insufficient flow necessitates the collection of multiple grab samples to meet the required volume of each sample container. Standard operating procedures for low flow discrete grab sample transfers will be included in Appendix 2. In all other situations, the samples will be collected directly in the appropriate sample container. Each sample container will then be capped, labeled (time, date, and site name), and stored in a cooler on ice. Standard operating procedures associated with the collection of discrete grab samples and the use of a swing sampler will be included in Appendix 2 when developed.

The following field parameters will be measured with each grab sample suite: temperature, pH, conductivity and dissolved oxygen. A Horiba U10 multiparameter meter or equal will be used to measure all parameters. The calibration and use of the Horiba or other meters will follow manufacturer standard operating procedures included in Appendix 1. All field parameter results will be recorded on program specific field forms included in Appendix 3 when developed.

3.3 COLLECTING RAINFALL DATA

Rain gauge with a data logger may be used in the monitored drainage watershed, near the sample location if there is not a weather station near the sample site. The logger will continually record precipitation representative for each monitored watershed. Recorded data from the logger will be downloaded monthly and following sampled storm events. The site will be equipped with a Global Water tipping bucket and two rain event loggers. A primary and a backup recording device for each gauge will be used to ensure the accuracy of precipitation measurements. The tipping bucket is fastened to the top of a pole approximately 10 ft. above ground, in an open area near the sample location to get the best estimate of rainfall. The information obtained from the site specific logger will be used in support of rainfall data collected from the National Weather Service or other weather service.

Section 4 Storm Event Sampling

This section outlines the procedures for obtaining manual grab storm water samples. Grab samples will be used to measure a specific set of storm water quality parameters from only one point in time during an event. Storm event sampling consists of numerous tasks: weather forecasting, station and equipment setup, collecting grab samples, and station shutdown.

4.1 WEATHER FORECASTING, STORM SELECTION AND STORM INITIATION

Weather Forecasting and Storm Selection

Weather forecasting and storm selection is an important aspect of monitoring in an arid, high desert environment. Weather forecasting, storm frequency, intensity, duration and time of year of storm events have been evaluated as part of the NPDES Phase I permit management process. The program specific selection criterion was developed in response to the inconsistent and difficult to forecast convective storm events that generally occur in this area. These events tend to be more localized and intense and rarely disperse precipitation evenly over a large area. Spring, winter and fall storm events can be tracked more easily and are traditionally more predictable. For this reason, ITD will discuss mid-term and long-term forecasts, storm selection criteria, staffing and event preparedness requirements on a regular basis, as described below. These criteria will become program guidelines.

ITD personnel or designee will obtain daily precipitation observations and weather forecasts each morning and compare them to an established set of storm selection criteria. Weather information will ordinarily be obtained from the National Weather Service (NWS); however, supplemental information may also be obtained from site specific rain gauges and other published sources. The current storm selection criteria specify that a targeted storm:

- Have a 60% or greater probability of measurable precipitation;
- Have a predicted precipitation amount of greater than 0.10 inch within a 24-hour period, in the Boise and Nampa Urbanized areas; and
- Be preceded by a minimum of 72 hours of dry weather (less than 0.11 inch of precipitation).

Certain storm selection criteria may be modified, as directed by ITD, based on long-range forecasts, staff availability, holiday schedules, summer storm frequencies and the progress of sample collection in relation to permit requirements.

Storm Initiation

If all current storm selection criteria appear to be met, ITD will call the NWS-Boise office and speak with the Lead Forecaster on shift to obtain detailed forecast information on the approaching storm. This often includes;

- Anticipated start time of the storm;
- Expected storm intensity and duration;
- Amount of precipitation expected;
- Storm tracking information and recorded observations; and
- Agreement and trends of various forecasting models.

ITD will determine if the upcoming storm will be targeted for sampling.

To allow sufficient time for Field Personnel, equipment and station setup during daylight hours, the decision to sample a forecasted storm must be made at least 4 hours prior to the estimated precipitation start time. If a storm is estimated to begin during the night or early the next morning, a decision must be made by 2 pm the day before the storm is forecasted. If a storm is forecasted to occur during the weekend, ITD Program Coordinator and Field Personnel will confer on the Friday before the weekend to arrange a schedule for discussing forecast updates and possible station setup.

Once a storm water monitoring event is initiated, the following storm monitoring responsibilities will be performed according to sampling roles, as follows:

- ITD or designee will Record weather forecast and other pertinent information on Sampling Event Communication Form Appendix 3 (pending) and email to sampling members and laboratory personnel;
- ITD or designee will monitor weather information with increased frequency as the storm approaches on the Internet and from NWS meteorologist;
- The ITD or designee will notify the Field Personnel when precipitation begins;
- ITD or designee will review post-storm data to determine if the storm satisfies the Permit requirements; and
- ITD will decide if storm tracking should continue after insufficient precipitation is received within the expected timeframe.

Selection criteria may be relaxed with the approval of the ITD Program Coordinator.

4.2 Station Setup and Dry Weather Sampling

The station set up process requires the completion of two phases of preparation before mobilization can begin.

Setup

Once a storm meets the criteria to be targeted, ITD or designee will perform the following tasks:

- Ensure field boxes are stocked with necessary sampling supplies;
- Ensure coolers are stocked with appropriate containers and accurately labeled;
- Ensure field meter(s) are calibrated;
- Ensure charged laptop is available for station setup downloads;
- Ensure supplies adequately stocked for the event (i.e. acid and ice);
- Ensure adequate field staff available for sampling event;
- Ensure sampling and setup forms are available for Field Personnel; and
-

Upon completion of these tasks by ITD or designee, Field Personnel will initialize set up of the monitoring location. The following activities will be conducted at the site prior to the start of measured runoff:

- Observe if dry weather flow is present at the outfall;
- Ensure flow meter is recording depth and velocity measurements;
- Download the flow meter;

- Restart the flow meter;
- Check the battery; and
- Collect dry weather samples from the location.

Flow Meter

The Field Personnel will download the recorded dataset from the flow meter to a dedicated, program-specific laptop using the standard operating procedures outlined in the Flow Meter manual.

After the data is successfully downloaded, the program will be restarted and the battery checked to ensure that ample battery power reserves to sustain flow meter operations throughout the entirety of the storm event.

Dry Weather Sampling

Dry weather sampling will be conducted before each targeted storm event to determine base flow characteristics. The Field Personnel will collect a grab sample from the discharge outfall using the same sampling procedures identified in the storm event sampling aspect of this plan. The results of the dry weather sampling will be compared to the results of the storm water sampling in an effort to determine the pollutant loading associated with storm water runoff. When completed, Table 2 will outline the water quality parameters that will be measured during dry weather sampling. Appendix 2 (pending) will includes the standard operating procedures associated with the base flow, dry weather discrete grab sampling efforts. Following collection, the samples will be labeled with the date, time, and location name and placed on ice in a cooler. A completed Chain-of-Custody (CoC) form will accompany the samples to the laboratory. A sample CoC form will be included in Appendix 3 when completed. *E. coli* will be submitted for analysis because of holding time restraints. All other samples will be placed on hold until the completion of storm water sampling activities associated with the submitted samples. When the entire set of wet and dry weather samples are submitted to the laboratory, the hold will be removed.

Field forms have been created for each aspect of the setup process. The Field Personnel or a designee will be responsible for the completion of these field forms.

4.3 MOBILIZATION

Mobilization will be authorized by the Field Coordinator when there is ample evidence that measureable storm water runoff is imminent at the sample location. The Field Personnel will decide when measurable runoff has begun. The Field Personnel will initiate the mobilization process.

4.4 STORM WATER SAMPLING

The Field Personnel will consist of a two who are qualified as defined in the QAPP. The Field Personnel will be responsible for the collection of grab samples and field parameters according to standard operating procedures included in Appendix 2 (pending). The Field Personnel will also follow safety procedures while sampling. The Field Personnel will record all field

operations and water quality measurements in accordance with the field sheets established for this program. At the monitoring station, the sampling team will:

- Collect grab and, if necessary, quality control (QC) samples;
- Measure and record field parameters and other observations on the dedicated field forms;
- Communicate with the Program Coordinator to increase the ability to adapt sampling strategies to field conditions;
- Troubleshoot equipment problems;
- Deliver samples to the designated laboratory; and
- Return sampling equipment to the ITD equipment shed.

The Field Personnel will review the CoC and field forms for completeness and accuracy and coordinate with the laboratory regarding samples submitted. Samples of the program specific field forms will be included in Appendix 3, when completed.

4.5 Sample Handling and Delivery

Once grab samples have been collected in the field, they will be labeled and placed in coolers with ice in accordance with sample handling procedures outlined in Table 2 (pending) and the *QAPP*. Bottle labels will include date and time of sample collection and name of the station where the sample was collected. The CoC forms will be completed with an entry for each of the bottles collected, and the bottles will be delivered to the designated laboratory.

4.6 Station Shutdown

After each storm event, station shutdown activities will be completed by ITD Field Personnel. The station shutdown process includes downloading the flow meter and as applicable, rain gauge at the monitoring stations. The Field Personnel will also complete a station shutdown checklist Appendix A (pending) to ensure that all equipment is in working order and recorded values are valid based on equipment condition. The following list of tasks is to be completed during shutdown:

- Halt program on flow meter;
- Download data from flow meter to a program specific laptop;
- Identify the specific laptop that the data is downloaded to;
- Restart flow meter program at Station A;
- Note battery charge level in volts; and
- Turn off the flow meter and remove the battery at the sample location;

Section 5 Parameters, Methods and Rationale for Chemical Analyses

This section of the monitoring plan provides a general description of the targeted constituents of concern and field parameters, a rationale for why the parameters were selected, and the analytical methods that will be used by the laboratory. Selection of parameters included in the sampling program is based on the requirements of the Permit. The parameters and their associated analytical methods will be summarized in Table 2 when completed.

Pollutants of concern in the lower Boise river watershed are phosphorus, sediment and bacteria. These pollutants have been identified as the source of impairment in water quality-limited listings for the lower Boise River and its tributaries. Water quality improvement plans (i.e., TMDLs and Implementation Plans) have been developed for each of these parameters. These plans establish load and waste load allocations that are designed to reduce overall pollutant loading to levels needed to meet in-stream water quality targets and criteria.

5.1 ANALYTES

Total Suspended Solids (TSS)

Rivers and streams in their natural state carry sediment loads. Solids can be present in the water column in a dissolved phase as well as the particulate, or suspended phase. In general, TSS is considered a pollutant when it significantly exceeds natural concentrations and has a detrimental effect on water quality and/or beneficial uses of the water body. Portions of TSS will settle out of the water column depending on the size of the particle and the velocity of the water. These settleable solids can blanket the bottom of water bodies and damage invertebrate populations, cover gravel spawning beds, clog the gill structures of young trout and salmon, change the pattern of the channel and in some cases lead to the reduction of channel capacity. TSS may also result in fish stress, altering their behavior and movement patterns in turbid waters. Sediment that remains suspended in the water column diminishes light penetration, reducing the depth of the zone where primary production occurs and potentially reducing the amount of food available for fish. TSS near the surface can also cause an increase in water temperature, scatter light (as measured by turbidity) and reduce water clarity. TSS can create an environment where toxic heavy metals and organic compounds tend to attach onto fine particulate matter. The Permit requires an estimate of the annual pollutant loads for TSS.

Nitrogen (Total Kjeldahl Nitrogen, Nitrate and Nitrite)

Nitrogen is used as a nutrient by algae and aquatic plans. With decomposition of plant cells, some nitrogen may be released immediately through bacterial action for recycling within the biotic community, while the remainder may be deposited with sediments.

In nature, organic compounds (*e.g.*, proteins, peptides, nucleic acids, urea) decay to ammonia and then to nitrate and nitrite.

Nitrogen can reach natural waters through the application of inorganic lawn fertilizers, agricultural fertilizers and animal waste, municipal/industrial wastewater, septic tanks, leachate from waste disposal in dumps or sanitary landfills, atmospheric fallout, nitrate discharges from automobile exhausts and other combustion processes, decay of vegetation, and natural sources such as the mineralized organic matter in soils. Nitrate (NO3) is very mobile and is usually difficult to treat utilizing storm water BMPs. The Permit requires an estimate of the annual pollutant loads for total nitrogen.

Total nitrogen is made up of organic nitrogen, ammonia nitrogen, nitrate and nitrite. Total Kjeldahl Nitrogen (TKN) measures organic nitrogen and ammonia nitrogen. Nitrate+nitrite measures the nitrate and nitrite levels in the sample. The sum of the results from the two measurements (TKN and nitrate+nitrite) will be reported as total nitrogen.

Phosphorus

Phosphorus is taken up by algae and vascular aquatic plants and, when available in excess of the plant's immediate needs for metabolism and reproduction, can be stored in the cells. When plant materials decompose, phosphorous compounds are released. Some of these compounds are recycled within the biotic community. Other phosphorus compounds are relatively resistant to biodegradation and tend to sink to the bottom of the water. These compounds will degrade slowly over time. Non-point sources of phosphorous include lawn fertilizers, agricultural fertilizers and animal waste, leachate from septic tanks, waste disposal dumps, sanitary landfills, decay of vegetation, and natural sources such as the mineralized organic matter in soils. The Permit requires an estimate of the annual pollutant loads of total phosphorus.

Bacteria
E. coli is a bacterium which is present in the intestines and feces of warm–blooded animals. It is considered to be an indicator of human pathogens. Humans engaging in contact activities in pathogen–contaminated water may suffer eye and skin irritation from direct contact and gastrointestinal diseases from water ingestion. Sources of bacteria can include droppings from wild and domestic animals, leaking sewer pipes, and septic tank leachate. The Permit requires an estimate of the annual pollutant loads of *E. coli.*

5.2 FIELD PARAMETERS

Temperature
The temperature of receiving waters depends on atmospheric conditions, the source of stream water, the volume of flow and the extent of shading by vegetation. Temperature levels are important for several reasons: 1) it affects the ability of aquatic life to survive and reproduce effectively; 2) higher water temperatures reduce the solubility of oxygen in water, thus reducing the amount of dissolved oxygen levels; 3) increased temperatures accelerate the biodegradation of organic material, thereby increasing demands on dissolved oxygen resources; and 4) low dissolved oxygen levels resulting from increased water temperatures increase the toxicity and mobility of pollutants, such as heavy metals.

pH
The pH value is a measure of the hydrogen ion concentration in water. The impact of pH can be significant. The concentrations of many contaminants in solution, heavy metals in particular, are governed by the pH of the water. A large number of precipitation, dissolution, oxidation-reduction and complexation reactions are intimately linked to the pH value. Changes in pH value, such as the mixing of aggressive and acidic storm water with receiving water can often have a significant effect on the concentrations of dissolved contaminants. Toxicity of ammonia, for example, is often a function of the pH.

Dissolved oxygen
Dissolved oxygen is essential to the metabolism of all aerobic aquatic organisms. Dissolved oxygen concentrations in water vary with atmospheric and hydrostatic pressure, oxygen demand (BOD_5 and COD), water temperature, photosynthetic activity, and re-aeration through turbulence. In addition to meeting the needs of aerobic organisms, high dissolved oxygen levels can decrease the toxicity and mobility of pollutants.

SECTION 6 QUALITY ASSURANCE AND QUALITY CONTROL

The measurement of chemical constituents at the trace level is often difficult due to inherent properties of environmental samples, field sampling techniques and analysis techniques. A detailed *QAPP* has been prepared to facilitate the collection of valid data. Key features of that plan will include:

- Establishment of Data Quality Objectives;
- Written standard operating procedures for field and laboratory tasks;
- Routine instrument calibration and equipment maintenance;
- Field QA/QC samples for monitoring data quality;
- Standardized data recording forms;
- Sample Chain-of-Custody procedures and forms;
- Use of standard analytical procedures; and
- Data management and validation.

Descriptions of some of the basic features are presented in the following sub-sections.

6.1 FIELD QA/QC

Field QA/QC samples include field blanks and field duplicate samples. A field blank is a sample prepared in the field using Type I reagent water and the appropriate preservatives. It is transported in the same cooler as the field samples, and serves as a check on the cleanliness of field conditions. A field duplicate is a second sample collected at the same time and in the same manner as the first sample. Field duplicate pairs provide information about the repeatability of sampling and analysis. For this project, field duplicates will be partially "blind," *i.e.* they will be assigned arbitrary sample names and collection times, making it more difficult for the laboratory to identify the duplicate pairs. Specific naming conventions will be outlined in the *QAPP*.

All of the samples associated with this program are discrete grab samples. Table 3 (pending) will present the QA/QC schedule for the program for the next five years. The data quality objectives for this program require a field duplicate schedule that offers reliable information on the repeatability of the grab sample method implemented. For this reason, 25-40% of the samples will have accompanying field duplicates and field blanks to ensure that field sampling data quality objectives are met.

6.2 LABORATORY QA/QC

All laboratory analyses will be performed by a designated laboratory. Once a laboratory is selected their QA/QC procedures will be incorporated into the QAPP for this program.

Laboratory QA/QC procedures will vary somewhat according to the analysis performed, but will always include instrument calibration. They will also, typically include analysis of method blanks and laboratory control samples. Method blanks are aliquots of analyte–free reagent water that are subjected to the entire analytical procedure in order to identify possible laboratory

contamination. Laboratory control samples are aliquots of analyte–free reagent water that have been spiked with known amounts of selected target compounds. These samples are often analyzed in duplicate pairs, and serve to demonstrate that the analytical procedures and instruments are performing with suitable accuracy and precision.

6.3 DATA VALIDATION

Results of the QA/QC program described above will be reviewed after each storm event. In the event that data quality objectives are not met, the datasets will be flagged in the database and the results explained in the annual report.

SECTION 7 DATA MANAGEMENT AND REPORTING

All data collected as part of this monitoring program will be stored in electronic format for easy retrieval, data interpretation, graphing, and amendment with future data collection results. Initially, the data will be manually entered into a Microsoft Excel file. Electronic data files will be required from the lab and stored on a secure server with the PDF versions of the lab analytical reports. Data collected as part of the sampling program will include rainfall quantity data, runoff volumes, runoff coefficients, field analytical data, laboratory analytical data and QA/QC results. All data will be formatted according to preset standards in order to interface with the potential database storage and parameter evaluation procedures. Specific reporting procedures are provided below.

7.1 DATA MANAGEMENT

The potential relational database will be used to organize the following information:

- Monitoring station data: name, location, drainage area, land use classification, land use distribution, conveyance system (e.g., piped or open channel) and receiving water;
- Storm event data: data, sampling conditions (e.g., wet or dry weather), volume of rainfall, duration of event and antecedent dry period; and
- Storm water quality data: laboratory results, units of measure, type of sample (e.g., grab), laboratory method, detection limits and QA/QC results.

Formal recordkeeping requirements are located in Section A9 of the accompanying QAPP for this program. After each storm event the data collected during the event will be managed by ITD or designee in accordance to the following list:

- Downloaded Loggers using ;
- Verify agreement between primary and backup loggers;
- Import data into Microsoft Excel and update rain gauge charts;
- Create flow report for each site ;
- Report includes level, velocity, flow and flow meter program settings.

After each storm event the following data will be checked and stored on the ITD server.

- Copies of the Set-up/Shut-down Checklist Forms;
- Copies of Grab Sample Data Forms;
- Copies of CoC forms;
- Paper copies of weather forecasts;
- Electronic copies of weather forecasts and Sampling Event Communication Forms;

- Electronic files downloaded from the flow meter and rain gauges;
- Storm event narrative including forecast, storm characteristics, total rainfall recorded, submittal of analyses to laboratory, documentation of deviations to SOPs and equipment problems

7.2 DATA REPORTING

Following each sampling event, a Storm Water Discharge Monitoring Report summarizing the results of the sampling activities will be prepared by the Program Coordinator. The report will include the date of the storm, the antecedent dry period, the total rainfall, and a description of the storm (*i.e.*, showers, light rain, or heavy rain). As defined in the Permit, this Storm Water Discharge Monitoring Report must also include:

- Dates of sample collection and analyses;
- Results of analytical samples collected;
- Location of sample collection; and
- Estimates of the wet weather monthly average pollutant loads for each pollutant at each sample location.

Within three years from the effective date of the Permit, and once per year thereafter, all available storm water discharge monitoring data will be submitted as part of an annual report. The report will be based upon the Storm Water Discharge Monitoring Reports and will include a comprehensive evaluation of all of the data collected. Data that have been qualified as part of the QA/QC program or exceed applicable water quality criteria will be noted. The annual report will include:

- Dates of sample collection and analyses;
- Analytical results of the samples collected;
- Sample collection locations;
- Estimates of the wet weather monthly average pollutant loads for each pollutant at each sample location;
- An annual cumulative estimate of pollutant loading for each parameter at each sample location, and an overall estimate of the contribution of pollutants from all storm water emanating from the ITD MS4;
- A summary of general statistics for analytical parameters with five or more data points; and
- A comparison to applicable water quality standards.

This annual report for the storm water discharge monitoring efforts associated with the Permit are just a part of the SWMP Annual Report that will be submitted to the EPA and the Idaho DEQ no later than January, 15 of each year. Data recordation will begin in the spring or 2012 and will be included in the yearly permit. This document will be subject to change as ITD determines the how to best prepare and present the information required by the subject permit. Several requirements in the permit are not due at this time and will be included when completed. No water sampling for the subject permit has started.

Tables 1-3
(Pending)

1. **Storm Water Monitoring Location**
2. **Water Quality Sample Parameters**
3. **Five Year QA/QC Schedule**

Figures 1-6
(Pending)

1. **Sample Location and MS4**
2. **Station A**
3. **Station A Photographs**
4. **Organizational Sampling Chart**

Appendices 1-4
(Pending)

1. **Site Description Documentation**
2. **Standard Operating Procedures**
3. **Program Forms**
4. **Permit**

Appendix 1
Site Description Documentation
To be determined spring of 2012

Appendix 2
Standard Operating Procedures
(Pending)

Flow Meter
- **Set up**
- **Shut down**
- **Download**
- **Calibration -**

Discrete Grab Samples
- **Dry Weather**
- **Wet Weather**
- **Sampler**

Low Flow Discrete Grab Samples
- **Dry Weather**
- **Wet Weather**
- **Sampler**

Horiba U-10 Multiparameter Meter
- **Field Measurements**
- **Calibration -**

Appendix 3
Program Forms
(Pending)

Event Communication Form
Station Setup/Shutdown Form
Grab Sample Form
Sample Chain of Custody

APPENDIX B

Quality Assurance Program Plan

QUALITY ASSURANCE PROGRAM PLAN
FOR NPDES PHASE II STORM WATER PERMIT MONITORING

BOISE AND NAMPA URBANIZED AREAS
ADA AND CANYON COUNTIES
IDAHO

NPDES PERMIT NO. IDS-028177

IDAHO TRANSPORTATION DEPARTMENT DISTRICT 3
MUNICIPAL SEPARATE STORM SEWER SYSTEM
NPDES PHASE II PERMIT

JANUARY 13, 2012

GROUP A—PROJECT MANAGEMENT

Group A elements describe general project management, project objectives and the roles of participants.

A1 - SIGNATURE PAGE

Quality Assurance Program Plan (QAPP)
For NPDES Phase II Storm Water Permit Monitoring
NPDES Permit No. IDS-028177
January 2012

Idaho Transportation Department District 3 (ITD)

_____ Date: _____
Greg Vitley, ITD NPDES Program Manager

_____ Date: _____
Chris Branstetter, ITD NPDES Program Coordinator

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Table 1 Changes to QAPP Since Last Major Revision
Table 2 Storm Water Quality Objectives
Table 3 Storm Water Sample Frequency Requirements
Table 4 Monitoring Site Characteristics
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Table 6 Storm Water Quality Components and Analytical Methods
Table 7 QC Sampling Schedule
Table 8 QC Event Example Naming Convention

APPENDICES (PENDING)

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Appendix 2 Field Data Forms
Appendix 3 Illustrative Chain-of-Custody Forms
Appendix 4 Laboratory Information- Pending
Appendix 5 Standard Operating Procedures

A3A – ACRONYMS AND ABBREVIATIONS

BMP	Best Management Practice
CFR	Code of Federal Regulations
CoC	Chain of Custody
DO	Dissolved Oxygen
DQO	Data Quality Objective
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
GPS	Global Positioning System
HAZMAT/ER	Hazardous Materials and Emergency Response
HCl	Hydrochloric Acid
IDL	Instrument Detection Level
ITD	Idaho Transportation Department District 3
LCS	Laboratory Control Standard
LIMS	Laboratory Information Management System
MDL	Method Detection Level
MS	Matrix Spike
MS4	Municipal Separate Storm Sewer System
MSD	Matrix Spike Duplicate
NIST	National Institute for Standards and Technology
NPDES	National Pollutant Discharge Elimination System
NWS	National Weather Service
PRDL	Project Required Detection Limit
QA	Quality Assurance
QAPP	Quality Assurance Program Plan
QC	Quality Control
QMP	Quality Management Plan
RPD	Relative Percent Difference
SOP	Standard Operating Procedure
SSHP	Site Safety and Health Plan
TKN	Total Kjeldahl Nitrogen
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
WLA	Waste Load Allocation

A3 - Distribution List

Copy 1 Dave Jones, ITD
Copy 2 Tom Points, ITD
Copy 3 Greg Vitley, ITD
Copy 4 Chris Branstetter, ITD
Copy 5 Sue Sullivan, ITD

All recipients on the distribution list will be issued numbered copies of the Quality Assurance Program Plan (QAPP). Revisions to the QAPP will be made using document control procedures with revised, dated pages to be inserted into the QAPP. When necessary, the QAPP will be reissued in full to all parties on the distribution list.

Minor administrative changes to the QAPP will be addressed by issuing revised pages on an as-needed basis. V1.0 is the first version of the QAPP; any minor revisions will be delimited by a value in the tenths aspect of this naming system (e.g. V1.1, V1.2). A major revision will be delimited by a value in the whole number of this system (e.g. V2.0, V3.0). A record of these changes will be maintained with each QAPP, using Table 1. A new QAPP will be reissued whenever major changes are necessary.

Table 1
Changes to QAPP since Last Major Revision

Revision Number	Date	Pages Reissued	Revision Made	Pages Sent to QAPP Recipients (Y/N)	Environmental Manager Signature
V1.0	2010	All	Full Version Issue	N	

A4 - Project/Task Organization

This QAPP is intended to cover the monitoring requirements of National Pollutant Discharge Elimination System (NPDES) Phase II Permit No. IDS-028177, (referred to as the Permit). The Permit was issued to ITD on September 4, 2009 with an effective date of October 15, 2009.

The program monitoring activities are described in elements A5 and A6 below. ITD is responsible for NPDES Phase II Permit monitoring. The provider for the laboratory services has not yet been determined. Key roles or job functions for this project are

described below and the organization chart with key project personnel is provided as Figure 1.

The *Program Manager* has overall responsibility for management of the Permit monitoring programs and assists the Program Coordinator with the implementation of the program. The *Program Manager* will assist the *Program Coordinator* with QA/QC issues and advise the *Program Coordinator* to ensure that project data conform to program requirements.

The *Program Coordinator* is responsible for day-to-day project operations and program implementation. Other responsibilities include direction to subcontractors, review weather forecasts, maintain project records, calibrate and maintain test instruments and maintain an adequate stock of field supplies. This individual also serves as *Program Quality Assurance/Quality Control (QA/QC) Officer*, reviewing project data for conformance to the project objectives and ensuring that corrective action is taken, where appropriate. The *Program Coordinator* may delegate selected responsibilities to ITD *Field Personnel. ITD Field Personnel* will conduct field monitoring activities and field maintenance activities under the direction of the *Program Coordinator.* They will also be responsible for providing support activities to the *Program Coordinator* when certain situations occur.

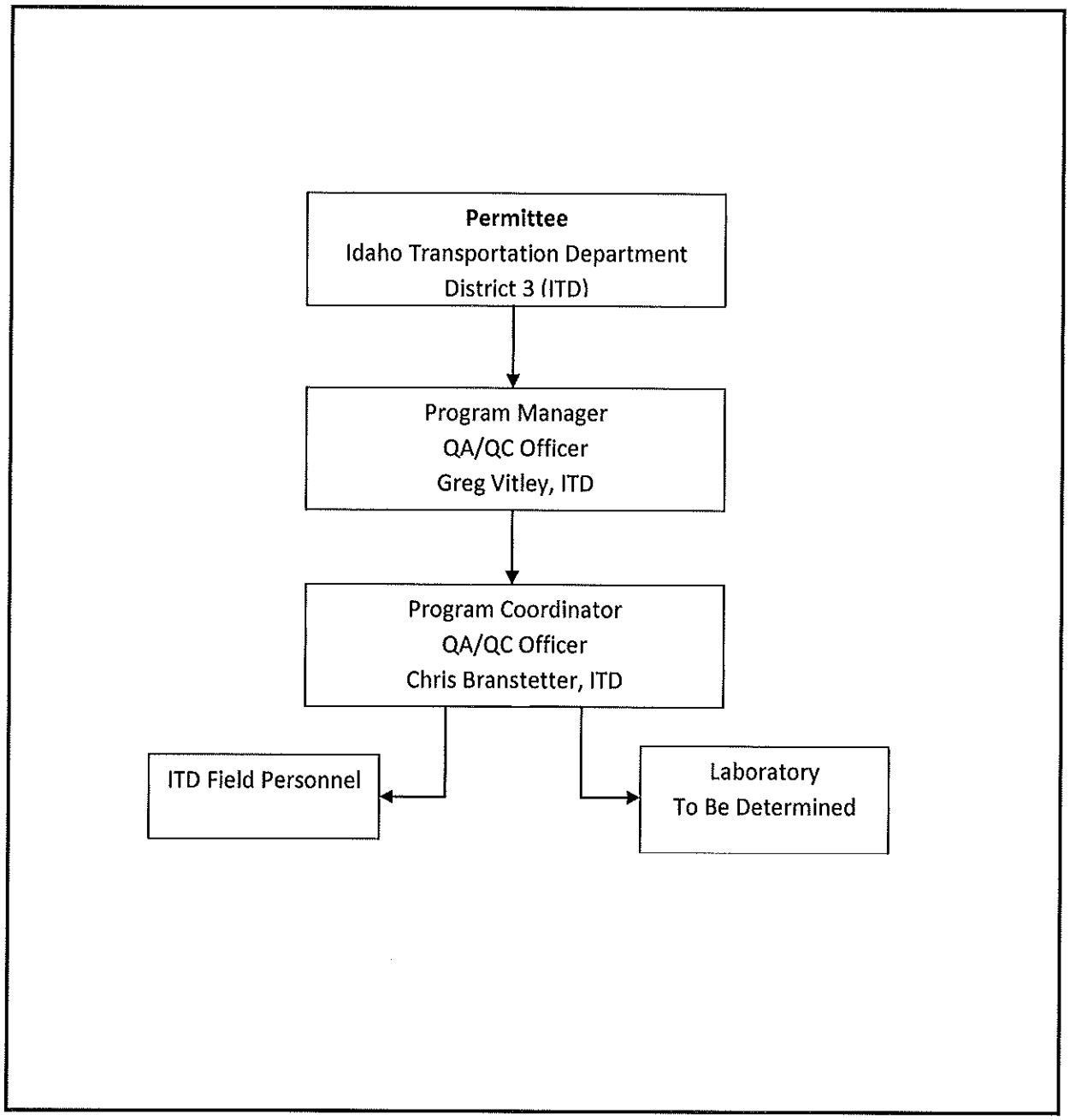
The *Program Coordinator is* responsible for all tasks contracted to the consultant. Included in these responsibilities are the coordination with other consultant personnel to assure storm water monitoring crews are available when necessary, reporting of results, offering advice to the *Program Coordinator* as requested, and scheduling personnel as appropriate to meet project deadlines.

The *Program Coordinator* is responsible for conducting the storm water monitoring events. This role is responsible for monitoring storm progress, managing and participating in collection of storm water samples, reporting storm event results, and maintaining field-located sampling equipment.

Field Personnel will conduct field monitoring activities and field maintenance activities under the direction of the *Program Coordinator.* The Field Personnel are responsible for following standard operating procedures and ensuring the QA/QC expectations are met in the field. The *Field Personnel* will also serve as the safety person in charge during storm event discharge monitoring.

The *Laboratory* has responsibility for ensuring that sample analyses are performed and reported according to project requirements. This individual is also responsible for scheduling the availability of laboratory staff, receiving and filling sample container requests and scheduling sampling events, when applicable. The laboratory is responsible to ensure that laboratory specific QA/QC procedures are completed according to standard operating procedures, and ensuring that the analytical results are representative of the samples submitted to them. *Laboratory Analysts* will conduct laboratory analyses and prepare sampling containers.

Figure 1
Storm Event Discharge and Dry Weather Monitoring Organization Chart



A5 - Problem Definition/Background

This project includes all monitoring activities required by NPDES Permit No. IDS-028177. The Permit authorizes discharges to waters of the United States from municipal separate storm sewer systems (MS4s) owned or operated by ITD not covered in the area defined in NPDES Permit No. IDS-027561. The Permit monitoring activities are described in Part IV of the permit and include:

- Storm event discharge monitoring; and
- Dry weather monitoring.

These monitoring activities are conducted to address the following list of permit requirements:

- Estimate the pollutant loading currently discharged from the MS4;
- Assess the effectiveness and adequacy of control measures implemented through the Permit; and
- Identify and prioritize those portions of the MS4 requiring additional controls.

Data gathered to support the Permit needs described above may also be used to estimate storm water loadings for comparison with Waste Load Allocations and Total Maximum Daily Loads (TMDLs); evaluate the performance of Best Management Practices (BMPs); or support watershed and land use management.

A6 - Task Description and Schedule

The project site includes all areas within the Boise and Nampa Urbanized Areas of Ada and Canyon Counties served by the MS4 owned or operated by ITD, excluding the portion of the permittee's MS4 previously authorized to discharge under NPDES Permit #IDS-027561. A monitoring station will be established for storm event discharge and dry weather monitoring. Data quality objectives are discussed in element A7 and program documentation is described in element A9. Location of monitoring station will be described and presented in Figure 2 in element B1 when determined.

The task descriptions contained in this document are abbreviated. Further details are provided in the *Storm Water Monitoring Plan NPDES Phase II Permit.*

Storm water monitoring consists of several field tasks: weather forecasting; station setup; dry weather grab sampling; storm water grab sampling; and station shutdown. The NPDES Permit requires monitoring at least one storm per defined period. A total minimum of four storms will be targeted over the course of the year. Storm events common to the arid high desert environment are extremely variable; forecasts and measured rain are often substantially different. The laboratory analyses required for the project are described in element B4. Routine equipment maintenance is discussed in element B6.

WEATHER FORECASTING

The *Program Coordinator* or their designee will obtain up-to-date information on a storm's anticipated physical characteristics from the National Weather Service (NWS). Information obtained for each forecast will include the probability of precipitation, the expected amount of precipitation, and the expected arrival time of the storm. Weather forecasts and information will ordinarily be obtained via the Internet, supplemented as needed by telephone conversations with the NWS Lead Forecaster on duty. The *Program Coordinator* or designee will review weather forecasts on a daily basis and compare them with the approved storm selection criteria to determine the likelihood of initiating storm water sampling. The current criteria require that the selected storm:

- Have a 60% or greater probability of measurable precipitation;
- Have a predicted precipitation of greater than 0.10 inches in 24 hours within the Boise or Nampa urbanized area; and
- Be preceded by a minimum of 72 hours of dry weather from the previous measurable storm event (rainfall greater than 0.10").

The convective summer storms have proven to be difficult to track and forecast effectively in the Boise or Nampa urbanized area. During these periods the criteria outlined above will be relaxed in an effort to increase the opportunity to sample summer convective storms. If storm selection criteria appear to be met, the *Program Coordinator* or designee will initiate storm event preparation by advising the Field Personnel of the upcoming sampling event.

These criteria may be adjusted, at the discretion of the *Program Coordinator*, to enable the appropriate number of events to be conducted during the year. If an adjustment in criteria is made by the *Program Coordinator*, the adjustment will be documented in the Sampling Event Communication Form (Appendix 2). The *Program Coordinator or designee* will communicate the sampling status to the *Field Personnel* on a daily basis by means of the Sampling Event Communication Form.

PRE-SAMPLING ACTIVITIES (STATION SETUP)

In order to assure proper operation of flow meters, the *Program Coordinator*, Field Personnel or designee will be responsible for maintaining the flow meters at both monitoring stations prior to a sampling event. These activities may include: checking the condition of flow meter harness and humidity indicator; verifying operation and downloading the flow meter; inspecting connections for tightness; installing recharged batteries; programming, and recording set-up information on field data sheets. The *Program Coordinator* or designee will be responsible for calibrating and verifying the operation of field test equipment according to elements B6 and B7, ensuring that adequate supplies are available for sampling and notifying laboratories of the possible sampling event.

DRY WEATHER GRAB SAMPLING

After the station is set up as outlined above, the *Program Coordinator*, Field Personnel or designee will collect dry weather grab samples. The dry weather grab sampling will

consist of measuring field parameters (see element B4) for temperature, pH, conductivity, and dissolved oxygen (DO) and collecting grab samples for laboratory analysis. Records of the field parameter measurements and sample time, date, location and sampler will be kept on the setup field form. The samples will be stored in a cooler with ice until they are delivered to the lab. The dry weather grab samples will be submitted to the laboratory within 4 hours of collection and placed on hold until storm water grab samples are collected and submitted. Bacteria samples will be submitted for analysis upon delivery to the lab. All sample handling and custody requirements are described in element B3.

STORM WATER GRAB SAMPLING

Trained Field Personnel will conduct storm water grab sampling. The sampling team will be responsible for: collecting field measurements (see element B4) of temperature, pH, conductivity and DO; collecting grab samples for laboratory analysis and verifying operation of the flow meters. Grab samples will be collected during the first two hours of discharge. The *Program Coordinator* will ensure that samples are delivered to the laboratory. The *Program Coordinator* will also review all chain-of-custody (CoC) forms prior to submittal to the laboratories and coordinate with the laboratories as necessary to ensure all methods, holding times and detection limits conform to project requirements, as outlined in elements B4 and B5.

POST-SAMPLING ACTIVITIES

The post-sampling activities include downloading data from flow meters and rain gauges, checking the batteries for the flow meters, and reviewing the overall condition of the equipment. Ongoing flow measurements will be recorded to measure dry weather flow influence on the discharge to the receiving waters.

A designated laboratory will analyze the samples for the constituents identified by the U.S. Environmental Protection Agency (EPA), using EPA-approved laboratory methods, as discussed in element B4. Quality assessment activities, to be performed by the *Program Coordinator,* will include review of field notes and CoC documents, as well as validation of data packages received from the laboratory. Each year's results will be submitted to EPA as part of the NPDES Permit-required annual report.

A7 - QUALITY OBJECTIVES AND CRITERIA FOR MEASUREMENT DATA

The data quality objectives (DQOs) described for this program are intended to guarantee that adequate procedures are developed and implemented that will ensure the collection of representative data of acceptable and known quality. These objectives will support the use of the data collected to estimate pollutant concentrations and loading, evaluate BMPs, and support watershed and land use management initiatives at a more measurable accuracy, meeting the requirements of the NPDES Permit.

One sampling site will be selected by ITD to represent typical hydrologic conditions and varied land use types in a major section of the MS4. The Permit requires the sampling of four storm event discharges during a calendar year (Table 3 in Section B1).

Data quality objectives specific to each analytical method, including project-required detection limits, precision limits, and objectives for accuracy and precision, are summarized in Table 2 for storm water analyses. Data quality associated with this program will meet data quality objectives or be flagged and qualified if they do not meet these objectives.

PROJECT-REQUIRED DETECTION LIMITS

The sensitivity of the entire sampling and analysis system must be adequate to detect the required constituents at levels comparable to Idaho's in-stream water quality standards, as applicable to the Boise River, the ultimate receiving water. Although the storm water data are not directly compared to water quality standards, data quality objectives dictate that project-required detection limits (PRDLs) should be at a similar level so that upstream sources of various constituents to the Boise River can be evaluated if needed. It is not necessary to accurately measure constituent concentrations substantially below in-stream water quality standards. Laboratory Method Detection Limits (MDLs) will generally fall below those standards, and samples are expected to be free of interferences at those levels. For this program the more conservative MDLs serve as adequate PRDLs. These PRDLs are shown in Table 2 (pending).

ACCURACY

The accuracy of the data is a measure of the extent to which a measured value represents the true value. Analytical accuracy is assessed by analyzing spiked samples with known standards and measuring the percent recovery. Laboratory accuracy is measured against quantitative matrix spike and surrogate spike recovery, and is deemed acceptable if it is within an established range.

PRECISION

Precision is a measurement of the reproducibility of the analytical data. For laboratory samples, precision is measured by the use of matrix spike/matrix spike duplicate samples and through duplicate samples. Precision is measured against the criteria shown on Table 2 (pending).

BIAS

Another data quality objective is to minimize sample bias. The Phase II monitoring program uses standard data collection, sample preservation, sample transport, and sample storage procedures to reduce most sources of sample bias. The laboratory uses standard quality control procedures applicable to the specific analytical methods presented in Table 2. These procedures include analysis of method blanks, matrix spikes and duplicates, surrogate analyses, and check standards analysis.

REPRESENTATIVENESS

The representativeness is a measure of the degree to which data accurately and precisely indicate environmental conditions. For the Phase II monitoring program, the selected analytical parameters have been identified as constituents of interest or

concern based on typical constituents that have been previously observed in storm water and urban runoff. The data will be considered to be representative if they meet precision limits.

COMPARABILITY

The comparability of a data set is the extent to which the data set can be compared to others. For this program, comparability is established through the use of standard analytical methodologies and reporting formats. The data sets generated through this program will be used to evaluate trends over time, meet the monitoring requirements of the NPDES permit, estimate pollutant concentrations and loadings and evaluate BMPs.

COMPLETENESS

Completeness is a comparison between the amounts of usable data collected versus the total amount of data collected. Completeness is measured as the percentage of total samples collected and analyzed overall for individual parameters and for individual sites that are not rejected, compared to the number of samples collected. All data will undergo a data review and validation process that includes reviewing data for holding times, evaluating data with respect to laboratory QA/QC samples, and evaluating data with respect to field QA/QC samples.

SUFFICIENCY

The project data set will be considered meeting the data quality objectives for sufficiency when enough useable data have been collected to meet the requirements of the Permit. The goal for sufficiency is 100%. Each data set will be evaluated individually as the data are reported, and adjustments made to subsequent sampling events as needed to ensure that the provisions of the Permit are adequately addressed.

Table 2
Storm Water Data Quality Objectives

Component	Analysis	Method	PRDL	Units	Precision (%RPD)[2]
pH	Field	EPA 150.1	0.01	S.U.	NA
Temperature	Field	EPA 170.1	0.01	°C	NA
Dissolved Oxygen	Field	SM 4500 G	0.01	mg/L	NA
Conductivity	Field	EPA 120.1	--	uS/cm	NA
E. coli [MPN]	Lab	SM9221BCF	1.8	MPN/100mL	See Note 1
Total Suspended Solids	Lab	SM2540 D	1	mg/L	20%
Total Phosphorus	Lab	EPA 365.1	0.04	mg/L	20%
Total Kjeldahl Nitrogen	Lab	Perstorp PAI-DK01	0.3	mg/L	20%
Nitrate+Nitrite Nitrogen	Lab	EPA 353.2	0.04	mg/L	20%

Notes:

1 = *E. coli* is evaluated using the Relative Percent Difference of logarithmic parent and duplicate values. This is then compared to historical data. All data that fall outside of the 95th percentile should be researched and qualified. No data points will be automatically disqualified or omitted from reporting.

2 = In cases where one value is reported at the MDL and the other value is less than five times the MDL the samples will be

considered within acceptable precision limits.
PRDL = Project Required Detection Limit

A8 - Special Training Requirements

All Field Personnel must be familiar with general environmental sampling procedures and confined space "awareness", and must understand the standard operating procedures (Appendix 5) for the monitoring program(s) in which they participate. All Field Personnel working in areas where hazardous chemicals or fumes will receive Hazardous Materials and Emergency Response (HAZMAT/ER) training. Personnel assigned to maintenance tasks that require bodily entry into a manhole will also have completed a one-day course in Confined Space Entry. Training certifications are to be submitted and maintained by the Program Coordinator. Training for consulting personnel will be maintained by consultant.

A9 - Documentation and Records Retention

Project documentation will include:

- This QAPP;
- Storm Water Monitoring Plan NPDES Phase II Permit ;
- Annual Reports;
- Storm Event Reports;
- Weather forecasts and precipitation records;
- Sampling Event Communication Forms;
- Field notes (generally recorded on preprinted forms);
- Maintenance forms;
- Instrument calibration records;
- Chains-of-custody; and
- Laboratory reports.

The Program Manager and the *Program Coordinator* will ensure that program plans (QAPP, Monitoring Plans) are revised as needed. The revision date will be printed in the footer on each page of the documents. Copies of the plan documents will be distributed to key personnel identified in A3 on the Distribution List.

Weather information and forecasts will typically be obtained from the following sites:

- http://www.crh.noaa.gov/forecasts/IDZ014.php?warncounty=IDC001&city=Boise+City
- http://forecast.weather.gov/MapClick.php?lat=43.58834891179792&lon=116.56631469726562&site=boi&smap=1&unit=0&lg=en&FcstType=text
- http://www.wunderground.com/US/ID/Nampa.html
- http://www.wrh.noaa.gov/climate/index.php?wfo=boi.

For the storm event discharge monitoring program, weather information will be stored electronically. Forecasts will also be summarized in electronic files. Electronic rain gauge data downloaded from the data loggers will be stored on ITD's network. The *Program Coordinator or designee* will be the custodian of these records.

Field notes, maintenance activities and instrument calibration history and activities will be recorded on preprinted forms (Appendix 2) pending. Each page will be dated and initialed. At a minimum, field notes will include the name(s) of the person(s) conducting the subject activities, sample numbers and locations, maps and diagrams (where appropriate), equipment used, local weather conditions, and any pertinent observations by field personnel.

CoC records will document transmission of the samples from the field to the laboratory. They will also indicate the analyses requested, including specification of batch quality assurance (QA) samples. If changes to the request are made, they will be documented in writing.

For storm event discharge and dry weather monitoring, Field Personnel will scan the forms and email them to the Program Coordinator's "inbox". The original documents will be kept in binders (filed by water year, program area and then event date) under the care of the *Program Coordinator*. Electronic files downloaded from flow meters and data loggers will be stored on the ITD network, by water year. Copies of these electronic files will be added to the ITD server for backup and to be used by the *Program Coordinator during* report preparation.

Laboratory reports will consist of analytical results for all field samples and tables summarizing laboratory QA results. Laboratory reports for the storm event discharge and dry weather monitoring programs will include electronic data files of analytical results. Original paper laboratory reports will go directly to the *Program Coordinator*, who will store them in date-tabbed binders. Paper laboratory reports will be scanned to generate "portable document format" (pdf) files. Electronic files will be stored on the ITD network, by water year, laboratory and then program area. Electronic laboratory report files will be named according to the format LABYYMMDD2.pdf, where LAB is a three-letter abbreviation for the laboratory, YY is the two-digit year, MM is the two-digit month, DD is the two-digit day and 2 indicates this data is associated with Phase II sampling efforts. Electronic data files will be named according to the format LABYYMMDD2.txt, where LAB, YY, MM, DD and 2 are the same as described above. Paper and electronic copies of laboratory reports associated with the storm event discharge and dry weather monitoring programs will be transmitted to the *Project Coordinator* and backed up on the ITD server.

In the event that general field practices or other standard procedures deviate from normal procedures, this will be documented on field forms, in the Discharge Monitoring Reports or in field notebooks. These documentations will also include the methods used or suggested to resolve noncompliance. The *Program Coordinator* will maintain these records.

All program-related records will be maintained as described in NPDES Permit IDS-028177 Part IV.B (Appendix 1).

GROUP B—MEASUREMENT/DATA ACQUISITION

Elements in Group B cover aspects of the measurement system design and implementation.

B1 - SAMPLING PROCESS DESIGN

Many facets of the sampling process design are determined by the terms of the NPDES Permit. This element summarizes key features of the design.

STORM EVENT DISCHARGE AND DRY WEATHER MONITORING

The Permit defines four sampling periods during the calendar year (Table 3). The variable nature of sampling storm water in an arid environment makes it difficult to guarantee that there will be a storm that meets the program criteria in all four sample periods. For this reason, the period between October and February will be considered a fifth period and will be sampled if a storm event meets the program criteria. This will ensure that four samples are taken annually for the program.

Table 3
Storm Water Sample Frequency Requirements

Sample Frequency		
Period	**Number of Sample Events**	**Required**
October 15 – December 31 and January 1 – February 28	1	Backup
March 1 – April 30	1	Permit Required
May 1 – June 30	1	Permit Required
July 1 – August 31	1	Permit Required
September 1 – October 15	1	Permit Required

The NPDES Permit specifies the number of samples to be collected, and the types of field measurements and laboratory analyses to be performed. These are described in element B4. The location of the monitoring station is presented in Figure 2 (To be determined). The site will be sampled for dry weather discharges before a targeted storm event, when flow is present, and storm water discharge monitoring.

Figure 2
Storm Event Discharge and Dry Weather Monitoring Station Locations

SPACE LEFT BLANK

Station "A" will be monitored for compliance. The site will be equipped with a flow meter that continuously collects flow data to help estimate total discharge from the catchment area. Detailed site descriptions, location characteristics and sampling locations for each site are provided below. The general location of the monitoring site is presented in Figure 2 (pending). Table 4 provides a summary of the monitoring site characteristics.

Table 4
Monitoring Site Characteristics

Monitoring Site	Land Use	Catchment Area (acres)	Receiving Water

Station A

B2 - Sampling Methods Requirements

Storm event discharge monitoring and dry weather monitoring will follow the same set of standard operating procedures. Sample collection for dry weather monitoring will be completed at the monitoring locations prior to a targeted storm event to exclude the influence of storm water. In situations where no dry weather flow is present, a written summary of the observations on site will be recorded on the associated field form and sampling will not be required. Storm event discharge monitoring occurs during the "first flush" of a storm event. For this program, the permit defines the "first flush" as the first 120 minutes of measured storm water runoff.

Grab samples for storm event discharge and dry weather monitoring will be collected using a Swing Sampler. A Swing Sampler is a fiberglass extendable pole that has an attached bottle holder.

Samples to be analyzed for bacterial content will be collected directly into sterile, autoclaved, lab issued sample bottles. Samples to be analyzed for total nitrogen, total phosphorus and total suspended solids (TSS) will be collected directly into the defined sample bottles in Table 5. Samples to be analyzed for field parameters will be collected into an amber glass container.

Sample collection will be performed by attaching the specified containers, identified in Table 5, attached to a Swing Sampler and placed near the center of flow at the discharge. Detailed standard operating procedures are included in Appendix 5. Collection date, time and sample identification will be recorded on sample containers immediately following sample collection. Collection date, time and other observations will be recorded on a Grab Sample Data Log (Appendix 2).

The multi meter will be maintained and calibrated. Sample parameters are identified in Table 5 and are to be collected in accordance to the standard operating procedures included in Appendix 5. Temperature measurements will be made at the time of sample collection. Primary temperature recordings will be measured using the hand held meters. The *Program Coordinator* is responsible for ensuring that any instruments that are unusable during a sampling event are repaired promptly, prior to the next event.

All sampling standard operating procedures associated with this program will be included as Appendix 5 (pending).

B3 - Sample Handling and Custody Requirements

The required types of containers, preservation techniques and holding times for the storm event discharge and dry weather monitoring program are dependent upon the components to be analyzed. Table 5 presents container types, preservation techniques and holding times for each parameter group.

Sufficient ice will also be placed in coolers used for grab sample transport to maintain the samples at a temperature of 4°C. "Blue ice" will not be used, since it has inadequate thermal mass to reduce sample temperatures.

Table 5
Storm Water Required Containers, Preservation Techniques & Holding Times

Components	Analytical Method	Container	Preservative	Volume	Holding Time
Field Parameters – Measured in the Field					
pH	EPA 150.1	None	None	None	Immediate
Temperature	EPA 170.1				
Dissolved Oxygen	SM 4500 G				
Conductivity	EPA 120.1				
Field Grab Samples – For Laboratory Analysis					
E. coli [MPN]	Colilert QT/2000	P, sterile	Cool < 10°C	500 mL	6 hours
Total Suspended Solids	SM 2540 D	P	Cool < 6°C	1 L	7 Days
Total Phosphorus*	EPA 365.1	G, amber	Cool < 6°C	500 mL	28 Days
Total Kjeldahl Nitrogen*	Perstorp PAI-DK01	P		1L	
Nitrate+Nitrite*	EPA 353.2	P		500 mL	

Notes:
* = preserved with H_2SO_4 at laboratory, pH<2
P = polyethylene
G = glass

CHAIN-OF-CUSTODY REQUIREMENTS

Standard CoC forms Appendix 3 (pending) will be completed prior to submittal of samples to the laboratory. Sample identification, sample type, analyses requested, and start and stop times will be noted on the CoC.

A sample is considered to be "in custody" if it is either in actual physical possession of authorized personnel or in a secured area that is restricted to authorized personnel. Such areas include (but are not limited to): laboratory refrigerators, ITD facilities, consultant facilities, ITD vehicles and consultant vehicles.

All transfers of custody will be recorded by signature, date, and time by both the individual relinquishing custody and the one receiving custody. This information is placed in the designated area on the bottom of standard CoC forms.

GRAB SAMPLE TRANSFERS

Grab samples collected during a storm event must be transferred on the CoC between the *Field Personnel*, who took the sample and the the lab. The lab will record their signature with date and time they received the samples on the associated CoC.

Samples may be stored overnight (in coolers with ice) at the ITD facilities while awaiting qualitative analysis, shipment or delivery. The CoC forms must be reviewed and signed by at least one of the persons who collected the samples listed on the CoC. The CoC forms will be shipped or delivered to the laboratory with the samples.

Dry weather monitoring samples will be submitted to a designated laboratory after completion of the setup and sample collection. The samples will be submitted to the lab but placed on hold until the collection of storm water discharge monitoring is completed except for the constituent *E. coli* which requires the immediate submittal for analysis without holding time. All other analyses will be placed on hold until further approval from the *Program Coordinator..*

LABORATORY TRANSFERS
If samples are submitted to the laboratory during business hours, samples are relinquished to laboratory personnel in person for immediate receipt with signature, date, and time.

SAMPLE NAMING CONVENTIONS FOR THE CHAINS-OF-CUSTODY

STORM EVENT DISCHARGE MONITORING
Analytical samples will be named using a single letter that identifies the station: A. The station name will be followed by a dash and "Wet Grab" (example: A-Wet Grab). Quality control (QC) sample handling and naming procedures are outlined in B5.

DRY WEATHER MONITORING PROGRAM
Analytical samples will be named using a single letter that identifies the station: A. The station name will be followed by a dash and "Dry Grab" (example: A-Dry Grab). Quality control (QC) sample handling and naming procedures are outlined in B5.

B4 - ANALYTICAL METHODS REQUIREMENTS

The analytical methods planned for use in this program are presented below. In some cases, the analytical method is specified by the terms of the NPDES Permit (Appendix 1) pending. In other cases, the NPDES Permit merely requires that "analysis and collection of samples shall be done in accordance with the methods specified at 40 CFR Part 136. Where an approved Part 136 method does not exist, any available method may be used, after approval from the EPA and IDEQ." In these cases, the method listed below is the one that will usually be followed. However, sample, laboratory or instrument conditions may require the substitution of an alternate Part 136 method.

The analytical requirements for this project are based on the NPDES Permit (Appendix 1) pending. Field measurements provide pH, temperature, conductivity and DO data. Additional water quality data is provided by laboratory analyses of grab samples. Table 6 identifies the components to be collected by grab sampling and the analytical methods to be used.

Laboratory analytes include *E. coli*, TSS, total phosphorus, Total Kjeldahl nitrogen (TKN), and nitrate+nitrite. The targeted analytes are outlined by the Permit.

The flow meter at the monitoring site will log flow, depth and velocity measurements. The logging interval will typically be set to 1 minute. Rainfall will also be logged at both

stations as defined in Section B1. After each storm water monitoring event, data will be downloaded for processing.

Failures in the analytical system will be detected and addressed by the quality control procedures in element B5.

Table 6
Storm Water Quality Components and Analytical Methods

Component	Analysis	Method	Grab	Frequency
pH	Field	EPA 150.1	+	A
Temperature – pH meter	Field	EPA 170.1	+	A
Temperature – DO meter				
Temperature – Conductivity meter				
Dissolved Oxygen	Field	SM 4500 G	+	A
Conductivity	Field	EPA 120.1	+	A
E. coli [MPN]	Lab	Colilert QT/2000	*	A
Total suspended solids	Lab	SM 2540 D	*	A
Total phosphorus	Lab	EPA 365.1	*	A
Total Kjeldahl nitrogen	Lab	Perstorp PAI-DK01	*	A
Nitrate+Nitrite nitrogen	Lab	EPA 353.2	*	A

Notes:
* = Samples should be analyzed for this parameter (required by the NPDES permit)
\+ = Non critical (not required by the NPDES permit)
A = Four representative storm events per year

B5 - Quality Control Requirements

Quality Control (QC) Validation

Field QC samples include field blanks and field duplicate samples. A field blank is a sample prepared in the field using type I reagent grade water and the appropriate preservatives. It is transported in the same cooler as the field samples, and serves as a check on the cleanliness of field conditions at the time of sampling. A duplicate is a second aliquot of sample collected at the same time and in the same manner as the first aliquot. Duplicate pairs provide information about the repeatability of sampling and analysis. A lab split duplicate is a duplicate split by the laboratory. It serves as a check on the labs ability to representatively split a sample.

Field Blanks

When one of the analytical parameters is detected in a field blank, all analytical results, associated with that blank batch, exhibiting a concentration of less than five times the concentration detected in the blank, will be qualified. The qualification will indicate the analytical results may be biased high for the samples collected. All concentrations above five times the blank value will be considered valid because any blank contamination is well below the sample concentration.

Field blanks for storm event discharge and dry weather monitoring will be prepared using type I reagent water generated by the laboratory.

DUPLICATES

Field duplicate pairs provide information about the repeatability of sampling and analysis. For all samples (excluding bacterial analyses) where laboratory analyses indicate a sample concentration of less than five times the MDL, the difference between the concentrations of the field duplicates will be considered acceptable if it is within an amount equal to the MDL. For all samples with concentrations greater than five times the MDL, the relative percent differences (RPDs) for each analyte will be considered acceptable if they are within 20 percent for water matrix samples.

Relative Percent Difference Equation

$$RPD = \frac{|x_1 - x_2|}{((x_1 + x_2)/2)} \times 100\%$$

Where:
RPD = Relative Percent Difference
x_1 = Duplicate
x_2 = Parent

The inherent variability associated with bacteria analyses from grab samples requires a different set of criteria to verify sample collection results. To qualify and identify outliers for this analyte the logarithmic RPD_{log} will be calculated by the *Program Coordinator or designee.* The variability associated with extremely low numbers indicates little to no association between MPN with a concentration of less than 10 MPN/100 mL. All sample pairs that are both less than 10 MPN/100mL will be automatically included in the database without qualifier flags. For values where the parent and the duplicate concentrations are greater than 10 MPN/100mL the RPD_{log} will be calculated and will be compared to the historical dataset. If a RPD_{log} is outside of the 95th percentile of the entire database the samples will be flagged and verified. If the parent and duplicate concentrations fall within the 95th percentile of historical data then they will automatically be included in the dataset without qualifier flags.

Logarithmic Relative Percent Difference Equation

$$RPD_{\log} = \frac{|\log(x_1) - \log(x_2)|}{((\log(x_1) + \log(x_2))/2)} \times 100\%$$

Where:
RPD_{log} = Relative Percent Difference of Log Values
x_1 = Duplicate
x_2 = Parent

QC MANAGEMENT

In the event that insufficient volume is available in a single QC sample for all of the scheduled QC analyses, additional QC samples may be collected and submitted for analysis.

The laboratory will perform additional internal QA/QC determinations.

The normal laboratory data package will include analytical results for field samples and field QC samples and a case narrative. Limited QC data, such as surrogate recoveries, will also be included, as appropriate. However, raw data, laboratory notebook pages, chromatograms and similar supporting data will not be routinely provided. A more detailed reporting package will be requested and reviewed in the event of a change in laboratories, a major change in methods, or to troubleshoot potential data problems.

QA/QC SCHEDULE

STORM EVENT DISCHARGE MONITORING

The QA/QC schedule derived for this program targets between 20% and 40% of all samples taken. When a site is identified as a QC site during a certain period, the QC samples identified in Table 6 will be collected during both storm event discharge monitoring and dry weather monitoring. The Permit identifies four sampling periods for sampling between March and October, a fifth period consisting of the combination of October through December and January through February will be sampled to ensure that four samples are collected annually. Since it is unknown which period may not be sampled in a particular year it will be necessary to collect a QC sample during this fifth period.

Table 7
QC Sampling Schedule

Station A							
Period	Sampling Year					QC Parameters	Types of QC Samples
	2011	2012	2013	2014	2015		
March 1 – April 30	--	QC	--	--	--	TSS, TKN, Nitrate+ Nitrite, Total Phosphorus, *E. coli*	Field Duplicates And Field Blanks
May 1 – June 30	QC	--		QC	--		
July 1 – August 31	--	--	QC	--	--		
September 1–October 15	--	--	--	--	QC		
October 15 – December 31 and January 1 – February 28	QC	QC	QC	QC	QC		

ITD may choose to conduct additional QA/QC to address data discrepancies, potential sample contamination, or other QA/QC issues. This additional process will be handled on an as-needed basis, depending on the particular issue(s) involved.

QC Sample Naming Conventions for the Chains-of-Custody

Analytical samples will be named using a single letter that identifies the station: A. The station name will be followed by a dash and "Wet Grab" (for storm water grab samples) or "Dry Grab" (for dry weather grab samples). Quality control (QC) samples for a given sampling event will be given names that are similar but not identical to the other analytical samples so that QC samples cannot be easily distinguished by the laboratory, to ensure that all samples are handled and analyzed in the same manner. The QC samples will be given a number associated with the term P2QC. This number will start with 1 and count up to the total number of QC samples taken during an event. Table 8 presents an example of how the naming convention should work for a QC event.

Table 8
QC Event Example Naming Convention

Analyte	Sample Type	Example Sample Name
E. Coli	Parent	A-Wet Grab
	Field Blank	P2QC-1
	Field Duplicate	P2QC-2
TSS	Parent	A-Wet Grab
	Field Blank	P2QC-1
	Field Duplicate	P2QC-2
Total Phosphorus	Parent	A-Wet Grab
	Field Blank	P2QC-1
	Field Duplicate	P2QC-2
TKN	Parent	A-Wet Grab
	Field Blank	P2QC-1
	Field Duplicate	P2QC-2
Nitrate+Nitrite	Parent	A-Wet Grab
	Field Blank	P2QC-1
	Field Duplicate	P2QC-2

B6 - Instrument/Equipment Testing, Inspection and Maintenance Requirements

Field instruments will be visually inspected and tested before use to ensure that they are in good working order. Maintenance and cleaning will be performed in accordance with manufacturers' instructions. The instruments presently used in the program include:

- Horiba U-10 Multi-meterpH/temperature/dissolved oxygen/conductivity/turbidity meter ;
- Finepix X1500 digital camera;
- Flow Meters (not yet acquired);
- Rain gauges (not yet acquired); and
- Event Loggers (not yet acquired).

Maintenance of the flow meters will be performed semi-annually by the ITD or qualified designee, according to standard operating procedures. Flow meters will be programmed to record flow continuously. ITD or qualified designee will periodically download the flow meters and change the batteries, as needed. ITD or qualified designee inspects, maintains, and downloads the rain loggers and gauges monthly.

B7 - Instrument Calibration and Frequency

The flow meters will be calibrated semi-annually, or more frequently as warranted by equipment performance, by the ITD or qualified designee, according to standard operating procedures and guidance included in Appendix 5. The other field instruments listed in element B6 will be calibrated by the *Program Coordinator* or a designee prior to use, and as instrument performance warrants. Calibration will be performed according to manufacturer's instructions and program-specific standard operating procedures. Thermometers will be calibrated yearly against a NIST-traceable standard thermometer by ITD or their designee. Calibration forms (Appendix 2 pending) will be part of the project documentation maintained by the *Program Coordinator*. ITD will check the calibration of the rain gauges annually if applicable.

B8 - Inspection/Acceptance Requirements for Supplies and Consumables

Plastic bags, and grocery store deionized water will be food grade (*i.e.*, purchased from a grocery store). Supplies will be visually inspected for evidence of cleanliness, and any items showing visible contamination or damage will be discarded unused.

Disposable nitrile gloves will be inspected for contamination upon receipt. They will be kept double-bagged during transportation.

B9 - Data Acquisition Requirements (Non-Direct Measurements)

Weather forecasts and hourly precipitation totals will typically be obtained from the following links:

- http://www.crh.noaa.gov/forecasts/IDZ014.php?warncounty=IDC001&city=Boise+City
- http://forecast.weather.gov/MapClick.php?lat=43.58834891179792&lon=116.56631469726562&site=boi&smap=1&unit=0&lg=en&FcstType=text
- http://www.wunderground.com/US/ID/Nampa.html
- http://www.wrh.noaa.gov/climate/index.php?wfo=boi.

Additional forecasts or weather reports may be obtained from local media or commercial weather services. "Raw" (unedited) weather data must be used, since it is impractical to wait for a period of days to weeks for internal NWS QA/QC review.

For storm event discharge monitoring, the *Program Coordinator* will typically call the NWS for additional details if it appears that an approaching storm may meet the sampling criteria. Pertinent details of these conversations will be recorded on the Sampling Event Communication Form, directly on the forecast printouts (Appendix 2) pending.

B10 - Data Management

As described in element A9, the *Program Coordinator* will store daily weather forecasts, original field data sheets, CoC, laboratory reports in binders at ITD. Sampling event communication forms, electronic laboratory data and electronic data downloaded from field equipment are stored electronically on the ITD network. Copies of these electronic files will be stored on the secure ITD remote access server that is backed up on a 24 hour cycle.

Data from the storm event discharge and dry weather monitoring will be stored in a Microsoft® Excel spreadsheet managed by ITD. This file will be backed up on a secure server managed and maintained by ITD.

Group C—Assessment/Oversight

Group C elements address the activities for assuring that the project is being implemented as designed, and in accordance with the NPDES Permit. These activities constitute part of the quality assurance performed for this program.

C1 - Assessments and Response Actions

Event and Data Completeness

The *Program Coordinator* will review the analytical data from each sampling event for accuracy, precision, and completeness. This review will include the following activities:

- Review field data sheets for completeness and for circumstances which might adversely affect data quality (such as apparently erroneous field measurements or unclear writing);
- Confirmation that all samples, including QC samples, were collected as specified;
- Confirmation that all samples were delivered to the laboratory promptly;

- Confirmation that the samples were received in good condition by the laboratory; and
- Confirmation that analytical reports on all samples were received.

The analytical data, along with QC data from each sampling event, will be entered into the Microsoft® Excel files and used in the generation of annual reports. Appendix 2 (pending) contains the form that will be filled out and signed by the *Program Coordinator* to ensure the completeness of this process.

Based on the review of analytical data from each sampling event, changes to subsequent sampling events may be made to ensure that at the end of the year, sufficient data will be available to meet data quality objectives and permit conditions. This may include additional sampling events for one or more parameters, additional QA/QC samples to investigate data issues, or other changes.

At the end of each sampling season, the *ITD Program Manager and ITD Program Coordinator* will meet and discuss the sampling season that was just completed, any problems that were encountered, and any changes that are needed prior to the next sampling year. Changes to the QAPP will be made as needed at that time.

Additional QA/QC checks may be instituted from time to time to assess procedures or investigate apparent problems. These checks will generally be undertaken if data generated by the sampling program is significantly different from data previously generated, or QA/QC data indicate potential problems with one or more analytical parameters.

C2 - Reports to Management

Discharge Monitoring Reports will be transmitted to the *Program Coordinator* after each sampling period. These will be stored in folders, separated by storm date, at ITD. The NPDES annual reports will incorporate all monitoring data for the water year (October 15 through October 14 the following year).

Group D—Data Validation and Usability

The elements in Group D, performed after data collection is complete, ensure that the data conform to the specified criteria in the NPDES Permit, and produce valid, defensible data. These activities constitute part of the quality assurance and quality control process performed for this program.

D1 - Data Review, Validation and Verification Requirements

Analytical data must meet the laboratory's ordinary internal QA/QC requirements, as described in Appendix 4. The *Program Coordinator* will examine the field forms and laboratory reports to verify field data are complete; that sample holding times were met; that all samples were analyzed for desired parameters; and that detection limits are

appropriate (allowing for dilution or matrix interference, as necessary) to meet NPDES Permit limitations. The *Program Coordinator* will also confirm that the laboratory QA samples meet the laboratory's stated control limits. Deficiencies will be referred to the laboratory for the corrective actions specified in their QAP (such as reanalysis). The laboratory updates their control limits on a regular basis by adding the results of recent Laboratory Control Standards (LCS) to a statistical analysis.

D2 - Validation and Verification Methods

Data validation will be performed by the *Program Coordinator or designee.* Procedures will include, at a minimum:

- Review chain-of-custody forms and laboratory reports to confirm that all samples were extracted and analyzed within the appropriate holding time; for the desired constituents, by the correct methods;
- Confirm that results of all method blanks and spikes fall within the limits set by the laboratories;
- Confirm that surrogate recoveries fall within the limits set by the laboratories;
- Consult with the laboratory and possible raw data review in the event of outliers or unexpected values;
- Confirmation that all analytical holding times were met;
- Confirmation that appropriate analytical methods were used;
- Confirmation that all laboratory QA samples were within LCSs;
- Ensuring that all data flagged by the laboratory is properly entered into the Microsoft® Excel file along with all data qualifiers;
- A review of all data together with field QA/QC samples and assignment of data qualifiers where necessary;
- Confirmation that all data quality objectives were achieved.

After receiving the lab analytical reports, the ITD *Program Coordinator* will fill out and sign a checklist that includes the above validation review. This form is included as Appendix 2 (pending). This documentation indicates that the validation process was done properly and should include any notes pertinent to the use of the data in the annual reports.

D3 - Reconciliation with Data Quality Objectives

The activities specified in the Event and Data Completeness and Validation and Verification Methods portion of this plan will be used to assess the degree to which the DQOs have been met. This information will be summarized in the annual report. The *Program Coordinator* will initiate appropriate corrective action in the event that DQOs have not been met.

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APPENDIX 1
NPDES PERMIT NO. IDS-028177

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101

Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems

Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 *et seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act", the

Idaho Transportation Department, District # 3
(hereinafter "permittee")

is authorized to discharge from all municipal separate storm sewer system (MS4) outfalls existing as of the effective date of this permit to waters of the United States which include the Boise River, and other associated waters of the United States within the Boise and Nampa Urbanized Areas, in accordance with the conditions and requirements set forth herein.

This permit shall become effective October 15, 2009.

This permit and the authorization to discharge shall expire at midnight, October 14, 2014.

The permittee must reapply for permit reissuance on or before April 18, 2014, 180 days before the expiration of this permit if the permittee intends to continue operations and discharges from the MS4 beyond the term of this permit.

Signed this 28th day of August 2009

Michael A. Bussell, Director
Office of Water and Watersheds

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I. Applicability

A. Permit Area. This permit covers all areas within the Boise and Nampa Urbanized Areas served by the municipal separate storm sewer system (MS4s) owned or operated by the Idaho Transportation Department, District # 3 (permittee), excluding the portion of the permittee's MS4 previously authorized to discharge under NPDES Permit #IDS-027561.

B. Discharges Authorized Under This Permit. During the effective dates of this permit, the permittee is authorized to discharge storm water to waters of the United States from all portions of the MS4 and property located within the Boise and Nampa Urbanized Areas that are owned or operated by the permittee, subject to the conditions set forth herein. This permit also authorizes the discharge of flows categorized as allowable non-storm water discharges in Part I.C. of this permit.

C. Limitations on Permit Coverage

1. **Non-Storm Water Discharges.** The permittee is not authorized to discharge non-storm water from the MS4, except where such discharges satisfy one of the following three conditions:

a) The non-storm water discharges are in compliance with a separate NPDES permit;

b) The non-storm water discharges result from a spill, and:

(i) are the result of an unusual and severe weather event where reasonable and prudent measures have been taken to minimize the impact of such discharge; or

(ii) consist of emergency discharges required to prevent imminent threat to human health or severe property damage, provided that reasonable and prudent measures have been taken to minimize the impact of such discharges;

or

c) The non-storm water discharges satisfy each of the following two conditions:

(i) The discharges consist of uncontaminated water line flushing; potable water sources; landscape irrigation (provided all pesticides, herbicides and fertilizer have been applied in accordance with manufacturer's instructions); lawn watering; irrigation water; flows from riparian habitats and wetlands; diverted stream flows; springs; rising ground waters;

uncontaminated ground water infiltration (as defined at 40 CFR § 35.2005(20)) to separate storm sewers; uncontaminated pumped ground water or spring water; foundation and footing drains (where flows are not contaminated with process materials such as solvents); uncontaminated air conditioning or compressor condensate; water from crawlspace pumps; individual residential car washing; dechlorinated swimming pool discharges; routine external building wash down which does not use detergents; street and pavement wash waters, where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed); fire hydrant flushing; or flows from emergency firefighting activities;

and

(ii) The discharges are not sources of pollution to waters of the United States. A discharge is considered a source of pollution to waters of the United States for the purposes of this permit if it:

(a) Contains hazardous materials in concentrations found to be of public health significance or to impair designated beneficial uses in receiving waters. (Hazardous materials are those that are harmful to humans and animals from exposure, but not necessarily ingestion);

(b) Contains toxic substances in concentrations that impair designated beneficial uses in receiving waters. (Toxic substances are those that can that can cause disease, malignancy, genetic mutation, death, or similar consequences);

(c) Contains deleterious materials in concentrations that impair designated beneficial uses in receiving waters. (Deleterious materials are generally substances that taint edible species of fish, cause taste in drinking waters, or cause harm to fish or other aquatic life);

(d) Contains radioactive materials or radioactivity at levels exceeding the values listed in 10 CFR Part 20 in receiving waters;

(e) Contains floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or in concentrations that may impair designated beneficial uses in receiving waters.

(f) Contains excessive nutrients that can cause visible slime growths or other nuisance aquatic growths that impair designated beneficial uses in receiving waters;

(g) Contains oxygen-demanding materials in concentrations that would result in anaerobic water conditions in receiving waters;

(h) Contains sediment above quantities specified in IDAPA 58.01.02.250.02.e, or in the absence of specific sediment criteria, above quantities that impair designated beneficial uses in receiving waters; or

(i) Contains materials in concentrations that exceed applicable natural background conditions in receiving waters (IDAPA 58.01.02.200.09). Temperature levels may be increased above natural background conditions when allowed under IDAPA 58.01.02.401.

2. **Discharges Threatening Water Quality**. The permittee is not authorized to discharge storm water that will cause, or have the reasonable potential to cause or contribute to an excursion above the Idaho water quality standards.

3. **Discharge Compliance with Anti-Degradation Policy**. The permittee is not authorized to discharge storm water that does not comply with Idaho's anti-degradation policy for water quality standards. Idaho's anti-degradation policy, IDAPA 58.01.02.051, can be obtained from IDEQ at the address listed in Part IV.D.

4. **Snow Disposal to Receiving Waters**. The permittee is not authorized to dispose of snow directly to waters of the United States or directly to the MS4(s). Discharges from public snow disposal sites are authorized under this permit when such sites are operated using best management practices (BMPs) required in Part II.B.6. Such BMPs shall be designed to prevent pollutants in the runoff and assure that applicable water quality standards are not violated.

5. **Storm Water Discharges Associated with Industrial and Construction Activity.** The permittee is authorized to discharge storm water associated with industrial activity (as defined in 40 CFR 122.26(b)(14)), and storm water associated with construction activity (as defined in 40 CFR 122.26(b)(14)(x) and (b)(15)), from their MS4s, only when such discharges are otherwise authorized under an appropriate NPDES permit.

II. Storm Water Management Program Requirements

A. General Requirements

1. The permittee must develop, implement and enforce a Storm Water Management Program (SWMP) designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable, and to protect water quality in receiving waters. The SWMP actions and activities must include BMPs, system design, engineering methods, and other provisions appropriate to control discharges of pollutants from the MS4.

2. The SWMP actions and activities are outlined through the minimum control measures in Parts II.B and II.C, and the assessment/monitoring requirements described in Part IV. The permittee must implement a SWMP that provides:

a) BMPs selected, implemented, maintained and updated to ensure that storm water discharges do not cause or contribute to an excursion above an applicable numeric or narrative Idaho water quality standard; and

b) Measurable goals, including interim milestones, for each BMP

3. Modifications to the SWMP must be made in accordance with Part II.D of this permit.

4. Implementation of one or more of the minimum control measures may be shared with or delegated to another entity other than the permittee. The permittee may rely on another entity only if:

a) The other entity, in fact, implements the control measure;

b) The control measure, or component of that measure, is at least as stringent as the corresponding permit requirement; and

c) The other entity agrees to implement the control measure on the permittee's behalf. A binding written acceptance of this obligation is required. The permittee must maintain this obligation as part of the SWMP. If the other entity agrees to report on the minimum control measure, the permittee must supply the other entity with the reporting requirements in Part IV.C of this permit. The permittee remains responsible for compliance with the permit obligations if the other entity fails to implement the control measure.

B. Minimum Control Measures. The following minimum control measures must be accomplished through this Storm Water Management Program:

1. **Public Education and Outreach**

a) Within two years of the effective date of this permit, the permittee must implement an ongoing public education program to educate their audiences about the impacts of storm water discharges on local water bodies and the steps that employees and businesses can take to reduce pollutants in storm water runoff.

b) Throughout the permit term, the permittee must continue to provide relevant and appropriate storm water management education and training for those ITD staff holding positions responsible for maintenance activity and/or field construction oversight. Such staff positions include, but are not limited to, resident engineers, staff engineers, and environmental inspectors.

c) Within two years after the effective date of this permit, the permittee must offer relevant storm water pollution prevention information on its internet website. The permittee must update this information on the website at least once annually.

2. **Public Involvement/Participation**

a) The permittee must comply with applicable State and local public notice requirements when implementing a public involvement/participation program.

b) The permittee must make all relevant SWMP documents and all Annual Reports available to the public. Within three years of the effective date of this permit, all SWMP documentation and Annual Reports must be posted online through its regularly maintained website (or a website sponsored by the permittee).

c) The permittee must hold at least one public meeting to solicit public input for each major transportation construction project conducted/overseen by the permittee. A "major construction project" is one that disturbs one acre of land or more.

d) At least annually, the permittee must coordinate, promote and participate in the existing "Adopt a Highway" clean-up program.

3. **Illicit Discharge Detection and Elimination**

An illicit discharge is any discharge to an MS4 that is not composed entirely of storm water. Exceptions are described in Part I.C of this permit.

a) Within three years from the effective date of this permit, the permittee must develop and implement a plan to detect and eliminate illicit discharges to their MS4, roadways and associated drainage facilities, ditches, pipes, culverts, catch basins and retention ponds in the permit area This plan must include written spill response procedures to ensure protection of the permittee's MS4. The plan must include written procedures for detection, identification of the source, and removal of non-storm water discharges from the MS4. This plan must address illegal dumping into the MS4, and include training for District staff on how to respond to reports of illicit discharges. The permittee must develop an information management database system to track the activities and actions of the program.

b) Within three years from the effective date of this permit, the permittee must effectively prohibit non-storm water discharges into its MS4 through an ordinance or other regulatory mechanism to the extent allowable under State or local law. The permittee must implement appropriate enforcement procedures and actions, including a written policy of enforcement escalation procedures for recalcitrant or repeat offenders.

c) Through the ordinance or other regulatory mechanism, set forth in Part II.B.3.b, the permittee must prohibit any of the non-storm water flows listed in Part I.C.1.c only if such flows are identified (by EPA or the permittee) as a source of pollutants to the MS4. The permittee must document to EPA in the Annual Report any existing local controls or conditions placed on the types of non-storm water discharges in Part I.C.1.c.

d) Within three years from the effective date of this permit, the permittee must update and complete its comprehensive MS4. At a minimum, the map(s) must show jurisdictional boundaries; the location of all ITD-owned or operated storm sewers, culverts, ditches, and other conveyances; the location of all inlets and outfalls; points at which the permittee's MS4 is interconnected with other MS4s; names and locations of all waters that receive discharges from those outfalls; locations of all permittee owned or operated facilities, including all maintenance/storage facilities, permittee-owned or private snow disposal sites, and the ITD maintenance yard. For the ITD maintenance yard, the map must show the locations of activities within the boundaries of the facility, including the maintenance shop, sand/salt storage areas, and the location of the fleet washing area. Locations of all outfalls must also be provided in latitude and longitude, and the

diameter of all outfalls must be provided with the map. The maps must be available in electronic or digital format as appropriate. A copy of the completed map(s), as both a report and as an electronic file via Arc GIS format, must be submitted to EPA and IDEQ as part of the corresponding Annual Report.

e) Within three years from the effective date of this permit, , the permittee must begin an ongoing education program to inform its employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. This program must be conducted in concert with the education requirements outlined in Part II.B.1.

f) Within three years of the effective date of this permit, the permittee must begin dry weather field screening for non-storm water flows from storm water outfalls. By the expiration date of this permit, at least 20% of the permittee's outfalls within the Boise and Nampa Urban Area must be screened for dry weather flows. The screening should include field tests of selected parameters as indicators of discharge sources. Screening level tests may utilize less expensive "field test kits" using test methods not approved by EPA under 40 CFR Part 136, provided the manufacturer's published detection ranges are adequate for the illicit discharge detection purposes. The permittee must investigate any illicit discharge within fifteen (15) days of its detection, and must take action to eliminate the source of the discharge within 45 days of its detection.

g) Within three years from the effective date of this permit, the permitee must inventory all industrial facilities that discharge directly to the permittee's MS4 within the permit area and submit this inventory as part of the corresponding Annual Report. The types of industrial facilities that must be inventoried are set forth in 40 CFR § 122.26(b)(l4)(i-ix). This inventory must include the name and address of the facility, and the location of its outfall.

4. **Construction Site Storm Water Runoff Control**

a) Within three years from the permit effective date, the permittee must review (and update if necessary), implement, and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction activities conducted or overseen by ITD that result in land disturbance of greater than or equal to one acre. This program must include controls for pollutants in such storm water discharges from activity disturbing less than one acre, if that construction activity is part of a larger common plan of development or sale that disturbs one acre or more.

b) Through this program, the permittee must provide adequate oversight and direction to contractors working on ITD projects to ensure compliance with the NPDES General Permit for Storm Water Discharges for Construction Activity in Idaho, #IDR10-0000 (Construction General Permit).

c) Within three years from the effective date of this permit, the permittee must adopt regulatory mechanism to the extent allowable under State or local law that requires construction site operators to practice appropriate erosion, sediment and waste control. This regulatory mechanism must include sanctions to ensure compliance. The permittee may evaluate any existing procedures, policies, and authorities pertaining to activities occurring on public property that may be used to assist in the development of the required regulatory mechanism.

d) Within three years from the effective date of this permit, the permittee must publish and distribute requirements for construction site operators to implement appropriate erosion and sediment control BMPs and to control waste (such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste) at a construction site that may cause adverse impacts to water quality.

e) Within three years from the effective date of this permit, the permittee must develop procedures for reviewing all pre-construction site plans for potential water quality impacts, including erosion and sediment control, control of other wastes, and any other impacts according to the requirements of the law, ordinance, or other enforceable mechanism created to comply with Part II.B.4.c. These procedures must include provisions for receipt and consideration of information submitted by the public.

f) Within three years from the effective date of this permit, the permittee must implement a program to receive, track, and review information submitted by the public regarding construction site erosion and sediment control complaints.

g) Within three years from the effective date of this permit, the permittee must develop and implement procedures for site inspection and enforcement of control measures established as required in Parts II.B.4c and d, including a written policy of enforcement escalation procedures for recalcitrant or repeat offenders. Within three years from the effective date of this permit, the permittee must inspect all construction sites in their jurisdiction disturbing five (5) acres or more for appropriate erosion/sediment/waste control practices at least once per construction season. Within three years from the permit effective date, the permittee

must also develop a written policy identifying how construction sites disturbing less than 5 acres will be prioritized for inspection.

h) The permittee must comply with the Construction General Permit and all relevant local requirements for erosion, sediment and onsite materials control on public construction projects. The permittee must ensure that all contractors working on behalf of the permittee are complying with the Construction General Permit and all relevant local requirements for erosion, sediment, and onsite materials control on construction projects. The permittee must incorporate specific language in all contracts ensuring appropriate storm water management on all public construction projects.

5. **Post-Construction Storm Water Management in New Development and Redevelopment**

a) Within four years of the effective date of this permit, the permittee must develop, implement, and enforce requirements to address post-construction storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre (including projects less than one acre that are part of a larger common plan of development or sale) and that result in discharge into the permittee's MS4 within the permit area. The program must ensure that controls are enacted that prevent or minimize water quality impacts from newly developed or redeveloped areas

b) Within four years from the effective date of this permit, the permittee must implement a regulatory mechanism to the extent allowable under State or local law to address post-construction runoff from new development and redevelopment projects. If such requirements do not currently exist, development and adoption of such a mechanism is required. The permittee may evaluate existing procedures, policies, and authorities pertaining to activities occurring on their property that may be used to assist in the development of the required regulatory mechanism.

c) Not later than the expiration date of this permit, the permittee must ensure proper long term operation and maintenance of all permanent storm water management controls for newly developed project areas greater than or equal to one acre discharging to the MS4 located within the permit area.

d) No later than the expiration date of this permit, the permittee must develop and implement a process for pre-construction plan review of permanent storm water management BMPs. The permittee must implement an inspection program to ensure proper installation and appropriate long-term operation and maintenance of such controls.

6. **Pollution Prevention and Good Housekeeping for Municipal Operations**

a) Within four years from the effective date of this permit, the permittee must develop and implement an operation and maintenance program intended to prevent or reduce pollutant runoff from the permittee's operations. This program must address ITD activities occurring within the permit area with potential for negative storm water related water quality impacts including the use of sand and road deicers; fleet vehicle maintenance and washing; street cleaning and maintenance; materials storage; building maintenance; grounds/park maintenance; hazardous materials storage; used oil recycling; sand/salt storage; and storm water system maintenance. Examples of other activities which may also be evaluated by ITD, include, but are not limited to: solid waste transfer activities; spill control and prevention measures for refueling facilities; new construction and land disturbances; snow removal, and snow disposal site operation.

b) Within four years from the effective date of this permit and once per year thereafter, the permittee must develop and conduct appropriate training for the ITD's employees related to best maintenance practices for protection of water quality. This training must be conducted at least once annually to address the activities specified in Part II.B.6.a.

c) Within four years from the effective date of this permit, the permittee must prepare and implement a storm water pollution prevention plan for permittee's fleet maintenance/street maintenance yard in areas not already permitted under NPDES Permit #IDS027561.

C. Discharges to Water Quality Impaired Receiving Waters

1. The permittee must conduct storm water discharge monitoring as required in Part IV.

2. The permittee must determine whether storm water discharges from any part of the MS4 contribute pollutants of concern, either directly or indirectly, to any Clean Water Act ("CWA" or "Act") Section 303(d) listed water bodies. For the purposes of this permit, the Section 303 (d) listed water bodies according to the IDEQ 2002 Integrated Report include, but are not limited to, the Boise River, and associated tributaries. "Pollutant(s) of concern" refer to the pollutant(s) identified as causing or contributing to the water quality impairment. Pollutants of concern for the purposes of this permit are total phosphorus, sediment, and *E. coli*.

3. The permittee's Annual Report must include a description of how the activities in each of the minimum control measures in Part II.B are targeted by the

permittee to control the discharge of pollutants of concern, and ensure to the maximum extent practicable that the MS4 discharges will not cause or contribute to an excursion above the applicable Idaho water quality standards. This discussion must specifically identify how the permittee will evaluate and measure the effectiveness of the SWMP to control the discharge of the pollutants of concern. For those activities identified in Part II.B requiring multiple years to develop and implement, the permittee must provide updates on progress to date. The permittee must submit this description of the SWMP implementation to EPA and IDEQ as part of the first Annual Report required in Part IV.C, and update it annually in subsequent Annual Reports.

D. Reviewing and Updating the SWMP

1. The permittee must annually review its SWMP actions and activities as part of the preparation of the Annual Report required under Part IV.C.

2. The permittee may request changes to any SWMP action or activity specified in this permit in accordance with the following procedures:

a) Changes to delete or replace an action or activity specifically identified in this permit with an alternate action or activity may be requested at any time. Modification requests to EPA must include:

(i) An analysis of why the original actions or activity is ineffective, infeasible, or cost prohibitive;

(ii) Expectations on the effectiveness of the replacement action or activity; and

(iii) An analysis of why the replacement action or activity is expected to better achieve the permit requirements.

b) Change requests must be made in writing and signed by the permittee in accordance with Part VI.E.

3. Documentation of any of the actions or activities required by this permit must be submitted to EPA upon request.

a) EPA may review and subsequently notify the permittee that changes to the SWMP are necessary to:

(i) Address discharges from the MS4 that are causing or contributing to adverse water quality impacts;

(ii) Include more stringent requirements necessary to comply with new federal or state statutory or regulatory requirements; or

(iii) Include other conditions deemed necessary by EPA to comply with water quality standards, and/or other goals and requirements of the CWA.

b) If EPA notifies the permittee that changes are necessary pursuant to Part II.D.3.a, the notification will offer the permittee an opportunity to propose alternative program changes to meet the objectives of the requested modification. Following this opportunity, the permittee must implement any required changes according to the schedule set by EPA.

4. Any formal modifications to this permit will be accomplished according to Part VI.A of this permit.

E. Transfer of Ownership, Operational Authority, or Responsibility for SWMP Implementation. The permittee must implement the actions and activities of the SWMP in all new areas added or transferred to the permittee's MS4 (or for which the permittee becomes responsible for implementation of storm water quality controls) as expeditiously as practicable, but not later than one year from the date upon which the new areas were added. Such additions and schedules for implementation must be documented in the next Annual Report following the transfer.

F. SWMP Resources. The permittee must provide adequate finances, staff, equipment and other support capabilities to implement the SWMP actions and activities outlined in this permit.

III. Schedule for Implementation and Compliance

Table III. Storm Water Management Program - Schedule for Implementation and Compliance		
Part of Permit	**Storm Water Management Program Component**	**Compliance Date**
	General Requirements	
Part II.C	Submit written description of how SWMP actions are targeted to control the discharge of pollutants of concern, and how permittee will evaluate the effectiveness of those actions	As part of the 1st Annual Report, annually thereafter
Parts II.D and IV.C	Conduct an annual review of SWMP implementation and submit an Annual Report to EPA and IDEQ	January 15, 2011, annually thereafter reflecting the 12 month period ending Oct 15th of the previous year
	Include Storm Water Discharge Monitoring Report (SWDMR)	Jan 15, 2012; annually thereafter
Part IV	Develop a Monitoring Plan & Quality Assurance Plan for storm water discharge monitoring, provide written notice to EPA and IDEQ	Within one year of permit effective date
	Begin monitoring	Two years from permit effective date
	Public Education and Outreach (40 CFR §122.34(b)(1))	
Part II.B.1	Implement an education program to educate the community about the impacts of storm water discharges on local water bodies and the steps that citizens and businesses can take to reduce pollutants in storm water runoff (II.B.1.a)	Within two years of the permit effective date
	Provide relevant and appropriate storm water management training to ITD staff (II.B.1.b)	Ongoing
	Post storm water pollution prevention information on ITD's website (II.B.1.c)	Within two years of the permit effective date
	Public Involvement and Participation (40 CFR §122.34(b)(2))	
Part II.B.2	Post all SWMP documentation and Annual Reports on the permittee's website (II.B.2.b) Make hard copies of all SWMP documentation and Annual Reports publicly available at the ITD maintenance yard (II.B.2.c) Update documentation on website and in hard copy	Within three year of the permit effective date
	Hold at least one public meeting to solicit public input for each major transportation project (II.B.c)	Ongoing
	Continue Adopt a Highway program	Ongoing

Table III., continued Storm Water Management Program - Schedule for Implementation and Compliance		
Part of Permit	**Storm Water Management Program Component**	**Compliance Date**
Illicit Discharge Detection and Elimination (40 CFR §122.34(b)(3))		
Part II.B.3	Develop, implement and enforce a program to detect and eliminate illicit discharges into the MS4 (II.B.3.a)	Three years from the permit effective date
	Adopt an ordinance or other control measure to prohibit illicit discharges to the MS4(s); prohibit any specific non-storm water discharge, if necessary (II.B.3.b & c)	Three years from the effective date of this permit
	Develop/update a comprehensive storm sewer system map. (II.B.3.d)	Three years from the permit effective date
	Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste (II.B.3.e)	Three years from the permit effective date
	Begin dry weather screening of outfalls 20% of outfalls screened for dry weather flows (II.B.3.f)	Three years from the permit effective date Not later than permit expiration date
	Inventory the industrial facilities discharging storm water to the MS4 (II.B.3.g)	Three years from the permit effective date
Construction Site Storm Water Runoff (40 CFR §122.34(b)(4))		
Part II.B.4	Develop, implement and enforce a construction site runoff control program for sites disturbing one or more acres of land (II.B.4.a)	Three years of the permit effective date
	Provide oversight to ITD contractors regarding CGP (II.B.4.b)	Ongoing
	Adopt an ordinance or other control measure to require construction site operators to practice erosion, sediment and waste control (II.B.4.c)	Three years from permit effective date
	Distribute written requirements for construction site best management practices for new building and service area construction. (II.B.4.d)	Three years from permit effective date
	Develop, or review and update as necessary, procedures for reviewing site plans and accepting public input (II.B.4.e & f)	Three years from permit effective date
	Implement site inspection & enforcement procedures. Inspect all construction sites >5 acres at least once per construction season. Develop a written policy identifying how construction sites disturbing < 5 acres will be prioritized for inspection (II.B.4.g)	Three years from the permit effective date
	Ensure all permittee-owned construction projects comply with EPA's Construction General Permit (II.B.4.h)	Upon permit effective date

Table III.A, continued Storm Water Management Program - Schedule for Implementation and Compliance		
Part of Permit	**Storm Water Management Program Component**	**Compliance Date**
Post-Construction Storm Water Management (40 CFR §122.34(b)(5))		
Part II.B.5	Develop and implement a program to address post-construction storm water runoff from new development and redevelopment projects (II.B.5.a)	Four years from the effective date of this permit
	Adopt an ordinance to address post-construction runoff from new development and redevelopment projects (II.B.5.b)	Four years from the effective date of this permit
	Ensure proper long term operation and maintenance of post construction storm water BMPs. (II.B.5.c)	Not later than the permit expiration date
	Develop and implement a site plan review process and inspection program to ensure proper installation and long-term operation and maintenance of post-construction storm water management controls (II.B.5. d)	Not later than the permit expiration date
Pollution Prevention/Good Housekeeping (40 CFR §122.34(b)(6))		
Part II.B.6	Develop and implement an operation and maintenance program intended to prevent or reduce pollutant runoff from municipal operations (II.B.6.a)	Four years from the permit effective date
	Develop and conduct appropriate training for ITD personnel (II.B.6.b)	Four years from the permit effective date, once per year thereafter
	Develop SWPPP for ITD's maintenance yard/street department site (II.B.c)	Four years from the permit effective date

IV. MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

A. Monitoring

1. At least once per year, the permittee must evaluate its compliance with these permit conditions, the appropriateness of identified BMPs, and progress toward achieving the minimum control measures. This evaluation of program compliance must be documented in each Annual Report required as described in Part IV.C.

2. **Monitoring Objectives.** The permittee must monitor the quality of storm water discharges from the MS4, as described in Part IV.A.5. Not later than one year from the effective date of this permit, the permittee must develop a monitoring plan that includes the quality assurance requirements defined in Part IV.A.6. The permittee must develop and implement a monitoring program to:

   a) Estimate pollutant loading currently discharged from the MS4;

   b) Assess the effectiveness and adequacy of control measures implemented through this permit; and

   c) Identify and prioritize the portions of the MS4 requiring additional controls.

3. **Representative Sampling.** Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

4. **Monitoring Procedures.** Monitoring must be conducted according to test procedures approved under 40 CFR Part 136. Where an approved 40 CFR Part 136 method does not exist, and other test procedures have not been specified, any available method may be used after approval from EPA and IDEQ.

5. **Storm Water Discharge Monitoring.** The permittee must conduct a storm water discharge monitoring program which meets the following minimum requirements:

   a) The permittee must sample at least one storm water outfall discharging to the Boise River or tributary to the Boise River in areas of the permittee's jurisdiction not already permitted by NPDES Permit #IDS027561.

   b) Not later than two years from the effective date of this permit, the permittee must begin stormwater discharge monitoring for pollutants identified in Table IV.A.

Table IV.A: Monitoring Requirements

Parameter	Monitoring requirements		
	Sample location[1]	Sample frequency[2]	Sample type[3]
Flow (cfs)	See below	4 times/yr	Grab
Total suspended solids (mg/L)	See below	4 times/yr	Grab
Total phosphorus (mg/L)	See below	4 times/yr	Grab
Total Nitrogen	See below	4 times/yr	Grab
E. coli	See below	4 times/yr	Grab

[1] Outfall location to be determined by the permittee.
[2] A minimum of four (4) samples must be collected in a calendar year. Monitoring should occur within the following periods: March — April, May — June, July — August, September — October. If samples cannot be collected due to lack of rainfall in these periods, samples may be collected in other months as necessary to meet the minimum of four (4) samples. Sampling should occur within the first 120 minutes (2 hours) of a storm event.
[3] Grab samples may be taken manually or with an automatic water sampler.

6. **Quality Assurance Requirements.** The permittee must develop a quality assurance plan (QAP) for all monitoring required in this Part. The QAP must be developed concurrent with the monitoring plan within one year of the effective date of this permit. Any existing QAPs may be modified for the requirements of this section. Upon completion of the QAP, the permittee must provide written notice to to EPA and IDEQ, as indicated in Part IV.D.

a) The QAP must be designed to assist in planning for the collection and analysis of storm water discharge samples in support of the permit and in explaining data anomalies when they occur.

b) Throughout all sample collection and analysis activities, the permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in the following documents:

(i) *EPA Requirements for Quality Assurance Project Plans EPA-QA/R-5* (EPA/240/B-01/003, March 2001). A copy of this document can be found electronically at: http://www.epa.gov/quality/qs-docs/r5-final.pdf

(ii) *Guidance for Quality Assurance Project Plans EPA-QA/G-5*, (EPA/600/R-98/018, February, 1998). A copy of this document can be found electronically at: http://www.epa.gov/r10earth/offices/oea/epaqag5.pdf

The QAP must be prepared in the format specified in these documents.

c) At a minimum, the QAP must include the following:

(i) Details on the number of samples, type of sample containers, preservation of samples, holding times, analytical

methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements;

(ii) Map(s) indicating the location of each sampling point;

(iii) Qualification and training of personnel; and

(iv) Name(s), address(es) and telephone number(s) of the laboratories, used by or proposed to be used by the permittee.

d) The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP.

e) Copies of the QAP must be maintained by the permittee and made available to EPA and/or IDEQ upon request.

B. Recordkeeping

1. **Retention of Records.** The permittee must retain records and copies of all information (including all monitoring, calibration and maintenance records and all original strip chart recordings for any continuous monitoring instrumentation, copies of all reports required by this permit, copies of DMRs, a copy of the NPDES permit, and records of all data used to complete the application for this permit) for a period of at least three years from the date of the sample, measurement, report or application, or for the term of this permit, whichever is longer. This period may be extended at the request of the EPA at any time. Records include all information used in the development of the SWMP, all monitoring data, copies of all reports, and all data used in the development of the permit application.

2. **Availability of Records.** The permittee must submit the records referred to in Part IV.B.1 to EPA and IDEQ only when specifically asked to do so. The permittee must retain the SWMP required by this permit (including a copy of the permit language and all Annual Reports) at a location accessible to the EPA. The permittee must make records, including the permit application and the SWMP, available to the public. The public must be able to view the records during normal business hours. The permittee may charge the public a reasonable fee for copying requests.

C. Reporting Requirements

1. **Storm Water Discharge Monitoring Report.** Within three years from the effective date of this permit, and once per year thereafter, all available storm water discharge monitoring data must be submitted as part of the Annual Report. At a minimum, this Storm Water Discharge Monitoring Report must include:

a) Dates of sample collection and analyses;

b) Results of analytical samples collected;

c) Location of sample collection;

d) For the months sampled, estimates of the wet weather monthly average pollutant loads for each pollutant at each sample location; and

e) An annual cumulative estimate of pollutant loading for each parameter at each sample location, and an overall estimate of the contribution of pollutants from all storm water emanating from the permittee's MS4.

2. **Annual Report.** No later than January 15 of each year beginning in year 2011, the permittee must submit an Annual Report to EPA and IDEQ. The reporting period for the first Annual Report will be from the effective date of this permit through October 15, 2010. The reporting period for all subsequent annual reports will be the 12 month period ending October 15th of the previous calendar year. Copies of all Annual Reports must be made available to the public, at a minimum, through a permittee-maintained website. The following information must be contained in each Annual Report:

a) The report must assess compliance with this permit and progress towards achieving the identified actions and activities for each minimum control measure in Parts II.B and II.C. Status of each program area must be addressed, even if activity has previously been completed or has not yet been implemented

b) Results of any information collected and analyzed during the previous 12 month period, and any other information used to assess the success of the program at improving water quality to the maximum extent practicable;

c) A summary of the number and nature of inspections, formal enforcement actions, and/or other similar activities performed by the permittee;

d) A summary list of any water quality compliance-related enforcement actions received from regulatory agencies other than EPA. Such actions include, but are not limited to, formal warning letters, notices of violation, field citations, or similar actions. This summary should include dates, project synopsis, and actions taken to address the compliance issue(s);

e) Copies of education materials, ordinances (or other regulatory mechanisms), inventories, guidance materials, or other products produced as a result of actions or activities required by this permit;

f) A general summary of the activities the permittee plans to undertake during the next reporting cycle (including an implementation schedule) for each minimum control measure;

g) A description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable water quality standards to the maximum extent practicable;

h) Notice if the permittee is relying on another entity to satisfy any of the permit obligations, if applicable; and

i) A description of the location, size, receiving water, and drainage area of any new MS4 outfall(s) owned or operated by the permittee added to the system since the previous annual reporting period.

D. Addresses

Reports and other documents required by this must be signed in accordance with Part VI.E and submitted to each of the following addresses:

EPA: United States Environmental Protection Agency
Attention: Storm Water Program
NPDES Compliance Unit
1200 6th Avenue, Suite 900 (OCE-133)
Seattle, WA 98101

IDEQ: Idaho Department of Environmental Quality
Boise Regional Office
1445 North Orchard
Boise, ID 83720

V. Compliance Responsibilities

A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for

enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

B. Penalties for Violations of Permit Conditions

1. **Civil Penalties.** Pursuant to 40 CFR Part 19 and the Act, any person who violates Section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701) (currently $37,500 per day for each violation).

2. **Administrative Penalties.** Any person may be assessed an administrative penalty by the Administrator for violating Section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of this Act. Pursuant to 40 CFR Part 19 and the Act, administrative penalties for Class I violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701) (currently $16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $37,500). Pursuant to 40 CFR Part 19 and the Act, penalties for Class II violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C.§ 2461) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701) (currently $16,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $177,500).

3. **Criminal Penalties.**

a) **Negligent Violations.** The Act provides that any person who negligently violates Sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act, or any requirement imposed in a pretreatment program approved under Section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two years, or both.

b) **Knowing Violations.** Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of

$5,000 to $50,000 per day of violation, or imprisonment for not more than three years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six years, or both.

c) **Knowing Endangerment.** Any person who knowingly violates Section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in Section 309(c)(3)(B)(iii) of the Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

d) **False Statements.** The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this permit.

D. Duty to Mitigate. The permittee must take all reasonable steps to minimize or prevent any discharge or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance. The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related

appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

F. Toxic Pollutants. The permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

G. Planned Changes. The permittee must give notice to the Director and IDEQ as soon as possible of any planned physical alterations or additions to the permitted facility whenever:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR §122.29(b); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in the permit.

H. Anticipated Noncompliance. The permittee must give advance notice to the Director and IDEQ of any planned changes in the permitted facility or activity that may result in noncompliance with this permit.

VI. General Provisions

A. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR §§ 122.62, 122.64, or 124.5. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

B. Duty to Reapply. If the permittee intends to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. In accordance with 40 CFR §122.21(d), and unless permission for the application to be submitted at a later date has been granted by the Director, the permittee must submit a new application at least 180 days before the expiration date of the permit, or in conjunction with the fourth Annual Report. The reapplication package must contain the information required by 40 CFR §122.21(f) which includes: name and mailing address(es) of the permittee(s) that operate the MS4(s), and names and titles of the primary administrative and technical contacts for the municipal permittee(s). In addition, the permittee must identify the identification number of the existing NPDES MS4 permit; any

previously unidentified water bodies that receive discharges from the MS4; a summary of any known water quality impacts on the newly identified receiving waters; a description of any changes to the number of applicants; and any changes or modifications to the Storm Water Management Program. The re-application package may incorporate by reference the fourth Annual Report when the reapplication requirements have been addressed within that report.

C. Duty to Provide Information. The permittee must furnish to the Director and IDEQ, within the time specified in the request, any information that the Director or IDEQ may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee must also furnish to the Director or IDEQ, upon request, copies of records required to be kept by this permit.

D. Other Information. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or that it submitted incorrect information in a permit application or any report to the Director or IDEQ, the permittee must promptly submit the omitted facts or corrected information.

E. Signatory Requirements. All applications, reports or information submitted to the Director and IDEQ must be signed and certified as follows:

1. All permit applications must be signed as follows:

   a) For a corporation: by a responsible corporate officer.

   b) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively

   c) For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the Director or the IDEQ must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a) The authorization is made in writing by a person described above;

   b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the organization; and

c) The written authorization is submitted to the Director and IDEQ.

3. Changes to authorization. If an authorization under Part VI.E.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part VI.E.2 must be submitted to the Director and IDEQ prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this Part must make the following certification:

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

F. Availability of Reports. In accordance with 40 CFR Part 2, information submitted to EPA pursuant to this permit may be claimed as confidential by the permittee. In accordance with the Act, permit applications, permits and effluent data are not considered confidential. Any confidentiality claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice to the permittee. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2, Subpart B (Public Information) and 41 Fed. Reg. 36902 through 36924 (September 1, 1976), as amended.

G. Inspection and Entry. The permittee must allow the Director, IDEQ, or an authorized representative (including an authorized contractor acting as a representative of the Director), upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permitee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

H. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, nor any infringement of state or local laws or regulations.

I. Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act. (See 40 CFR §122.61; in some cases, modification or revocation and reissuance is mandatory.)

J. State/Tribal Environmental Laws

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

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

K. Oil and Hazardous Substance Liability. Nothing in this permit shall be constructed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under

Section 311 of the CWA or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

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

VII. Definitions and Acronyms

All definitions contained in Section 502 of the Act and 40 CFR Part 122 apply to this permit and are incorporated herein by reference. For convenience, simplified explanations of some regulatory/statutory definitions have been provided but, in the event of a conflict, the definition found in the statute or regulation takes precedence.

"Administrator" means the Administrator of the EPA, or an authorized representative.

"Best Management Practices (BMPs)" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Boise Urbanized Area" means the greater Boise, Idaho, area delineated by the Year 2000 Census by the U.S. Bureau of the Census according to the criteria defined by the Bureau on March 15, 2002 (67 FR 11663) namely, the area consisting of contiguous, densely settled census block groups and census blocks that meet minimum population density requirements, along with adjacent densely settled census blocks that together encompass a population of at least 50,000 people.

"Construction General Permit or CGP" means the current version of the U.S. Environmental Protection Agency's *NPDES General Permit for Storm Water Discharges from Construction Activities in Idaho, Permit No. IDR10-0000.* The permit is posted on EPA's website at *www.epa.gov/npdes/stormwater/cgp*.

"Control Measure" as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the United States.

"CWA" or "The Act" means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq.

"Director" means the Environmental Protection Agency Regional Administrator, the Director of the Office of Water and Watersheds, or an authorized representative.

"Discharge" when used without a qualifier, refers to "discharge of a pollutant" as defined at 40 CFR §122.2.

"Discharge of Storm Water Associated with Construction Activity" as used in this permit, refers to a discharge of pollutants in storm water runoff from areas where soil disturbing activities (*e.g.*, clearing, grading, or excavation), construction materials or equipment storage or maintenance (*e.g.*, fill piles, borrow areas, concrete truck washout, fueling) or other industrial storm water directly related to the construction process are located. (See 40 CFR §122.26(b)(14)(x) and 40 CFR §122.26(b)(15) for the two regulatory definitions of storm water associated with construction sites.)

"Discharge of Storm Water Associated with Industrial Activity" is defined at 40 CFR §122.26(b)(14).

"Discharge-related Activities" include: activities which cause, contribute to, or result in storm water point source pollutant discharges and measures to control storm water discharges, including the siting, construction, and operation of best management practices to control, reduce or prevent storm water pollution.

"Discharge Monitoring Report or DMR" means the EPA uniform national form, including any subsequent additions, revisions or modification for the reporting of self monitoring results by permittees. See 40 CFR §122.2.

"EPA" means the Environmental Protection Agency Regional Administrator, the Director of the Office of Water and Watersheds, or an authorized representative.

"Facility or Activity" means any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

"IDAPA" means Idaho Administrative Procedure Act.

"IDEQ"means the Idaho Department of Environmental Quality.

"Illicit Connection" means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

"Illicit Discharge" is defined at 40 CFR §122.26(b)(2) and means any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire fighting activities.

"Industrial Activity" as used in this permit refers to the eleven categories of industrial activities included in the definition of discharges of storm water associated with industrial activity at 40 CFR §122.26(b)(14).

"Industrial Storm Water" as used in this permit refers to storm water runoff associated with the definition of discharges of storm water associated with industrial activity.

"MEP" or "maximum extent practicable," means the technology-based discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by CWA Section 402(p). A discussion of MEP as it applies to small MS4s is found at 40 CFR §122.34.

"Measurable Goal" means a quantitative measure of progress in implementing a component of a storm water management program.

"MS4" means "municipal separate storm sewer system" and is used to refer to either a Large, Medium, or Small Municipal Separate Storm Sewer System. The term, as used within the context of this permit, refers to small MS4s (see definition below) and includes systems operated by a variety of public entities (*e.g.*, military facilities, prisons, and systems operated by other levels of government).

"Municipality" means a city, town, borough, county, parish, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA.

"Municipal Separate Storm Sewer" is defined at 40 CFR 122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.

"Nampa Urbanized Area" means the greater Nampa, Idaho, area delineated by the Year 2000 Census by the U.S. Bureau of the Census according to the criteria defined by the Bureau on March 15, 2002 (67 FR 11663) namely, the area consisting of contiguous, densely settled census block groups and census blocks that meet minimum population density requirements, along with adjacent densely settled census blocks that together encompass a population of at least 50,000 people.

"National Pollutant Discharge Elimination System" or "NPDES" means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the CWA. The term includes an "approved program."

"Outfall" means a point source (defined below) at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers or pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States.

"Owner or operator" means the owner or operator of any "facility or activity" subject to regulation under the NPDES program.

"Permitting Authority" means EPA.

"Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

"Pollutant" is defined at 40 CFR §122.2. A partial listing from this definition includes: dredged spoil, solid waste, sewage, garbage, sewage sludge, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial or municipal waste.

"Pollutant(s) of concern" includes any pollutant identified as a cause of impairment of any water body that will receive a discharge from a MS4 authorized under this permit.

"QA/QC" means quality assurance/quality control.

"QAP" means Quality Assurance Plan.

"Regional Administrator" means the Regional Administrator of Region 10 of the EPA, or the authorized representative of the Regional Administrator.

"Significant contributors of pollutants" means any discharge that causes or could cause or contribute to an excursion above any Idaho water quality standards.

"Small Municipal Separate Storm Sewer System" is defined at 40 CFR §122.26(b)(16) and refers to all separate storm sewers that are owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA that discharges to waters of the United States, but is not defined as "large"' or "medium" municipal separate storm sewer system. This term includes systems similar to separate storm sewer systems in municipalities such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas such as individual buildings.

"Storm event" for the purposes of this permit is defined as precipitation greater than 0.1 inch in magnitude which occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) event.

"Storm Water" is defined at 40 CFR §122.26(b)(13) and means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Storm Water Management Program (SWMP)" refers to a comprehensive program to manage the quality of storm water discharged from the municipal separate storm sewer system.

"TMDL" means Total Maximum Daily Load, an analysis of pollutant loading to a body of water detailing the sum of the individual waste load allocations for point sources and load allocations for non-point sources and natural background. See 40 CFR §130.2.

"Waters of the United States" means:

1. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

2. All interstate waters, including interstate "wetlands";

3. All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;

b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

c. Which are used or could be used for industrial purposes by industries in interstate commerce;

4. All impoundments of waters otherwise defined as waters of the United States under this definition;

5. Tributaries of waters identified in paragraphs 1. through 4. of this definition;

6. The territorial sea; and

7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs 1. through 6. of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds for steam electric generation stations per 40 CFR Part 423) which also meet the criteria of this definition are not waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

"Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

APPENDIX 2
FIELD DATA FORMS

APPENDIX 3

ILLUSTRATIVE CHAIN OF CUSTODY FORMS

APPENDIX 4

WATER QUALITY LABORATORY'S INFORMATION

APPENDIX 5

STANDARD OPERATING PROCEDURES

Vicki Farrar

From: Greg Vitley
Sent: Thursday, December 22, 2011 7:07 AM
To: Wade Christiansen; Dave Kuisti
Cc: Vicki Farrar
Subject: RE: Sh-55, N Fk Payette Rv Br, Cascade - Key No. 08670

Yes I am taking care of the agreement. Vicki has submitted the application to IDL for the ITD Easement/Permit. She will follow up next week as well.

From: Wade Christiansen
Sent: Wednesday, December 21, 2011 8:02 AM
To: Greg Vitley; Dave Kuisti
Subject: RE: Sh-55, N Fk Payette Rv Br, Cascade - Key No. 08670

Cost for wetland banking won't be an issue. Are you taking care of the agreement for it?
I'll talk with Lana about the IDL temporary construction license.

We also have to come up with an sp to comply with the joint permit. I'm working with Jayme & Jeff, since it's theirs to deal with.

Wade

From: Greg Vitley
Sent: Tuesday, December 20, 2011 7:16 AM
To: Dave Kuisti; Wade Christiansen
Subject: RE: Sh-55, N Fk Payette Rv Br, Cascade - Key No. 08670

On the environmental side..
IDWR Permit
Water Quality Cert
Reevaluation
Planting Plans and Specs.
Heads up: Based on current wetland impacts the cost for banking will be 45,500.
IDL Permit?

From: Dave Kuisti
Sent: Monday, December 19, 2011 5:06 PM
To: Wade Christiansen
Cc: Greg Vitley
Subject: FW: Sh-55, N Fk Payette Rv Br, Cascade - Key No. 08670

These seems quite a bit earlier than we were anticipating. What stands in the way of PS&E submittal?

From: Vicki Farrar
Sent: Monday, December 19, 2011 4:19 PM
To: Wade Christiansen; Rick Jensen; Jeff Morf; John Arambarri
Cc: Jayme Coonce; Greg Vitley; Michele Fikel; Victoria Jewell Guerra; Dave Kuisti; Dave Jones; Sue Sullivan
Subject: Sh-55, N Fk Payette Rv Br, Cascade - Key No. 08670

RE: SECTION 404 PERMIT, U.S. ARMY CORPS OF ENGINEERS

The attached permit arrived in today's mail. It's also been filed in the electronic project file, if you need to locate it again later.

If you have any additional comments or concerns, let me know.

- Vicki

ATTACHMENTS

Stormwater Compliance Inspection

ITD 2802 (Rev. 08-11)
itd.idaho.gov

Inspection Identification Number* _____

*Identification Number is created using District Number, Key Number, Inspection Number, and Inspection Type (I – ITD; T – Third Party)

Section 1 – Project Information

Go to Procedures

Key Number	Project Number	Project Name	
District	Resident Engineer	Contractor's Name	
NPDES Permit ☐ Yes ☐ No	If Yes, Current SWPPP Date	Contractor Has Filed Their NOT ☐ Yes ☐ No	If Yes, Date NOT Filed
List Permits/Special Operating Conditions for the Project			

Section 2 – Inspection and Inspector Information

Inspected By			NPDES Qualification Number	NPDES Qualification Expiration Date
Inspection No.	Current Inspection Date	Previous Inspection Date	No. of Days Since Last Inspection	Inspector Accompanied By

Section 3 – Weather Information

Weather Conditions at Time of Inspection: ☐ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ Drifting Snow ☐ High Winds	Temperature
Describe weather information for the period since the last inspection (or since commencement of construction activity if the inspection is the first one). For each storm event, include a best estimate of the beginning, duration, approximate precipitation, and whether discharges occurred.	

Section 4 – Site Conditions-Construction/Stabilization Status

Note: No clearing or grubbing allowed outside the physical clearance limits shown on the site plans of any project. No clearing or grubbing shall take place outside the schedule in the applicable SWPPP.

Estimate area of land opened up or disturbed by construction activities: Maximum 5 acres, unless authorized as per spec 212.03	Acres
Estimate area of land that has been temporarily stabilized or has temporary sediment and erosion controls in place	Acres
Estimate area of land that has been permanently stabilized or has permanent sediment and erosion controls in place	Acres

Section 5 – Areas Inspected

Construction Areas

Area	Description (Include Station Numbers or Location)	All Areas Inspected?
Limits of Active Construction		☐ Yes ☐ No*
Site Entrances		☐ Yes ☐ No*
Storage Areas / Contractor Yards		☐ Yes ☐ No*
Onsite Waste / Borrow Areas / Topsoil		☐ Yes ☐ No*
Offsite Waste / Borrow Areas / Topsoil		☐ Yes ☐ No*
		☐ Yes ☐ No*
		☐ Yes ☐ No*

*If not inspected, explain in subsection below labeled Project Areas/Discharge Locations Not Inspected.

Discharge Locations

Station or Location	Description	Inspected	Observation
		☐ Yes ☐ No*	
		☐ Yes ☐ No*	
		☐ Yes ☐ No*	
		☐ Yes ☐ No*	
		☐ Yes ☐ No*	
		☐ Yes ☐ No*	

*If not inspected, explain in subsection below labeled Project Areas/Discharge Locations Not Inspected. Double Click to Add Row

Discharge Locations Not Currently Noted on SWPPP (Requires SWPPP Update)

Note: Additional BMPs to address new discharge locations should be noted in Section 6, Additional BMPs Needed...

Description of Potential Discharge Location

Project Areas/Discharge Locations Not Inspected – Include Explanation

•

Section 6 – Action Items to Correct BMP Deficiencies

Include the station or location (e.g., milepost number) and required corrective action, including any necessary changes to the SWPPP and implementation dates. **Number each action item using a two-part system.** The first part is the inspection number; the second part is the action item number.

BMPs to Maintain

•

BMPs that Failed to Operate as Designed, or Proved Inadequate (Requires SWPPP Update)

•

Additional BMPs Needed That Did Not Exist at Time of Inspection (Requires SWPPP Update)

•

BMP Deficiencies Corrected Since Last Inspection – Include Completion Date

•

BMP Deficiencies Not Corrected Since Last Inspection – Include Explanation

Note: May indicate non-compliance with CGP Part 3.6 if BMP deficiencies identified in the previous inspection report were not corrected as soon as possible and before the next rain event.

•

Section 7 – Other Outstanding Items

Additional Items – Document Outstanding Issues or Project Information **Not** Designated as a BMP Deficiency Here

•

Section 8 – Signature and Certification Page

Key Number	Inspection Number	Inspection Date

Inspection Findings:

☐ All BMP deficiencies noted in the previous inspection report **have been** satisfactorily completed.

☐ All BMP deficiencies noted in the previous inspection report **have not been** satisfactorily completed. See Section 6.

☐ No BMP deficiencies were noted in the previous inspection report.

☐ **New** BMP deficiencies have been identified in this inspection report.

Inspector's Name (Type or Print)	Inspector's Designation: ☐ ITD Environmental ☐ WPCM ☐ 3rd Party
Inspector's Signature	Date Signed

Water Pollution Control Manager (WPCM) Signature

WPCM Name (Type or Print)	Most Recent WPCM Training Certification Date
WPCM Signature	Date Signed

Contractors Acknowledgment – Receipt of Inspection and Acknowledgment of Inspection Findings

I have received a copy of this inspection report and been informed of any alleged deficiencies, and:

☐ I agree with the inspection findings

☐ I disagree with the inspection findings

Must be signed by Prime Contractor or Duly Authorized Representative

If contractor disagrees with findings, specify reasons here:	
Prime Contractor Authorized Representative's Name (Type or Print)	Title
Prime Contractor Authorized Representative's Signature	Date Signed

ITD Certification - Must be signed by District Engineer or Duly Authorized Representative

☐ I certify that on the date of this inspection, this Project was found to be in compliance with the terms of its Stormwater Pollution Prevention Plan and the current Construction General Permit.

☐ I certify that actual or potential non-compliance items have been identified in this report.

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

District Engineer or Authorized Representative's Name (Type or Print)	Title
District Engineer or Authorized Representative's Signature	Date Signed

ITD Acknowledgement – Receipt of ITD 2802 from Third Party Inspector

Must be signed by Resident Engineer, Environmental Inspector, or Authorized Representative.

Resident Engineer, Environmental Inspector, or Authorized Representative's Name (Print or Type)	Title
Resident Engineer, Environmental Inspector, or Authorized Representative's Signature	Date Signed

Distribution: Original – DE Copies – RE Asst. Dist. Eng. Dist. Env. HQ ENV SWPP Contractor

ITD and 3rd Party Stormwater Inspection Procedures

The inspection procedures must follow the Construction General Permit (CGP) requirements and include the following.

A copy of the National Pollution Discharge Elimination System (NPDES) CGP and a copy of the current Stormwater Pollution Prevention Plan (SWPPP) must be available on the project site at all times.

If there are any questions pertaining to the Project SWPPP, contact the Senior Environmental Planner in the District.

If there are any questions regarding contract administration, contact Headquarters Construction.

If there are any questions on reporting of non-compliance items, contact the Stormwater Compliance Coordinator in the Headquarters Environmental Section (HQ ENV).

Section 1 – Project Information

- Provide Key Number, Project Number, Project Name, District Number, Resident Engineer name, and Contractors name.
- Indicate whether this project has coverage under a CGP permit and has an approved SWPPP in place.
- If the Yes box checked, indicate the current SWPPP date. This is the date of the most recent SWPPP amendment and/or update.
- If using this form to complete an inspection that does not require a CGP, check the "No" box and put N/A in the "Current SWPPP Date" box.
- Indicate whether the contractor has filed their Notice of Termination (NOT) from permit coverage, and if so, the date filed. If the contractor has filed their NOT, they are no longer required to sign the inspection forms.

Section 2 – Inspection and Inspector Information

- Each Project must be inspected by a qualified Environmental Inspector. Include Inspector name and training information. ITD inspectors are required to have completed the E.npdes training course within two years of the inspection date.
- Include inspection date, previous inspection date, and number of days since last inspection. Number of days since last inspection is determined by beginning to count days starting the day after the last inspection took place. For example, if an inspection was done on June 1st, the next inspection would be due on June 8th.
- If the inspector was accompanied by another person(s), provide the name of this individual(s).
- Each Project must be inspected per Part 4 of the 2008 CGP.

Section 3 – Weather Information

- Check the box that best fits the description of the weather conditions at the time of inspection. Enter the current temperature.
- Provide a description of the weather since the last inspection. Describe a best estimate of the beginning time, end time, and approximate amount of rainfall that occurred. Include a description of any discharges that occurred during the weather event.
- It is recommended that a rain gage be placed at each Project in order to obtain project site-specific rainfall information.

Section 4 – General Site Conditions, Construction, and Stabilization Status

- Estimate of the amount of land **currently** disturbed by construction and not stabilized. This is not the total project area, just what is currently disturbed. This includes areas of vegetative removal (both hand and machine removed vegetative materials), topsoil removal, side slope grading, shoulder construction, and fence installation, removal, or replacement. All areas disturbed by grading must be included. Staging areas, stockpile areas, and source areas must also be included in the disturbed area calculation, unless source areas are covered by a Multi Sector General Permit (MSGP).
- Provide a current estimate of the amount of land that has been temporarily stabilized, or has temporary sediment and erosion controls in place.
- Provide a current estimate of the amount of land that has been permanently stabilized, or has the permanent sediment and erosion controls in place. Project area that has not been disturbed is considered permanently stabilized.
- All three of these boxes (currently disturbed, temporarily stabilized, permanently stabilized) should add up to the total project area.

Section 5 – Areas Inspected

Fill out the table concerning Limits of Active Construction, Site Entrances, Storage Areas/Contractor Yards, Onsite Waste/Borrow areas, Offsite Waste/Borrow Areas. Identify locations examined. Inspections need to include all areas, both on-site and off-site, disturbed by construction activity, and areas used for storage of materials. Inspectors need to look for evidence of, or the potential

for, pollutants entering the stormwater conveyance system. Erosion and sedimentation control measures identified in the SWPPP need to be observed to ensure proper operation. Locations where vehicles enter or exit the site need to be inspected for evidence of off-site sediment tracking.

- Record a description of each area and its station number or milepost, indicate whether the area was inspected or not.
- Fill out the table listing Discharge Locations. Some examples of these include median drain, cross drain, box culvert, etc. Double click the hyperlink to add rows. Discharge locations need to be inspected to ascertain whether erosion control measures are effective in preventing impacts to waters of the United States.
- If a discharge location is identified during an inspection that is not in the current SWPPP, the SWPPP needs to be revised to include this location.
- Explain any areas not inspected in the "Project Areas/Discharge Locations Not Inspected" box at the end of Section 5. Include an explanation for why the area was not inspected.

Section 6 – Action Items to Correct Best Management Practices (BMP) Deficiencies

BMPs are structural pollution control measures. They can be temporary or permanent. When describing BMP maintenance, corrections, or additions, be sure to include the BMP location(s) by station number (MP allowed if no stationing is available).

- Describe any BMPs that require maintenance. Examples would include removing accumulated silt from behind silt fence, or staking down fiber wattles that have broken loose.
- Describe any BMPs that failed to operate as designed or proved inadequate for a particular location, or where BMP failures resulted in discharges of sediment or other pollutants from the site. This would require a SWPPP update.
- Describe where additional BMPs are needed that did not exist at the time of inspection. Based on observations made during the inspection, indicate where additional BMPs are required to prevent future erosion from the site. Include a description of the corrective action required to resolve the BMP deficiency. This would require a SWPPP update.
- Document any required BMP additions/modifications in the SWPPP, and include implementation dates. If the SWPPP requires updating, the changes must be incorporated into the SWPPP **no later than seven (7) days** after the inspection **or prior to** the next storm event, whichever is sooner. SWPPP revisions need be signed by ITD and the Contractor. The revisions are also required to be made on plan sheets (similar to "as constructed" drawings). Refer to the CGP Section 5.10 for all of the instances that require SWPPP updates.
- Document any BMP Deficiencies corrected since the last project inspection. Include completion date. BMP deficiencies are required to be corrected as soon as possible and before the next storm event whenever practicable.
- Document any BMP Deficiencies **not** corrected since the last project inspection. Include an explanation. Since BMP deficiencies are required to be corrected as soon as possible and before the next storm event whenever practicable, if you are filling in this section you likely need to report a violation of the CGP to HQ ENV using ITD Form 2790.
- There are instances where correcting BMP Deficiencies immediately could cause harm to water quality. An example is that site conditions are so wet that getting the equipment onto the project site to address the deficiencies could result in off-site discharge or tracking, and the deficiency cannot be addressed until conditions dry out. In a case such as this, thorough documentation of site conditions and weather conditions preventing the item from being corrected is essential.

Section 7 – Other Outstanding Items

- Document any outstanding issues or Project information, permitting information, special operating conditions, or any other issues determined not to be BMP issues here.

Section 8 – Signature and Certification Page

- Within 24 hours of each stormwater inspection, ITD shall make the Contractor aware of inspection findings.
- Check the box that best represents the inspection findings. Sign and date the inspection to certify completion and findings. One of the top three boxes will be checked on every report. The 4th box is checked in addition to one of the top three if you note new deficiencies during the current inspection.
- The Water Pollution Control Manager (WPCM) is required to document their site visit(s). The WPCM may sign the ITD inspection report as documentation that he/she visited the site and concurs with observations made by the ITD inspector. Otherwise, the WPCM is required to document their inspections with a diary entry and submit that entry to the Engineer within 24 hours of completion. The WPCM is strongly encouraged to conduct joint inspections with the ITD inspector.

- Include the most recent WPCM training date. The WPCM is not required to sign off on 3rd Party Inspections, but the Prime Contractor is.
- The WPCM may use the ITD 2802 to document their inspections, but ITD does not sign off on these inspections. Additionally, if the WPCM uses ITD 2802 to document site visits, it is not recommended that the WPCM's 2802 be included as a formal inspection in the SWPPP, as this could create significant discrepancies with BMP deficiency tracking and completion.
- The Prime Contractor must check the box that best represents his/her interpretation of the inspection findings and must sign the form. If the Contractor disagrees with the inspection findings, the reason for disagreement must be specified on the form. Refusal to sign the form could result in penalties assessed to the contractor.
- The Contractor and ITD must correct all deficiencies identified during the inspection as soon as possible and **before** the next storm event whenever practicable.
- The ITD District Engineer, Assistant District Engineer, or Duly Authorized Representative must check the box that indicates the compliance status of the inspection and sign and date the inspection. Authorized Representatives must be certified in the Project SWPPP.

2802 Submittal Process

- Upon completion of the inspection, and completion of all signatory and certification requirements, the completed ITD 2802 is distributed to the District Engineer, Assistant District Engineer, Resident Engineer, District Environmental Planners, HQ ENV SWPPP Inbox, and the Contractor.
- Hard copies of all original ITD 2802s are archived by Districts and kept for the timeframe specified in the CGP. The Consent Decree terminated on August 1, 2011 specifies that all records must be retained until one calendar year after the termination of the Decree. The CGP states that all records must be retained for three years from the date the permit expires or is terminated.

Non-Compliance Reporting Process

- Per CGP Appendix G Part 12.F, non-compliance issues or discharge events should be reported verbally to the Headquarters Stormwater Coordinator within 24 hours of discovery, and in writing using ITD form 2790 to the HQ ENV SWPP inbox within 5 days of discovery. District staff must not report non-compliance directly to EPA.
- Provide all required information on the 2790 to capture the non-compliance issue being reported.
- All communications with EPA must be completed through HQ ENV or ITD Legal.
- If there is uncertainty as to whether or not an issue of non-compliance exists, it is better to be cautious and report any issues that could be deemed non-compliant. HQ ENV and ITD Legal can determine if the issue represents non-compliance and requires reporting to EPA.

Inspection Procedures Specific to 3rd Party Inspections

3rd Party inspection procedures must follow all ITD inspection procedures contained herein, and follow all requirements of the CGP.

Q: What is the purpose of a Storm Water Pollution Prevention Plan?

Q: Who needs to sign the Storm Water Pollution Prevention Plan for certification to discharge under the National Pollutant Discharge Elimination System Construction General Permit?

Q: Does a Storm Water Pollution Prevention Plan need to be readily available for viewing and for how long?

Q: What documents of the Storm Water Pollution Prevention Plan need to be readily available for viewing and why?

Q: Where does a Storm Water Pollution Prevention Plan need to be located to ensure it is readily available?

Q: What needs to be posted?

Q: How long does a Strom Water Pollution Prevention Plan and all related documents and updates need to be retained?

IDAHO TRANSPORTATION

DEPARTMENT DISTRICT 3

Environmental Section

P.O. Box 8028

Boise, ID 83707-2028

ADDITIONAL INFORMATION ON THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM CONSTRUCTION GENERAL PERMIT AND STORM WATER POLLUTION PREVENTION PLANS MAY BE FOUND AT THE FOLLOWING INTERNET LINKS:

http://www.epa.gov/npdes/stormwater/swppp.cfm

http://www.epa.gov/npdes/training

http://cfpub.epa.gov/npdes/stormwater/cgp.cfm

http://www.epa.gov/npdes/pubs/cgp2008_finalpermit.pdf

2011 EDITION

STORM WATER POLLUTION PREVENTION PLAN QUESTIONS & ANSWERS THAT RELATE TO ENSURING COMPLIANCE.

A REFERENCE FOR OPERATORS, GENERAL CONTRACTORS & SUBCONTRACTORS.

PROVIDED BY:

THE IDAHO TRANSPORTATION DEPARTMENT & PARTNERS FOR CLEAN WATER

STORM WATER POLLUTION PREVENTION PLAN QUESTIONS & ANSWERS THAT RELATE TO ENSURING COMPLIANCE.

Q: What is the purpose of a Storm Water Pollution Prevention Plan?

A: A Storm Water Pollution Prevention Plan (SWPPP) is a plan to protect the quality of the nation's surface water resources from storm water discharges associated with construction actions/activities that disturb one or more acres and have the potential to discharge to waters of the United States. The intent is to ensure that construction actions/activities do not adversely impact surface water resources such as:

- Drinking Water
- Recreational Opportunities (e.g. Swimming and Fishing)
- Habitat for Fish and Wildlife

The National Pollution Discharge Elimination System Construction General Permit (CGP) provides all Operators including owners, contractors, and subcontractors the assurance to discharge to the nations surface waters under regulated compliance. Regulated compliance requires having an approved SWPPP that designates and implements appropriate erosion, sediment, and pollution prevention and control practices that are collectively referred to as Best Management Practices (BMPs). Referenced BMPs in the SWPPP are used to mitigate for storm water runoff, dust abatement, sediment tracking, spill prevention, and other pollutant discharge impacts associated with construction actions/activities. Successful implementation, monitoring, maintenance, and updates to the SWPPP can eliminate and minimize discharge impacts associated with construction actions/activities.

Q: Who needs to sign the Storm Water Pollution Prevention Plan for certification to discharge under the National Pollutant Discharge Elimination System Construction General Permit?

A: All Operators including, but not limited to: owners, contractors, and subcontractors who have operational control over the following:

- The construction plans and specifications, including the ability to make modifications or changes to those plans and specifications.
- Day-to-day activities at a project site, including those activities which are necessary to ensure compliance of the SWPPP and other permit conditions.
- A portion of a larger project.

Q. Does a Storm Water Pollution Prevention Plan need to be readily available for viewing and for how long?

A: YES—The CGP requires that the SWPPP be made readily available for viewing from the commencement of construction actions/activities to the date of final stabilization.

Q: What documents of the Storm Water Pollution Prevention Plan need to be readily available for viewing and why?

A: The entire SWPPP including all narrative and plan documents. This includes, but is not limited, to the following:

- A vicinity map showing all waters of the United States within one mile of the construction site or sites.
- The civil plan sheets indicating the topographical data, locations (i.e. stationing), types, lengths, and amounts of BMPs used.
- The erosion and sediment control standard drawings.
- The Spill and Discharge Prevention, Control, and Counter Measure Plan.
- The special contract provisions.
- Copies of the Environmental Protection Agency (EPA) Notice of Intent submittal form and EPA acknowledgement of completed Notice of Intent.
- All related change orders associated with the SWPPP.
- All updates or modifications to any items listed above.

The SWPPP must be updated for public view whenever a change occurs that may cause an effect on the discharge of pollutants to surface waters or municipal storm sewer systems. Changes include, but are not limited to, the following:

- A change in design of the project.
- A change in construction method.
- A change in operation method.
- A change in maintenance procedure or other similar change.

A SWPPP must also be updated and made available to the public when inspections by authorized personnel such as site staff or other local, state, tribal, or federal officials are completed to determine that the BMPs are effective or ineffective in eliminating or minimizing pollutant discharges from the construction site. This would include all inspection entries and all related construction diary entries which document a SWPPP inspection. If an inspection reveals inadequacies related to the SWPPP, the site or sites where the erosion, sediment, or pollution prevention BMPs have been identified as inadequate must have corrective actions through additional BMPs implemented. Corrective actions must be completed before the next storm event whenever practicable or be completed within seven calendar days. If implementation before the next storm event is impracticable, the reasoning shall be documented in the SWPPP and changes completed as soon as practicable thereafter. Any related updates to the SWPPP as a result of inspection findings must be made available for public viewing.

The SWPPP is an open ended living document. As the scope of the project evolves and construction actions/activities or affecting weather conditions change the SWPPP shall be updated to fit the needs of the project. Operators are required to make changes as well as updates to the SWPPP and implement appropriate BMPs to accomplish protection of the nation's surface water resources from storm water discharges associated with construction actions/activities.

Q: Where does a Storm Water Pollution Prevention Plan need to be located to ensure it is readily available?

A: At the main construction trailer or in a designated mailbox on site.

Q: What needs to be posted?

A: A notification about the NPDES Permit and SWPPP location must be posted conspicuously near the main entrances of the construction site where it can be found by the public and authorized inspecting authorities. This notification shall contain the following information:

- Copies of the EPA Notice of Intent submittal form and EPA acknowledgement of completed Notice of Intent.
- The current location of the SWPPP and all related documents, updates, and the time periods it can be viewed by the public.
- The telephone number of the Water Pollution Control Manager or other appropriate authority to schedule times to review the SWPPP and all related and updated documents.

Q: How long does a Storm Water Pollution Prevention Plan and all related documents and updates need to be retained?

A: A minimum 3-years after the final Notice of Termination has been filed by the last Operator.