



# STORMWATER MANAGEMENT PROGRAM PLAN



# March of 2020

Revised June of 2024

Nevada Department of Transportation
Environmental Division
1263 South Stewart Street
Carson City, Nevada 89712

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## **Acknowledgments**

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Acronym/Abv.	Definition
AASHTO	American Association of State Highway and Transportation Officials
AGC	Associated General Contractors
BMP	Best Management Practice
CFR	Code of Federal Regulations
CGP	Construction General Permit
GIS	Geographic Information System
CWA	Clean Water Act
EPA	United States Environmental Protection Agency
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FPPP	Facility Pollution Prevention Plan
FWPCA	Federal Water Pollution Control Act
IDDE	Illicit Discharge Detection and Elimination
ILA	Interlocal Agreement
IT	Information Technology
LID	Low Impact Development
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer Systems
NCA	Nevada Contractor's Association
NDA	Nevada Department of Agriculture
NDEP	Nevada Division of Environmental Protection
NDOT	Nevada Department of Transportation
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NRS	Nevada Revised Statutes
QA	Quality Assurance
RCP	Runoff Control Plan
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
WLA	Waste Load Allocation
WOUS	Waters of the United States
WPCM	Water Pollution Control Manager

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## 1.0 Introduction

On August 10<sup>th</sup>, 2018, the Nevada Division of Environmental Protection (NDEP) issued National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer Systems (MS4) Permit No. NV0023329 (Permit) to the Nevada Department of Transportation (NDOT aka Department) authorizing the discharge of stormwater (and specific non-stormwater) discharges into "waters of the United States" (WOUS) from its MS4. As a Permit requirement, NDOT is to develop and implement a Stormwater Management Program (SWMP) to mitigate potential stormwater pollutants to the maximum extent practicable (MEP) from its facilities and operations statewide into WOUS via its MS4.

Presented in this SWMP Plan (Plan) is a description of the NDOT's SWMP. The Plan serves as a documented "road map" for how the NDOT intends to comply with Permit requirements as they pertain to specific programmatic elements. Included are measurable goals, which serve as benchmarks for monitoring progress with SWMP implementation and ultimately Permit compliance.

## 1.1 Program Goals

The overarching goal of the NDOT's SWMP is to reduce pollution associated with stormwater discharges from the NDOT's MS4 to the MEP. Additional SWMP goals include:

- Protect water resources within the MS4 Permit area;
- Develop programmatic control measures that are implementable, efficient, and costeffective;
- Coordinate stormwater activities with all the NDOT Districts and appropriate Divisions in support of a unified vision for stormwater pollution reduction; and
- Serve as a model approach for the public as well as state, federal, and local entities for effective stormwater pollution prevention.

## 1.2 Plan Availability

An electronic copy of the Plan is available for download from the NDOT Stormwater Program website.

## 2.0 Stormwater Regulations

The 1948 Federal Water Pollution Control Act (FWPCA) was amended in 1972 and subsequently referred to as the Clean Water Act (CWA). The CWA was further amended in 1987, forming the legislative basis for all federal stormwater regulations. The 1987 amendments require NPDES permits for stormwater discharges from MS4s and industrial activities (including construction) into a WOUS. Stormwater NPDES permitting was implemented in two phases.

Phase I was promulgated in 1990 and required permit coverage to address stormwater runoff from:

- Facilities previously permitted for stormwater discharges;
- 10 categories of industrial activity;
- Large construction sites (i.e., construction activity disturbing 5 acres of land or greater, or less than 5 acres but part of a common plan of development disturbing 5 acres or more);
- Large (population >250,000) and Medium (100,000 <population <250,000) MS4s; and
- Facilities determined to be "significant contributors" of pollutants to WOUS.

Phase II's Final Rule was published in 1999 and required permit coverage to address stormwater runoff from:

- Regulated Small MS4s (population <100,000 within urbanized areas); and</li>
- Small construction sites (i.e., construction activity disturbing between 1 and 5 acres, or less than 1 acre but part of a common plan of development disturbing 1 acre or more).

The State of Nevada, i.e., NDEP, has authority from the US Environmental Protection Agency (EPA) (primacy) to issue NPDES permits.<sup>1</sup> Under Phase I, NDEP issued individual large MS4 permits to the Las Vegas Valley and the Truckee Meadows with the NDOT included as a co-permittee<sup>2</sup>. When Phase II went into effect, NDOT would have been a co-permittee with

<sup>&</sup>lt;sup>1</sup> EPA remains the NPDES permitting authority on Tribal Lands in the State of Nevada.

<sup>&</sup>lt;sup>2</sup> 40 CFR Part 122.26 defines an MS4 to also include road systems owned by states.

several small MS4s; consequently, NDOT requested coverage under a separate individual MS4 permit. NDOT was issued its first MS4 permit in 2004 and again in 2010 and 2018.

#### 2.1 NDOT's MS4 Permit

NDOT's MS4 permit is effective August 10, 2018, and expires August 09, 2023. By obtaining Permit coverage, NDOT is authorized to discharge stormwater and specific non-stormwater runoff to a WOUS from storm sewer systems owned and operated by NDOT within the Permit Area, i.e., State and interstate highways and their rights-of-way as well as NDOT owned and/or operated maintenance facilities and material source sites.<sup>3</sup> The NDOT is authorized to discharge in accordance with the NDEP reviewed and approved SWMP, and with the terms and conditions of the Permit. Discharges shall comply with all applicable federal, State, or local laws, regulations, and ordinances.

In addition to stormwater runoff, the NDOT is authorized to discharge the following non-stormwater discharges (provided the NDEP has not determined these sources to be substantial contributors of pollutants to the NDOT's MS4):

- Potable water line flushing during testing or fire hydrant testing;
- Diverted stream flows:
- Springs or rising groundwaters;
- Uncontaminated groundwater infiltration;
- Discharges from potable water sources;
- Residential foundation and/or footing drains;
- Air conditioning condensate;
- Irrigation water from lawns and landscaping;
- Water from residential crawl space pumps;
- Flows from natural riparian habitats and wetlands;
- De-chlorinated swimming pool discharges;
- Individual residential car washing;
- Water incidental to street sweeping (including associated sidewalks and medians) and that which is not associated with construction activities;
- Discharges or flows from firefighting activities;

<sup>&</sup>lt;sup>3</sup> Facilities associated with EPA designated Sector J Non-Metal Mining and Dressing.

- Dewatering discharges not requiring a separate permit;
- Discharges currently covered under a separate NPDES permit that pass through the NDOT's MS4; and
- Other discharges determined by the NDEP not to be a substantial contributor of pollutants to a WOUS.

If it is determined that NDOT's discharges cause or contribute to an instream exceedance of water quality standards, the NDEP may require corrective action.

The Permit does not authorize the following discharges:

- Discharges of non-stormwater, whether mixed with stormwater, unless the nonstormwater discharges are authorized as previously described above;
- Except for Sector J Non-Metals Mineral Mining and Dressing<sup>4</sup>, all stormwater discharges associated with industrial activity;<sup>5</sup> and
- Stormwater discharges associated with construction activity.<sup>6</sup>

A copy of the Permit is provided in Appendix A.

<sup>&</sup>lt;sup>4</sup> Addressed in *Section B.5.12*. of the Permit.

<sup>&</sup>lt;sup>5</sup> Stormwater discharges associated with industrial activity shall be authorized under General Permit NVR050000.

<sup>&</sup>lt;sup>6</sup> Stormwater discharges associated with construction activity shall be authorized under General Permit NVR100000.

## 3.0 SWMP Administration

The Stormwater Program within the NDOT's Environmental Division is responsible for SWMP development and oversight, including generating the SWMP Annual Report. Several NDOT Divisions, as well as the three (3) NDOT Districts, are key contributors with SWMP implementation; however, it is the Environmental Division's role to provide guidance and direction to the Districts and Divisions to ensure a cohesive, Department-wide effort with achieving Permit compliance. An organizational chart of the Environmental Division's Stormwater Program is provided in Appendix B.

## 3.1 SWMP Approval

In accordance with *Section B.5.1*. of the Permit, the NDOT's SWMP (as described in this plan) will be made available for public comment and will be subject to review and approval by the NDEP. Upon final approval by the NDEP, the NDOT's SWMP will be formally incorporated as terms and conditions of the Permit and will be considered acceptable to reduce the discharge of pollutants from its MS4 to WOUS to the MEP. Please note that several SWMP components are supported by supplemental documents and programs, many of which are administered by other Divisions within the NDOT. Unless specifically stated in the Permit (e.g., Stormwater Monitoring Plan), ancillary documents and programs referenced in this Plan are not subject to public review and comment or NDEP review and approval.

## 3.2 Annual Review and Updating the SWMP

The NDOT will conduct a comprehensive review and evaluation of the SWMP on an annual basis. Should it be determined during this review that additional programmatic BMPs (i.e., programmatic elements) are needed, the NDOT will develop those programmatic BMPs upon written notification to the NDEP. Once developed, the Plan will be revised to reflect those additions. Changes to policies, procedures, protocols, guidance documents, or other ancillary documents referenced within a programmatic BMP that affect NDOT's day-to-day operations will not be submitted to the NDEP for review and approval. These include contract specifications/terms and conditions, manuals, inspection forms, training components, etc. Additional, i.e., newly developed, programmatic BMPS will be implemented upon written notification to the NDEP.

Conversely, should a programmatic BMP described in the Plan be deemed by the NDOT as ineffective, unfeasible, or inappropriate, the programmatic BMP will be removed in its entirety, or an alternative programmatic BMP will be developed in its place. Prior to this occurring, the NDOT shall submit to the NDEP written justification for removing or developing an alternative programmatic BMP. This written justification will include an analysis describing why the previous programmatic BMP was deemed ineffective and/or infeasible. Submittals are tentatively approved unless comments are received by the NDEP within thirty (30) calendar days. Once approved, the Plan will be revised to reflect these changes.

The NDEP may require changes to the NDOT's SWMP based on the following circumstances:

- To address impacts on receiving water quality caused or contributed by discharges from the MS4;
- To include more stringent requirements necessary to comply with new federal or State statutory or regulatory requirements.

The NDOT's Plan will be revised to reflect SWMP changes required by NDEP. Should NDEP notify NDOT of the need to modify the Plan to ensure consistency with Permit or regulatory requirements, the NDOT shall have thirty (30) calendar days to submit the updated Plan to NDEP. All notifications by the NDEP shall be submitted to the NDOT in writing.

Programmatic BMPs are summarized in Section 5.0 of this plan.

## 3.3 Annual Reports

As part of the annual SWMP review, the NDOT will develop an Annual Report summarizing SWMP related activities performed during the previous fiscal year, i.e., Reporting Period. Specifically, Annual Reports will include the following:

- An evaluation of each programmatic element, which will ultimately determine compliance with Permit requirements and progress towards the goal of reducing the discharge of pollutants to the MEP;
- Changes to the SWMP and a description of programmatic element modification;
- Progress with achieving measurable goals;
- Changes to measurable goals;
- A summary of stormwater monitoring efforts and any associated results and conclusions derived from the data;

- Results and analyses of stormwater monitoring efforts should monitoring occur more frequently for a given monitoring project than what was proposed in the Stormwater Monitoring Plan;<sup>7</sup>
- A description of any identified improvements to or degradation in water quality attributable to the SWMP;
- A description of any identified effects on attainment of water quality standards attributable to the SWMP:
- A summary of stormwater activities planned to be implemented during the next fiscal year (including any known tentative implementation schedules) and a fiscal analysis;
- A summary of any Permit obligations that the NDOT is relying on other government entities to perform;
- Known estimates of pollutant loading reductions from the implementation of SWMP elements, including known impacts of stormwater controls on WOUS;
- Summary of all Permit required inspections performed and any enforcement action taken;
- A summary of public education and outreach activities performed;
- A description of changes made to the NDOT's stormwater specific manuals;
- Annual SWMP expenditures and an estimated budget for the following fiscal year;<sup>8</sup>
- A summary of annual evaluations performed to determine whether stormwater discharges from the NDOT's MS4 contributes directly or indirectly to the listing of a WOUS on the current Nevada 303(d) List of Impaired Waters;<sup>9</sup>
- A summary of annual BMP evaluations for those 303(d) listed waters that the NDOT is considered a significant contributor (directly or indirectly) to its listing.<sup>10</sup> Information for each waterway will include a description of the parameters for which the waterway was listed, BMPs evaluated, whether the BMPs evaluated would make a substantial improvement on water quality, and those BMPs selected for implementation;

<sup>&</sup>lt;sup>7</sup> The NDOT will summarize the results of these efforts and provide the NDEP with copies of laboratory analysis upon request.

<sup>&</sup>lt;sup>8</sup> Performed within the limits of the NDOT accounting and budgeting framework.

<sup>&</sup>lt;sup>9</sup> Nevada's 303(d) List is prepared by the NDEP - Bureau of Water Quality Planning in accordance with the requirements of Section 303(d) of the Clean Water Act.

<sup>&</sup>lt;sup>10</sup> BMP evaluations for 303(d)-listed waterways that the NDOT has not considered a significant contributor (directly or indirectly) to their listing will not be performed and hence not included in the Annual Report.

- A summary of control measures NDOT has, or plans to have, implemented in support
  of a Total Maximum Daily Load (TMDL) waste load allocation (WLA) or other
  performance requirements specifically for stormwater discharges from NDOT's MS4,
  including an estimate of pollutant load reductions;<sup>11</sup>
- The number of stormwater trainings offered, and the number of employees trained;
- A summary of stormwater-related public complaints received;<sup>12</sup>
- The number of volunteer groups participating in the Adopt-A-Highway (or other highway litter removal program), the number of miles cleaned, and the amount of littered collected:
- A summary of partnerships and cooperative outreach programs with other MS4s and jurisdictions;
- A list of all NDOT construction contracts awarded that procured coverage under the NPDES Construction General Permit NVR100000 (CGP) issued by the NDEP;
- A list of all NDOT construction contracts closed out (i.e., achieved department acceptance) that procured CGP coverage and their respected CGP status, i.e., the CGP remains open, has been transferred, or has been terminated;
- A summary of all formal violations issued to the NDOT and/or its contractors by the NDEP for CGP non-compliance, including any formal resolutions and enforcement actions;
- A summary of the New Development and Redevelopment Program;
- The number of industrial facilities identified as contributing significant pollutants to the Permit area:
- A map and summary (including number) of the active or inactive status of material source sites;<sup>13</sup>
- A compliance evaluation report summarizing material source site annual and triennial comprehensive stormwater inspections (including inspection findings, deficiencies, and corrective measures implemented);

<sup>&</sup>lt;sup>11</sup> Reporting requirements as they pertain to the Lake Tahoe TMDL will be addressed through the provisions of the Lake Tahoe TMDL Interlocal Agreement (ILA) entered between the NDOT and NDEP. Consequently, the requirements of *Section B.4.2.* of the Permit are not applicable to the Lake Tahoe TMDL.

<sup>&</sup>lt;sup>12</sup> Illicit discharge/pollutant related only; hydraulic related complaints (e.g., flooding and nuisance water) will not be included.

<sup>&</sup>lt;sup>13</sup> The map may be in the form of a web link accessible only to the NDEP.

- A summary of chemical, petroleum, and other releases from Maintenance Facilities;
- A summary of Facility Pollution Prevention Plan (FPPP) compliance activities;
- A summary of FPPP amendments;
- Copies of Maintenance Facility annual comprehensive site inspections;<sup>14</sup>
- List of FPPP covered Maintenance Facilities;
- The amount of sweeper waste accumulated, recycled, and/or disposed of;
- A narrative summary of the Public Street Maintenance Program (including results of specific maintenance tasks within urbanized MS4 Permit areas<sup>15</sup>);
- Summary of 3:1 slope abatement projects;
- Volume of abrasives and deicing agents used on individual highway segments;
- The number of drop inlets from which sediment and debris was removed;
- The number of storm sewer system inspections;
- A narrative summary of the Pesticide and Fertilizer Program; and
- A summary of changes to Vegetation Control Management Plans.

Annual Reports shall be submitted to the NDEP by November 1st at the following address:

Stormwater Branch Supervisor Bureau of Water Pollution Control Nevada Division of Environmental Protection 901 S. Stewart St., Ste. 4001 Carson City, NV 89701

## 3.4 Permit Changes

Permit changes requested by the NDEP shall be made in writing to the NDOT. Included with this written request is a timeframe for the NDOT to develop the necessary SWMP changes and offer the NDOT the opportunity to propose alternative SWMP changes and/or associated timeframes to meet the objective of the requested permit change. In the instance that NDOT does not agree to the requested Permit changes, NDEP has the option to move forward with the Permit changes in accordance with Nevada Administrative Code (NAC) 445A.261 and NAC 445A.263. Following these Permit changes, NDOT will update the Plan accordingly.

<sup>&</sup>lt;sup>14</sup> Upon NDEP approval, an inspection summary may be provided in lieu of individual inspection reports.

<sup>&</sup>lt;sup>15</sup> Urbanized MS4 permitted areas are delineated based on U.S. Census Data.

#### 3.4.1 Minor Permit Modifications

The NDEP may make minor Permit modifications with the NDOT's consent and without public notice for the following instances:

- · Correct typographical errors;
- Clarify Permit language;
- Require more frequent monitoring or reporting;
- Change an internal compliance date in a schedule of compliance, provided the new
  date is not more than one hundred twenty (120) days after the date specified in the
  Permit and does not interfere with attainment of the final compliance date;
- Allow for a change in ownership;
- Change the construction schedule for a new discharger provided that all equipment is installed and operational prior to discharge;
- Delete an outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants for other outfalls except in accordance with Permit limits; and
- Reallocate an individual WLA provided the sum of each allocation of the individual WLA does not change.

## 3.5 MS4 Permit Area Changes

SWMP implementation (as appropriate) is applicable to all areas added to the MS4 Permit Area, or areas which the NDOT becomes responsible for implementation of stormwater quality controls. These areas will be subject to SWMP implementation within six (6) months of being added to the Permit Area. Construction sites owned and operated by the NDOT, specifically, will be subject to SWMP implementation immediately following District acceptance.

## 3.6 Stormwater Manual Updates

The NDOT will review its stormwater manuals annually and update as needed.

## 3.7 Shared Responsibility

There may be instances when the NDOT shares SWMP responsibilities with another regulated MS4 entity to achieve Permit compliance. The Plan will include a description of those shared responsibilities as appropriate. Currently, there are no instances of shared responsibilities with another regulated MS4 entity to achieve Permit compliance.

## 3.8 Record Keeping

The NDOT will retain records of the following for a minimum of three (3) years following Permit termination:

- All monitoring information (including all calibration and maintenance records and original strip chart recordings for continuous monitoring instruments);
- A copy of the Permit; and
- Copies of all Annual Reports.

Please note there was no "application" for Permit coverage; consequently, the record retention requirements of the Permit pertaining to records of all data used to complete the Permit application do not apply.

The NDEP may extend the record keeping period at any time upon written notification to the NDOT.

Copies of SWMP related records will be provided to the NDEP upon written request. The NDOT will retain a copy of the Plan at a location readily accessible to the NDEP and the Public.

## 3.9 Continued Permit Coverage

Prior to Permit expiration, the NDOT will reapply for Permit coverage in accordance with *Section C.25* of the Permit. Should the NDOT not receive coverage under a new Permit prior to the current Permit expiring, coverage will be administratively continued in accordance with the terms and conditions of the expired Permit (including continued SWMP implementation) until the NDEP takes final action in accordance with NAC 445A.241.

#### 3.10 Document Submittal

All Permit required reports and plans will be submitted to the NDEP at the following address<sup>16</sup>:

Stormwater Branch Supervisor
Bureau of Water Pollution Control
Nevada Division of Environmental Protection
901 S. Stewart St., Suite 4001
Carson City, NV 89701

<sup>&</sup>lt;sup>16</sup> The NDOT will adhere to electronic reporting requirements when appropriate.

## 4.0 Stormwater Monitoring Plan

NDOT will develop and implement a Stormwater Monitoring Plan describing stormwater monitoring efforts planned during FY 2019 through FY 2024. The Stormwater Monitoring Plan will identify how monitoring efforts may assist in the decision-making process for Permit compliance, the appropriateness of appropriate BMPs, and progress towards achieving SWMP measurable goals. The Stormwater Monitoring Plan will be reviewed annually and updated accordingly.

## 4.1 Stormwater Monitoring Plan Approval

In accordance with *Section B.6.1.1* of the Permit, a draft version of the Stormwater Monitoring Plan was submitted to the NDEP on January 31, 2019. Subsequently, the NDOT received a letter from the NDEP dated February 25, 2019, stating that the NDEP reviewed the draft Stormwater Monitoring Plan and viewed it compliant with Permit requirements.

In accordance with *Section B.6.1.1.2* of the Permit, the draft Stormwater Monitoring Plan was available for public review and comment from April 17, 2019, thru May 17, 2019. A public meeting was held in accordance with NAC 445A.67558 on April 24, 2019, at the NDOT's Headquarters in Carson City, NV. The public meeting was video conferenced to the NDOT's District I Headquarters in Las Vegas and District III Headquarters in Elko and was recorded live on the Facebook social media platform. There were sixteen (16) attendees in Carson City, three (3) attendees in Las Vegas, and two (2) attendees in Elko. The NDOT received a total of fourteen (14) questions and comments during the public review and comment period. A summary of the questions and comments received, the NDOT's responses, and any action(s) taken is provided in the final Stormwater Monitoring Plan.

In accordance with *Section B.6.1.1.4* of the Permit, a final Stormwater Monitoring Plan was submitted to the NDEP for review and approval on June 5, 2019. Subsequently, the NDEP responded via letter dated June 20, 2019, the final Stormwater Monitoring Plan was approved.

In accordance with *Section B.6.1.1.1*. of the Permit, the NDOT recognizes that the final NDEP approved Stormwater Monitoring Plan is now incorporated as terms and conditions of the Permit.

## 4.2 Minor Stormwater Monitoring Plan Modifications

Changes to policies, procedures, protocols, or other ancillary documents referenced within the Stormwater Monitoring Plan that affect NDOT's day-to-day operations, as well as other minor plan changes, will not be submitted to the NDEP for review and approval. These include the following:

- Adding a monitoring project;
- Adding elements to a previously approved monitoring project (e.g., monitoring sites, BMPs, water quality parameters, etc.); and
- Relocating an individual monitoring site for a previously approved monitoring project
  to a different location within the same watershed (e.g., previous monitoring site was
  compromised and was subsequently relocated within the watershed), assuming data
  collection components do not change.

Conversely, the following monitoring project change will be subject to NDEP's review and approval. Submittals are tentatively approved provided comments are not received by the NDEP within thirty (30) days.

 Removing elements from a previously approved monitoring project (e.g., BMPs being monitored, water quality parameters, etc.).

## **5.0 Programmatic Elements**

This section describes the programmatic elements, i.e., programmatic BMPs, that comprise the NDOT's SWMP per *Section B.5.1.4.* of the Permit. Included with each program element description is the designated Environmental Division Stormwater Program manager (as well as Hydraulics Division Stormwater Design manager as appropriate) primarily responsible for overseeing its implementation for Permit compliance. Please note that the Environmental Division does not have authoritative or programmatic oversight over most of the NDOT's operations (e.g., maintenance of the State's highway system is administered at the NDOT District level). Consequently, SWMP implementation is considered a collaborative effort with the NDOT's Districts and other Divisions.

Partnerships with other MS4 entities that the NDOT relies on for programmatic BMP implementation to satisfy Permit requirements will be noted as appropriate. Measurable Goals for each program element are listed in Section 6.0 of this plan.

Each programmatic element will be implemented to the MEP.

## 5.1 Legal Authority

**Overview:** The NDOT currently has legal measures in place to control the contribution of pollutants to the MS4, notably the ability to:

- Control the contribution of pollutants from stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity;
- Prohibit illicit discharges;
- Control the discharge of spills, releases, dumping, or disposal of materials other than stormwater;
- Control the contribution of pollutants from one portion of the MS4 to another MS4;
- Require the NDOT's contractors to comply with applicable regulatory requirements;
- Establish civil, administrative, and criminal penalties for violations of applicable regulatory requirements;
- Carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and non-compliance with Permit conditions.

Responsibility: Compliance and Enforcement Manager

#### 5.1.1 Nevada Revised Statutes

NDOT's duty to administer the statewide transportation program is authorized by the Nevada Legislature through the enactment of the Nevada Revised Statutes (NRS). The NDOT is authorized to design, build, and maintain the Nevada Highway System pursuant to NRS Chapter 408 – Highways, Roads and Transportation Facilities. NRS 408.439 – 408.451 sets forth the legal authority to address illegal dumping, material spills, and illicit discharges within the NDOT right-of-way (including discharges associated with industrial activity). In the event of an illegal discharge within the right-of-way, the NDOT is authorized to:

- Enter upon any premises to investigate the source of a discharge;
- Issue orders for compliance;
- Seek injunctive relief;
- Impose a civil penalty of up to \$25,000 per day for violations;
- Request that the Attorney General pursue criminal prosecution for violations;
- Conduct independent investigations of potential violations.

The NDOT shall provide written notice to the NDEP of any formal proposal to modify the NRS regulating stormwater discharges into the MS4. Before any statute is modified, the NDEP shall have thirty (30) days to review and comment on the proposed modification.

For reference, NRS 408 is available for viewing on the Nevada Legislature website.

#### **5.1.2 Standard Specifications**

The NDOT requires its contractors to comply with the *Standard Specifications for Road and Bridge Construction* and associated Pull Sheets<sup>17</sup> (collectively referred to as the *Standard Specifications*) as a requirement of contract procurement. Within the *Standard Specifications* is language requiring contractors to comply with applicable regulatory requirements, as well as language for failure to comply. Minor contractor infractions are typically resolved at the lowest level via personal communication. However, for instances where compliance cannot be achieved at the lowest level, NDOT may escalate the enforcement process to assessing

<sup>&</sup>lt;sup>17</sup> Deviations from the *Standard Specifications for Road and Bridge Construction* that occur on a contract-by-contract basis are addressed in Pull Sheets.

liquidated damages, fines, or even contractor termination. Notable sections in the Standard

Specifications regarding contractor compliance include:

Section 106 – Control of Material

Section 107 – Legal Relations and Responsibility to the Public

Section 108 – Prosecution and Progress

Section 637 – Temporary Pollution Control

For reference, the Standard Specifications is available for viewing on the NDOT's website.

**5.1.3 Occupancy Permit Terms and Conditions** 

Right-of-Way Occupancy Permits are issued by the individual NDOT Districts to private or

publicly owned facilities (including temporary events) located within State highway right-of-

way. Permittees are subject to the Terms and Conditions Relating to Right-of-Way

Occupancy Permits, which includes requirements to comply with all environmental laws,

notably the CWA. In the event a permittee fails to comply with environmental laws, NDOT

may take appropriate action including: (1) revoking the encroachment permit; (2) requiring

the permittee to undertake corrective or remedial action; and (3) expressly consenting to entry

of injunctive relieve to enforce any listed remedies.

For reference, the Terms and Conditions Relating to Right-of-Way Occupancy Permits is

available for viewing on NDOT's website.

Stormwater Education

Overview: The NDOT has developed a robust stormwater education program that addresses

both employee and contractor training requirements. The Environmental Division's

Stormwater Program Development group oversees the development and implementation of

all the NDOT's stormwater training efforts.

Below is a description of the various training components, including the target audience and

training frequency. Training records are maintained by the Environmental Division, the

Districts, and/or the Training Division.

**Responsibility:** Program Development Manager

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#### **5.2.1** Introduction to Stormwater

This web-based course presents the topic of stormwater management and awareness at its most fundamental level. The primary course goal is for students to have a rudimentary understanding of what stormwater runoff is, implications of stormwater pollution, illicit discharge detection and elimination (IDDE), and common BMPs.

The target audience for this course are Hydraulics Division Stormwater Design staff and NDOT employees who are not required to complete a discipline-specific stormwater training module (as described in subsequent sub-sections), i.e., those employees not directly involved in activities that may impact stormwater quality or that may generate or manage non-stormwater discharges.

Hydraulics Stormwater Design staff are required to complete this course within one (1) year of hire.

#### 5.2.2 Maintenance Stormwater Training

This training course is specifically tailored towards the NDOT's District Maintenance Crews, providing an overview of BMP implementation at maintenance facilities and in the field while performing routine maintenance activities. Subject matter includes basic stormwater awareness, non-stormwater management, IDDE (including response, clean-up, and reporting), FPPP administration and implementation, maintenance of stormwater facilities, and BMP implementation in the field.

This course is approximately four (4) hours in length (i.e., half day) and is held in all three (3) NDOT Districts annually. Maintenance personnel are required to complete this course within one (1) year of hire and once every three (3) years afterwards.

#### 5.2.3 Introduction to Construction Site Stormwater Management Training

This training course is specifically tailored towards NDOT District Construction Crew personnel <u>not</u> tasked with performing stormwater inspections on NDOT construction sites, District Right-of-Way and Environmental Division personnel overseeing occupancy permit compliance, and District personnel performing routine construction site stormwater inspections on NDOT CGP Transfer Sites. Course curriculum includes basic stormwater awareness, non-stormwater management, CGP requirements, construction site BMP implementation, IDDE (including response, cleanup, and reporting), and key aspects of the

NDOT's Construction Site BMP Program. This course is intended to be a precursor to the Water Pollution Control Manager (WPCM) Training course (described below).

This course is approximately four (4) hours in length (i.e., half day) and is held in all three (3) NDOT Districts annually. Personnel are required to complete this course within one (1) year of hire and once every three (3) years afterwards.

The requirement to complete this course will be satisfied for staff who elect to complete the WPCM Training course instead.

#### **5.2.4 Water Pollution Control Manager Training**

For NDOT construction projects requiring CGP coverage, prime contractors are required to designate a WPCM to oversee construction site stormwater management. Consequently, the NDOT has collaborated with the Southern Nevada branch of the Associated General Contractors of America (AGC)/Nevada Contractor's Association (NCA) to create a 16-hour (i.e., two (2) day) WPCM training course focusing specifically on construction site stormwater management. Subject matter includes basic stormwater awareness, non-stormwater management, CGP requirements, construction site BMP implementation (including installation and maintenance), IDDE (including response, cleanup, and reporting), construction activities that may impact stormwater quality, and key aspects of NDOT's Construction Site BMP Program.

The contractor's designated WPCM is required to complete this course prior to the start of construction activities for their respective contracts. This course is also required for select District Construction Crew personnel (specifically Resident Engineers, Assistant Resident Engineers, and designated BMP oversight inspectors) and Environmental Division staff tasked with performing construction site stormwater QA inspections. Resident Engineers, Assistant Resident Engineers, and Environmental Division staff are required to complete this course within one (1) year of hire. Construction Crew BMP inspectors are required to complete this course prior to conducting BMP oversight inspections. Certification for NDOT and contractor personnel is valid for three (3) years.

This course is held in all three (3) Districts annually.

#### 5.2.5 Stormwater Management for Equipment Shops

This course is specifically tailored towards NDOT Equipment personnel tasked with performing equipment repairs at the NDOT's Major Maintenance facilities. Course curriculum includes basic stormwater awareness, spill prevention, control, and cleanup, general housekeeping BMPs, IDDE (including response, cleanup, and reporting), and an introduction to the NDOT's transportation policy for the management and disposal of hazardous waste.

This course is approximately four (4) hours in length and is held in all three NDOT Districts annually. Personnel are required to complete this course within one (1) year of hire and once every three (3) years afterwards.

#### **5.2.6 Post-Construction Stormwater Management Training**

NDOT staff tasked with designing or overseeing the design of post-construction BMPs associated with new development and redevelopment projects, i.e., the Hydraulics Stormwater Design staff, are required to complete a minimum of three (3) credit/professional development hours annually of stormwater design related training. Due to the dynamic and multifaceted nature of the subject matter, coupled with the difficulty in developing a single stand-alone training that would fully meet designer needs, stormwater designers will be afforded the opportunity to seek out design related training that specifically suits their individual needs, e.g., modeling, low impact design, etc. Requirements can be fulfilled by completing training offered by private vendors and government agencies, webinars, workshops, conferences, peer exchanges, etc.

Management and supervisor staff provide informal hands-on training to staff on internal policies, procedures, and guidance documents pertaining to post-construction BMP design.

#### 5.2.7 Miscellaneous Training

#### 5.2.7.1 Pesticide and Fertilizer Application Training

Maintenance personnel who oversee the application of pesticides (notably herbicides) at the District-level complete applicator training required by the Nevada Department of Agriculture (NDA) in accordance with State regulations. This training is provided by the NDA or through an alternative vendor. Training records are maintained at the District-level.

In addition, the Maintenance Stormwater Training module includes subject matter on pesticide and fertilizer application (including BMPs) and potential implications on stormwater runoff.

#### 5.2.7.2 Field Screening and IDDE Investigation Training

The Environmental Division's Stormwater Compliance and Enforcement group is tasked with conducting illicit discharge investigations and routine outfall monitoring as part of their day-to-day job duties. These staff members complete informal hands-on training focusing on key concepts of illicit discharge detection and elimination as well as current protocol, procedures, and guidance documents. Training is provided by appropriate supervisory/management staff and includes field screening procedures, sampling methods, and field measurements.

#### 5.2.7.3 Industrial Facility Stormwater Training

Except for material source sites, the NDOT does not own or operate industrial facilities (Appendix C). Consequently, stormwater training specific to non-material source site industrial facilities is not provided to employees. Should the NDOT own or operate non-material source site industrial facilities in the future, appropriate training will be integrated into the Stormwater Education Program.

#### 5.2.7.4 Other Training Opportunities

The Environmental Division will continue to seek out and promote other training opportunities as a means of supplementing current training efforts whenever possible. The ability of the NDOT staff to attend these training opportunities will be dependent on a variety of factors, including course availability and funding. Proof of course completion will be documented accordingly with each employee's training records.

## 5.3 Public Involvement/Participation

**Overview:** The NDOT takes a multi-pronged approach to public involvement/participation (i.e., public outreach). The purpose of public outreach is to create awareness about stormwater pollution and provide education on approaches to reduce the discharge of stormwater pollutants; inform the public on actions the NDOT is taking to reduce stormwater pollutants; and to provide the public with an opportunity to play an active role during the development of the NDOT's SWMP. The overarching goal of stormwater public outreach is

to foster community stewardship and instill behavior change to preserve or improve the quality of receiving waterways.

The NDOT has a statewide presence and is a major stakeholder in the construction industry. Consequently, the target pollutants associated with the outreach campaign are those most associated with urbanized and construction site stormwater runoff, e.g., sediment, trash, petroleum products, nutrients, etc. However, outreach efforts may focus on specific pollutants depending on several factors including venue location, audience, local issues, etc.

Responsibility: Program Development Manager

#### **5.3.1 Stormwater Management Plan Review and Comment**

Prior to submitting a final revised Plan to the NDEP for review and approval, a draft revised Plan was made available for public review and comment for a minimum of thirty (30) days, i.e., February 03, 2020, thru March 06, 2020. During the public review and comment period, the NDOT held a public meeting on February 18, 2020, at NDOT's Headquarters in Carson City, NV in accordance with NAC 445.67558. The public meeting was broadcast live to NDOT's District Headquarters offices in Elko and Las Vegas and was streamed live via the social media outlet Facebook Live.

A listing of comments/questions received during the public review and comment period as well as the NDOT's formal response and any subsequent action taken are summarized in Appendix D. Please note that all comments/questions were received during the public meeting.

#### **5.3.2 Stormwater Outreach Campaign**

Developed in conjunction with University of Nevada, Reno journalism students, the "Love NV Waters" brand is associated with all the NDOT's stormwater outreach efforts. The campaign aims to be a leader for keeping Nevada's waterways clean through effective stormwater management.

#### **5.3.3 Outreach and Education Events**

The NDOT's Environmental Division participates in numerous collaborative community events around the State targeting a variety of audiences including industry, students, and public officials. In addition to conversational interaction, stormwater outreach is achieved using handouts, displays, and promotional items. Target audiences vary and are dependent

upon the event itself. The NDOT's strategy is to participate in an array of events to maximize target audience diversity.

#### 5.3.4 Website and Social Media

The NDOT's Environmental Division uses social media and its Stormwater Program website to help promote public awareness of stormwater pollution and NDOT's efforts with statewide stormwater management.

The Stormwater Program website is a resource available to employees and the public by providing a broad assortment of SWMP related information, notably water quality monitoring projects, resources and documents (including BMP information and copies of the Permit and Plan), and illicit discharge/dumping reporting (including phone numbers and a link to NDEP's Spill Reporting website). Website information is dynamic and subject to frequent change.

The NDOT uses several social media platforms to disseminate stormwater outreach and to encourage employee and public involvement. Videos, pictures, and messages are posted on social media sites for immediate viewing. These sites also serve as avenues for immediate viewer response and feedback.

#### 5.3.5 Public Litter Removal Programs

The NDOT participates in two (2) public litter removal programs: Adopt-A-Highway and Sponsor-A-Highway. These programs provide a mechanism for the State's citizens, organizations, and businesses to become actively involved in keeping the NDOT's highways clean and reducing the potential for trash pollution in receiving waterways.

- Adopt-A-Highway: A program for litter removal on most state highway areas for individuals and community service groups. The program raises public awareness of litter and roadside dumping through signage and participation. Volunteers contribute to the community by adopting and maintaining a section of highway. NDOT posts signs acknowledging the volunteers and their efforts, thereby increasing public awareness.
- Sponsor-A-Highway: A program for litter removal on high-traffic volume urban freeways in the Las Vegas and Reno metropolitan areas. Firms and organizations seeking an outlet for community service may select pre-qualified litter removal

contractors for litter removal services. In turn, the NDOT provides signage and recognition of the sponsor partners.

#### **5.3.6 Public Complaints**

Stormwater-related public complaints are received via numerous avenues, e.g., online reports from the Stormwater Program's website, telephone calls, Spill Reports, etc. and subsequently routed to the Environmental Division for review. Potential illicit discharge related complaints are reviewed, logged into the IDDE Response Database (refer to Section 5.8.5 of this plan), and subsequently investigated (as appropriate) by the NDOT's Environmental Division's Stormwater Compliance and Enforcement group.

#### **5.3.7 Internal Coordination**

The NDOT's Environmental Division is tasked with overseeing the development and implementation of the SWMP. There are several aspects of SWMP implementation that are the responsibility of other Divisions and the Districts. Consequently, the Environmental Division relies on frequent and open communication to those Divisions and the Districts to ensure there is a consistent approach to SWMP implementation.

The Environmental Division Chief coordinates SWMP implementation with other department administrative personnel, e.g., Division Chiefs, District Engineers, etc. while Environmental Division managers and supervisors coordinate activities with appropriate staff-level personnel. The Environmental Division houses personnel in each District to help facilitate day-to-day communication at the District-level. The Environmental Division is overseen by one (1) Deputy Director who serves as the primary liaison with the other department administrators, notably the department Director.

#### 5.3.8 Partnerships and Affiliations

The NDOT maintains partnerships and affiliations with numerous organizations, groups, and agencies, notably other MS4 entities. These relationships provide the ability to enhance professional expertise, share technical and educational resources, and pool resources for SWMP implementation. In addition to existing relationships, the NDOT will continue to expand partnership opportunities that can help improve, support, and proliferate common stormwater related goals and objectives.

NDOT receives stormwater committee meeting agendas from other MS4 entities and provides representation at those meetings when appropriate. Traditionally, NDOT's cooperation with other MS4 entities has centered around public outreach/education and water quality monitoring.

In cooperation with the AGC and the regional contracting community, the NDOT has developed the *Guide to Partnering on NDOT Projects* to support its commitment to partnering as a way of doing business. Partnering is a critical tool in promoting an open dialogue of communication between NDOT and its contractors in all aspects of a highway construction project, notably construction site stormwater management. Formal partnering is a contractual requirement for NDOT's construction contractors as specified in the NDOT's *Standard Specifications*.

#### **5.4** Maps and Outfalls

**Overview:** Initial efforts to locate, map, and digitize the NDOT's stormwater infrastructure are complete. Asset location information, including outfalls, maintenance facilities, post-construction BMPs<sup>18</sup>, etc. is housed within a geographical information system (GIS)-based platform. GIS data available for public viewing from NDOT's Stormwater Program website can be accessed at the following web address: <a href="https://www.nevadadot.com/doing-business/about-ndot/ndot-divisions/stormwater/mapping">https://www.nevadadot.com/doing-business/about-ndot/ndot-divisions/stormwater/mapping</a>

Responsibility: IT Manager

#### **5.4.1 Major Outfalls**

Major outfalls are identified and mapped in accordance with the Permit definition. Due to ongoing data maintenance and refinement, the number of major outfalls identified within the Permit Area are subject to change.

#### **5.4.2** Inventory Maintenance

The Environmental Division's Information Technology group oversees the maintenance of the databases housing the stormwater asset information, i.e., permanent stormwater control measures. The NDOT's Hydraulic Division oversees the maintenance of the remaining storm sewer infrastructure databases, e.g., pipes and culverts. The GIS-based asset information

<sup>18</sup> Including (as applicable) retention/detention basins, constructed water quality wetlands, media filtration systems, and oil/water separators.

that the Environmental Division relies on for SWMP implementation support, e.g., bridges, maintenance facilities, roadways, etc., is maintained by their respective NDOT Divisions. The Information Technology group, however, is the Environmental Division's liaison with the other Divisions regarding maintenance of their respective asset information used for SWMP implementation.

Procedures have been developed for updating the GIS-based stormwater asset inventory, including response to changes within the right-of-way from encroachment permittee activities.

The stormwater asset information is dynamic and is subject to ongoing maintenance and frequent updating.

#### 5.5 Discharges to Water Quality Impaired Waters

**Overview:** The NDOT considers the following pollutants to be transportation related: sediment, total dissolved solids, total suspended solids, turbidity, nitrate, nitrite, total nitrogen, ortho-phosphorus, total phosphorus, chloride, cadmium, chromium, copper, lead, iron, nickel, manganese, zinc, herbicides, *Escherichia coli*, fecal coliform, oil, grease, polycyclic aromatic hydrocarbons, total petroleum hydrocarbons, dissolved oxygen, and temperature.

The NDOT has evaluated potential stormwater impacts from its Permit Area to all waterbodies on the State's current 303(d) list of impaired waters <sup>19</sup> as well as those that have a NDEP approved TMDL with respect to the transportation related pollutants. Results of those evaluations continue to be used as the basis for stormwater quality design improvements (as appropriate). The NDOT will continue to evaluate potential impacts from stormwater discharges as future 303(d) lists and TMDLs are developed.

Responsibility: Program Development Manager

#### 5.5.1 Impacts to Impaired Waterways

The NDOT has evaluated all waterbodies on the current 303(d) list for the potential to be impacted by stormwater discharges from the NDOT's MS4. NDOT's stormwater discharges

<sup>&</sup>lt;sup>19</sup> The 303(d) list provided in the *Nevada 2020-2022 Water Quality Integrated Report* published by the NDEP (February 2022) is the State's current impaired waters listing.

do not contribute directly or indirectly to the listing any waterbody on the current 303(d) list. A summary of these efforts is provided in Table E.1<sup>20</sup> in Appendix E.

The NDOT evaluates potential impacts to 303(d) listed waterways during a project's design phase. Included with the evaluation is the need for post-construction BMPs, potential BMPs for consideration, whether the BMPs would make a substantial improvement to receiving water quality, and those BMPs (if any) selected for incorporation into the final project design.

#### 5.5.2 Impacts to TMDL Waterways

The NDOT has evaluated all waterbodies with NDEP approved TMDLs for the potential to be impacted by stormwater discharges from the NDOTs MS4. A summary of these efforts is provided in Table E.2<sup>21</sup> in Appendix E.

The Lake Tahoe TMDL is the only TMDL that identifies the NDOT as a party responsible for implementation of pollutant controls. Specifically, "load allocations" have been established for Lake Tahoe with respect to fine sediment. As a result, the NDOT entered an Interlocal Agreement (ILA) with the NDEP in November of 2016 for the implementation of the Lake Tahoe TMDL (Appendix F). The ILA states what roles, commitments, and actions are expected of NDOT to help restore and protect Lake Tahoe's clarity. The current ILA is set to expire in August of 2021. Should NDOT breach the ILA, it is understood that NDEP may implement a more regulatory approach for TMDL implementation.

Waste load allocations have not been developed for NDOT's stormwater discharges for any other NDEP approved TMDL.

#### 5.6 Construction Site BMPs

**Overview:** This program consists of guidance documents, specifications, inspection practices, and enforcement procedures to mitigate potential construction site stormwater pollutant discharges. Collectively, the implementation of these BMPs will assist the NDOT

<sup>&</sup>lt;sup>20</sup> Information pertaining only to those water quality constituents that are potentially transportation related is presented.

<sup>&</sup>lt;sup>21</sup> Information pertaining only to those water quality constituents that are potentially transportation related is presented.

and contractors performing work within the right-of-way to maintain compliance with the requirements of the CGP and the Permit.<sup>22</sup>

BMPs will be implemented (as appropriate) on all construction projects performed within NDOT's right-of-way year-round. The NDOT's construction contractor is responsible for the day-to-day operations associated with construction site stormwater administration, including procuring CGP coverage through a Notice of Intent (NOI) and terminating CGP coverage through the filing of a Notice of Termination (NOT).

Enforcement is addressed in Legal Authority (refer to Section 5.1 of this plan).

Responsibility: Compliance and Enforcement Manager

#### 5.6.1 Construction Site Best Management Practices (BMPs) Manual

The NDOT's Construction Site Best Management Practices (BMPs) Manual (BMPs Manual) provides guidance to construction site operators for the implementation of stormwater pollution control measures on active construction sites. Topics include an overview of construction site stormwater regulations; structural BMP selection, implementation, and maintenance; stormwater pollution prevention plans (SWPPPs); and BMP considerations.

A copy of the *BMPs Manual* is available for download on NDOT's Stormwater Program webpage.

#### **5.6.2 Stormwater Guidance Manual for Construction Projects**

The NDOT's Stormwater Guidance Manual for Construction Projects (Guidance Manual) is an internal guidance document for NDOT personnel involved with construction site stormwater administration. Included in the Guidance Manual is information pertaining to:

- Pre-construction conference discussion of construction site stormwater permitting and contractor submittal requirements;
- Requirements prior to the commencement of earth-disturbing activities;
- Construction site stormwater inspection schedules and associated documentation;
- Procedures to address construction site stormwater non-compliance as it pertains to CGP implementation;

<sup>&</sup>lt;sup>22</sup> The Construction Site BMP Program will also be implemented for construction projects occurring on Tribal Lands.

- NDOT's SWPPP template;
- Construction site stormwater inspection forms for both contractor and NDOT personnel;
- NDOT's SWPPP review checklist which provides NDOT Construction Crew personnel with a "roadmap" for reviewing contractor generated SWPPPs;
- NDOT's Project Stormwater Checklist which provides NDOT Construction Crew personnel with a summary of tasks to be completed prior to commencement of earth disturbing activities;
- Documentation used by NDOT's contractors to request a reduced construction site stormwater inspection frequency;<sup>23</sup> and
- Internal department memorandum detailing the procedures for CGP transfer.

The documents referenced in the *Guidance Manual* are available on the NDOT's internal SharePoint site and/or the NDOT's website.

#### **5.6.3 NDOT's Construction Contractors**

The NDOT's construction contractors are responsible for procuring CGP coverage (as appropriate) on NDOT construction projects through the Notice of Intent (NOI) submittal process. The contractor serves the role as permit "Operator" with NDOT as the permit "Owner." A copy of the NDEP authorization certificate is included with the contractor's SWPPP demonstrating CGP procurement. Upon project completion, the contractor applies for CGP closeout by submitting a Notice of Termination (NOT) or follows the process to transfer complete CGP responsibilities to the NDOT. Temporary sediment control measures that could impede stormwater flows are removed as soon as practicable following CGP termination.

#### 5.6.3.1 Water Pollution Control Manager

The Standard Specifications require the NDOT's construction contractors to designate a WPCM to administer construction site stormwater management on the NDOT's construction sites that have CGP coverage. The WPCM must be knowledgeable in the principles and practices of construction site stormwater pollution control and possess the skills to assess conditions at the construction site that could impact stormwater quality, including the

<sup>&</sup>lt;sup>23</sup> Reduced inspection frequencies are in accordance with CGP requirements.

identification of illicit discharges and illicit connections to the storm sewer system. The WPCM must be able to identify existing and predictable effects of the contractor's operations and have complete authority to direct the contractor's personnel and equipment to implement the requirements of the CGP and the *Standard Specifications*.

#### 5.6.3.2 Stormwater Pollution Prevention Plan Template

A standardized template has been developed to assist operators with SWPPP development on NDOT construction sites. The template is available on the NDOT's Stormwater Program website for download.

#### 5.6.3.3 Construction General Permit Transfer

There are circumstances where construction activities performed by the NDOT's contractor have been completed per design but closing out the CGP is not possible due to the project site not meeting CGP final stabilization requirements. In this situation, the contractor will formally transfer complete CGP responsibilities to the NDOT, resulting in the NDOT becoming both the "Owner" and the "Operator" of the CGP until final stabilization is achieved. The appropriate District Maintenance Crew will oversee SWPPP implementation until the site achieves final stabilization per CGP requirements, upon which the NDOT will file the Notice of Termination (NOT) to close out the CGP.

#### 5.6.4 Right-of-Way Occupancy Permit Construction Sites

The NDOT issues occupancy permits to outside entities granting permission to work (notably non-NDOT affiliated construction activities) within the State highway right-of-way. The permits are for temporary occupancy only. Right-of-Way Occupancy Permit applications (including site plans) are submitted to the appropriate District office for review. The potential for stormwater pollutant discharges (during and post-construction) is considered and addressed appropriately during the review process.

Per the NDOT Terms and Conditions Relating to Right-of-Way Occupancy Permits (Terms and Conditions), the permittee is required to submit a copy of the SWPPP as part of the occupancy permit application if construction activities require CGP coverage. The permittee is required to develop and implement a Runoff Control Plan (RCP), i.e., an abbreviated SWPPP, for construction activities that do not require CGP coverage, but result in land disturbance within the NDOT right-of-way.

Temporary pollution control measures are implemented in accordance with the *BMPs Manual*.

## **5.6.5 Construction Site Stormwater Inspections**

There are three types of projects with construction site stormwater inspection roles and responsibilities: NDOT construction sites, NDOT construction sites that have been transferred to the Districts to oversee (i.e., NDOT CGP transfer sites), and Right-of-Way Occupancy Permit construction sites. Inspections performed by NDOT staff, NDOT's contractors, and occupancy permittees implementing an RCP are documented on the appropriate NDOT furnished inspection forms. Inspections are performed throughout the construction site, regardless of construction activity, site topography, soil characteristics, and receiving water quality. However, areas within the construction site that are not stabilized and have the potential to discharge stormwater runoff into a receiving waterway or the storm sewer system have inspection priority.

#### NDOT Construction Sites

- Contractor: The NDOT's Standard Specifications require construction contractors to perform inspections per the requirements of the CGP;
- NDOT Construction Crew: Quality control (QC) oversight inspections are performed prior to the onset of earth disturbing activities and prior to the contractor receiving relief of maintenance on construction projects that procure CGP coverage;
- NDOT Environmental Division: Quality assurance (QA) inspections are performed once every thirty (30) calendar days by the Environmental Division's Stormwater Compliance and Enforcement group on construction projects that procure CGP coverage.

#### NDOT CGP Transfer Sites

- NDOT Districts: District Maintenance Crew staff perform inspections per the requirements of the CGP;
- NDOT Environmental Division: QA inspections are performed once every thirty (30) calendar days by the Environmental Division's Stormwater Compliance and Enforcement group.

#### Right-of-Way Occupancy Permit Construction Sites

- Permittee: The NDOT's *Terms and Conditions* requires permittees to perform inspections per the requirements of the CGP. Permittees performing construction activities that do not require CGP coverage, but require the development and implementation of an RCP, perform inspections once every seven (7) calendar days and within twenty-four (24) hours after a storm event resulting in ≥ 0.50 inch of precipitation;
- NDOT Districts: During active construction, QC oversight inspections are performed every thirty (30) calendar days by District Permits personnel on projects that procure CGP coverage resulting in ≥ 1 acre of land disturbance within the NDOT right-ofway;
- NDOT Environmental Division: During active construction, QA inspections are performed every sixty (60) calendar days by the Environmental Division's District Field Support group on projects that procure CGP coverage resulting in ≥ 1 acre of land disturbance within the NDOT right-of-way.

# 5.7 New Development and Redevelopment Planning

**Overview:** This program consists of planning and design practices that collectively mitigate the potential of stormwater quality impacts from new development and redevelopment projects that result in land disturbance of  $\geq 1$  acre (including projects < 1 acre that are part of a larger common plan of development that are  $\geq 1$  acre). Also described are the processes for performing routine inspections and maintenance of post-construction BMPs, which for the purposes of this plan include (but are not limited to) the following: stormwater retention/detention basins; constructed water quality treatment wetlands; media filtration systems; oil/water separators; check dams; grassy swales; or other similar BMPs.

Responsibility: Compliance and Enforcement and Hydraulics Stormwater Design Managers

## 5.7.1 Planning and Design Guide

The *Planning and Design Guide (PDG)* provides guidance to project designers on permanent BMP selection and design considerations (including LID techniques) associated with new development and redevelopment projects specifically for NDOT's roadside environments. Included with the *PDG* are key regulatory, policy, and technical requirements, and details of the NDOT's processes and procedures for evaluating stormwater considerations during project planning and design. The *PDG* includes a description of documents to be completed

prior to project construction that aid in evaluating the need for post-construction BMPs (notably those projects that discharge stormwater runoff to WOUS on the State 303(d) List) that will protect receiving water quality and reduce the discharge of stormwater pollutants to the MEP.

As a matter of general engineering practice for all new development and redevelopment projects, stormwater facilities will be designed with the intention of preventing nuisance conditions or erosion in receiving channels or on down gradient properties.

The *PDG* is available for download from the NDOT's Stormwater Program website.

## **5.7.2 Post-Construction BMP Inspections and Maintenance**

Post-construction BMPs are inspected and maintained (as appropriate) by District personnel. Inspections are documented in a GIS-database; maintenance (as required) is documented in the NDOT's asset management system. Criteria for performing post-construction BMP inspections are built into the GIS mobile field technology used by District personnel.

## 5.7.3 Right-of-Way Occupancy Permit Projects

Post-construction BMPs are required for projects resulting in land disturbance  $\geq 1$  acre within the NDOT's right-of-way, or projects that result in  $\geq 1$  acre of land disturbance and discharges stormwater within NDOT's right-of-way. Post-construction BMPs are designed in accordance with the *PDG* with the Hydraulics Division's Stormwater Design group providing review of the permittee's design.

Stabilization via revegetation is the typical post-construction control measure required of right-of-way occupancy permittees. Vegetation prescriptions are reviewed by District and/or Landscape Architecture staff.

# 5.8 Illicit Discharge Detection and Elimination

**Overview:** The Illicit Discharge Detection and Elimination (IDDE) Program is intended to reduce unauthorized discharges within the NDOT's Permit Area. As defined in the Permit, an illicit discharge "means any discharge to an MS4 that is not entirely composed of

stormwater, except authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from firefighting activities."<sup>24</sup>

This program consists of practices and procedures for the identification, response, and elimination of illicit discharges<sup>25</sup> within the Permit Area.

Responsibility: Compliance and Enforcement and Program Development Managers

## **5.8.1 Illicit Discharge Reporting**

The NDOT has provided multiple avenues to facilitate reporting of potential illicit discharges and Reportable Spills<sup>26</sup> within the Permit Area by the public and the NDOT employees.

#### 5.8.1.1 Stormwater Program Website

An illicit discharge reporting webpage has been created within the NDOT's Stormwater Program website. Individuals interested in reporting a potential illicit discharge can fill out a brief online report describing the incident with the information received by the Environmental Division. A weblink to the NDEP's Spill Reporting webpage and Spill Reporting Hotline is also provided.

The Stormwater Program website provides information for the proper disposal of household wastes (including used oil), notably web links to State and local waste disposal and recycling programs.

#### 5.8.1.2 Environmental Division Phone Number

The Environmental Division's Stormwater Program provides its office number on the Stormwater Program website. This number is available for individuals who prefer to phone-in potential illicit discharge incidents.

#### 5.8.1.3 NDEP Spill Reports

Through inter-agency coordination, the NDOT's Environmental Division is included on the distribution list for Spill Reports circulated by the NDEP. This coordinated effort provides an

<sup>&</sup>lt;sup>24</sup> Section 2.1 of this plan clarifies what are considered authorized and non-authorized discharges into the NDOT's MS4.

<sup>&</sup>lt;sup>25</sup> Including instances of improper disposal within the Permit Area.

<sup>&</sup>lt;sup>26</sup> Involves any amount of a hazardous substance released to surface water; threatens a vulnerable source as defined by NAC 445A.3459; or is a quantity equal to or greater than that which is required to be reported to the National Response Center (40 CFR Part 302).

opportunity for NDOT staff to review potential illicit discharges reported to the NDEP that may have otherwise not been reported to the NDOT.

## 5.8.2 Field Guide for the Detection and Elimination of Illicit Discharges

This field guide was developed to educate NDOT employees and the Public on the basics of illicit discharge detection and elimination. Content includes information on what an illicit discharge is, common indicators of a potential illicit discharge, and mechanisms for reporting a suspected illicit discharge.

The Field Guide for the Detection and Elimination of Illicit Discharges is available for download from the NDOT's Stormwater Program website.

# 5.8.3 Illicit Discharge Response

For any potential illicit discharge or Reportable Spill incident reported by either NDOT personnel or the public, investigations are conducted by the Environmental Division. Figure G.1 in Appendix G illustrates the overall process the NDOT implements for responding to potential illicit discharges within the Permit Area.

Response times are dependent on when the Environmental Division's Stormwater Compliance and Enforcement group is notified of an incident. Incidents can vary with complexity depending on the nature of the discharge and where the discharge occurred; consequently, response efforts may require coordination with multiple NDOT Divisions and/or outside agencies. The NDOT maintains a state-wide on-call contract with a hazardous materials cleanup vendor as an additional resource for spill response within the right-of-way.

All potential illicit discharge incidents are investigated promptly and undergo closure as soon as possible. If necessary, enforcement action is applied under the NDOT's legal authority as described in Section 5.1 of this document.

#### 5.8.4 Illicit Discharge Field Investigation Procedures Manual

This manual serves as a tool for the Environmental Division's Stormwater Compliance and Enforcement group in response to a potential illicit discharge or spill reported within the Permit Area. Content includes guidance for appropriate data collection and documentation, providing a systematic and consistent approach for investigating potential illicit discharge incidents.

The *Illicit Discharge Field Investigations Procedures Manual* is an internal guidance document maintained by the Environmental Division's Stormwater Compliance and Enforcement group.

## 5.8.5 IDDE Response Database

The IDDE Response Database, maintained by the Environmental Division's Stormwater Compliance and Enforcement group, facilitates the tracking of potential illicit discharge and Reportable Spill incidents within the Permit Area from, reporting to closure. Information documented in the IDDE Response Database includes pertinent dates and timelines, incident locations, and descriptions of appropriate investigative and response measures. The information is reviewed annually to identify areas subject to illicit discharges on a repeat basis, i.e., "hotspots." Should a "hotspot" be identified, the Stormwater Compliance and Enforcement group will coordinate a plan for increased monitoring/surveillance of the area in question, with the goal of deterring future illicit discharge incidents.

## 5.8.6 Routine Outfall Screening and Field Investigations

Dry weather screening of major outfalls, i.e., routine outfall screening within the Permit Area, is performed by the Environmental Division's Stormwater Compliance and Enforcement group. The purpose of these investigations is to help identify and eliminate illicit discharges into the NDOT's MS4. Routine outfall screenings are documented electronically in a GIS platform. Potential illicit discharge discoveries and subsequent response actions are documented in the IDDE Response Database.

#### **5.8.7 Treated or Untreated Wastewater**

Sections C.8. and C.9. of the Permit reference requirements as they pertain to fixed based wastewater facilities. The terms wastewater and stormwater are viewed differently with regards to State statutes and regulations. The NDOT does not own or operate any facilities that generate treated or untreated wastewater. Consequently, the requirements of Sections C.8 and C.9 of the Permit pertaining to wastewater facilities (including 5-Day Reporting) are not applicable to NDOT's operations.

The NDOT will file Spill Reports and implement appropriate response efforts for employee caused incidents. The NDOT is not responsible for filing Spill Reports for third party incidents within the Permit Area (unless the incident site is a "discovery", and the responsible party is unknown). However, third party caused Reportable Spill incidents reported to the NDOT's

Environmental Division will be tracked and monitored to ensure appropriate response measures are implemented. All Reportable Spill incidents will be documented accordingly in the IDDE Response Database.

# 5.9 Industrial Facility Monitoring and Control

Overview: The Industrial Facility Monitoring and Control Program is intended to reduce unauthorized discharges into the Permit Area from industrial facilities through routine monitoring and discharge elimination efforts. Except for material source sites (i.e., Non-Metallic Mineral Mining and Dressing Facilities), the NDOT does not own or operate industrial facilities (Appendix C). Consequently, the NDOT will focus monitoring and control efforts to those non-NDOT industrial facilities that directly discharge stormwater runoff into the NDOT's Permit Area, primarily municipal landfills; hazardous waste treatment, disposal, and recovery facilities subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986; facilities covered under the NDEP's Industrial Stormwater General Permit (NPDES Permit NVR050000); and industrial facilities that the NDOT determines are contributing significant pollutant loading to its MS4.

NDOT will maintain an inventory of industrial sites monitored, documenting those facilities that are contributing a known substantial pollutant loading to the NDOT's MS4. Note that the NDOT is authorized to accept stormwater discharges from NPDES permitted facilities.

Permit requirements associated with the NDOT's material source sites are addressed in Section 5.10 of this document.

Responsibility: Compliance and Enforcement Manager

# **5.9.1 Monitoring Prioritization and Sampling**

The NDOT maintains an inventory of industrial sites subject to routine monitoring, which includes any facilities that have been confirmed as contributing significant unauthorized stormwater pollutant loads to the Permit Area. Facilities are inspected per the procedures outlined in the NDOT's internal *Guide for Industrial Facility Assessment* document. Monitoring will initially focus on those industrial facilities within State counties representing the highest total populations.

Should discharge sampling be necessary to identify illicit discharges, samples will be collected in accordance with the provisions of Section B.6.1.2 - B.6.1.4 of the Permit.

# **5.9.2 Industrial Facility IDDE**

Procedures for illicit discharge detection and elimination (as needed) will be implemented as described in Section 5.8 of this plan. The NDOT may require facilities to implement appropriate control measures prior to discharging stormwater to the Permit Area on a case-by-case basis. These control measures will be documented with the annual industrial site inventory.

Should NDOT encounter discharges from a facility requiring permitting, the NDOT will initiate appropriate enforcement procedures to eliminate the discharge followed by notification to NDEP of the facility's non-permitted status.

# **5.10 Non-Metallic Mineral Mining and Dressing Facilities**

**Overview:** This program addresses routine activities performed by NDOT Maintenance personnel within NDOT owned and/or operated material source sites (i.e., Non-Metallic Mineral Mining and Dressing Facilities as identified under *Section J* of the NPDES Multi-Sector General Permit for industrial activities) that have the potential to discharge into a WOUS. NDOT contractor usage of material source sites is in support of specific construction contracts; consequently, contractor activities are covered under the Multi-Sector General Permit (MSGP) or CGP (as appropriate) rather than the Permit.

Material source sites are used by Maintenance personnel as sources of material (e.g., aggregate base, borrow, etc.) for maintaining the NDOT's roadway infrastructure. Areas covered under the Permit include borrow pits, cinder pits, sand and gravel operations, and stone quarries. Permitted activities include material exploration, material source site development, excavation and storage of mined materials, and non-metallic processing and mineral services (e.g., plant and truck screening, pre-mix material production, and bulk material handling and storage).

Material source site usage is intermittent and dependent on the maintenance needs for a given region. Most of the material source sites are used infrequently and can be considered inactive.

Please note that many of the material source sites used by the NDOT are owned and managed by an underlying public agency fee owner, e.g., Bureau of Land Management. Consequently, these sites may be subject to 3<sup>rd</sup> party use granted by the underlying fee

owner. The implementation of the Non-Metallic Mineral Mining and Dressing Facilities program, therefore, will be limited to the NDOT's operations consistent with the "granted" use by the underlying fee owner and not 3<sup>rd</sup> party use.

Responsibility: Compliance and Enforcement Manager

## **5.10.1 Material Source Site Categories**

Material source sites are categorized into the following groups:

- Mine Development Phase: Earth disturbing activities are conducted prior to active mining activities and consist of the following:
  - Activities performed for the purposes of mine site preparation, including the cutting of new rights of way (except when related to access road construction), providing access to a mine site for vehicles and equipment (except when related to access road construction), and/or other earth disturbances associated with site preparation activities on any areas where active mining activities have not commenced;
  - Construction of staging areas to prepare for erecting structures to house personnel and equipment, mill buildings, etc., and construction of access roads;
  - Does not include new disturbance to an already open site, only refers to development of an undisturbed (i.e., non-open) site.
- Active Mining Phase: Active mining means activities related to the extraction, removal
  or recovery, and beneficiation of non-metallic minerals from the earth; removal of
  overburden and waste rock to expose mineable minerals; and site reclamation and
  closure activities.
  - Mining Extraction refers to the removal (especially by effort or force) of valuable minerals or geological materials from the earth, usually from an orebody, lode, vein, reef or placer deposit;
  - Mining Removal refers to a form of surface mining that involves the mining of a summit or summit ridge of a mountain;
  - Mining Recovery refers to the proportion of available product successfully removed as a percentage of the actual mineral or geological content;

- Beneficiation refers to the crushing and separating of ore into valuable substances or waste by any of the variety of techniques;
- Site Reclamation refers to restoring land that has been mined to a natural or productive post-mining land use.
- Inactive Mining Phase: A site where mineral mining and/or milling occurred in the
  past, but there are no "active mining" activities occurring as previously described. The
  site may occasionally be accessed by maintenance staff to retrieve material from
  stockpiles for use on routine maintenance projects.

Material source sites under the following conditions do not fall under any of the Material Source Categories listed above are not subject to Permit requirements:

- Sites not developed as Non-Metallic Mineral Mining and Dressing Facilities;
- Sites having undergone final stabilization<sup>27</sup> and not currently used to support the NDOT's maintenance or construction activities (i.e., defunct sites).

## 5.10.2 Inventory

The NDOT's Environmental Division will maintain an inventory of material source sites covered under this Permit; information will include site ID, location (e.g., latitude/longitude coordinates), category, name of the waterbodies that each site potentially discharges to; and whether the site contains material stockpiles<sup>28</sup>. The Environmental Division will also develop and maintain a GIS-based map depicting locations of the material source sites.

#### **5.10.3 Regulated Areas**

Stormwater discharges from all categories of material source sites are covered under the Permit, specifically from the following material source site areas:

- Overburden and topsoil piles;
- Onsite haul roads;
- Dams or dikes when constructed of overburden or excavated material and no process fluids are present;

<sup>&</sup>lt;sup>27</sup> Guidance is provided in the Department's *Material Source Site Stormwater Management Guide* (refer to section 5.10.4 of this plan).

<sup>&</sup>lt;sup>28</sup> The presence of material stockpiles in a material source site will be referenced in the site's respective SWPPP.

- Office or administrative building, parking, and housing areas if discharges are mixed with other site stormwater discharges;
- Chemical storage areas;
- Docking facilities;
- Fuel storage and dispensing areas;
- Vehicle and equipment maintenance areas and buildings;
- Un-stabilized, disturbed areas outside of the active excavation areas;
- Processing areas and processing waters.

Non-stormwater discharges as listed in Section 2.1 of this plan are authorized. Mine dewatering discharges composed entirely of stormwater or uncontaminated ground water seepage from construction sand and gravel, industrial sand, and crushed stone mining facilities are authorized. Wastewater from concrete washout and discharges containing soaps/solvents from equipment cleaning are not authorized.

## 5.10.4 Material Source Site Stormwater Management Guide

BMP implementation for all categories of material source sites and associated activities will be in accordance with NDOT's water quality guidance documents, notably the NDOT's internal guidance document *Material Source Site Stormwater Management Guide*. This document provides a description of non-metals mining and associated activities that may occur at material source sites owned/operated by the NDOT, as well as information pertaining to Permit requirements and final stabilization.

#### 5.10.5 Stormwater Pollution Prevention Plans

SWPPPs will be developed for material source sites in the Mine Development, Active Mining, and Inactive Mining Phases per the following schedule:

- Mine Development Phase sites: Prior to commencement of any earth disturbing activities;
- Active Mining Phase sites: within one (1) year of the Permit effective date;
- Inactive Mining Phase sites (those which have not achieved final stabilization): within three (3) years of the Permit effective date.

SWPPPs will cover routine activities performed by the NDOT's Maintenance personnel and will be developed in accordance with *Section B.5.12.13*. of the Permit. During initial SWPPP preparation, areas requiring corrective action will be identified and prioritized accordingly.

Contractors performing construction activities within any Plan covered material source site (including material source site expansion and mine development activities) in support of a stand-alone construction contract will develop and implement a SWPPP in accordance with the CGP or MSGP (as appropriate). Upon the contractor being granted relief of maintenance from the construction contract, SWPPP coverage will revert to the appropriate Maintenance SWPPP and managed per the appropriate site classification.

Monitoring based numeric effluent limitations and exceedance requirements as described in *Sections B.5.12.10.4 and B.5.12.10.5* of the Permit will be addressed in a material source site's SWPPP (as appropriate).

## **5.10.6 Stormwater Inspections**

- Active Mining Phase Sites: Routine stormwater inspections will occur at least quarterly<sup>29</sup>; however, for sites that discharge to a 303(d)-listed waterway impaired for sediment or nitrogen, routine inspections will occur at least monthly. In the event an Active Mining Phase site is used by an NDOT contractor in support of a NDOT construction contract, the site will be inspected monthly as part of the Environmental Division's QA inspections (refer to Section 5.6.5 of this plan). Comprehensive stormwater inspections will occur at least annually and may be conducted as a quarterly inspection.
- Inactive Mining Phase Sites: Comprehensive stormwater inspections will occur triennially (i.e., once every three (3) years) at all Inactive Mining Phase sites.
- Mine Development Phase sites: Comprehensive stormwater inspections will occur once every fourteen (14) calendar days and within twenty-four (24) hours of a storm event of a quarter (0.25) inch or greater of precipitation at all Mine Development Phase sites. For sites that discharge into a 303(d)-listed waterway, inspections will be conducted once every seven (7) calendar days and within twenty-four (24) hours of a storm event resulting in a quarter (0.25) inch or greater of precipitation.

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<sup>&</sup>lt;sup>29</sup> Unless adverse weather conditions make the site(s) inaccessible.

Comprehensive inspections will focus on all areas of the material source site that have been disturbed by clearing, grading, and excavation; material storage areas that are exposed to precipitation; junction of site ingress/egress areas with paved areas. At a minimum, comprehensive inspections will provide an evaluation/assessment of the following:

- Integrity of stormwater discharge diversions, conveyance systems, and containment structures;
- All stormwater controls (notably erosion and sediment controls) to ensure proper and effective operating and/or maintenance condition;
- Whether new or modified BMPs are necessary;
- Areas that could be subject to potential spills or leaks;
- Stormwater discharge points for signs of erosion or sedimentation as well as overall water quality as a direct result of material source site operations.

Inspection documentation will be housed within the Environmental Division.

#### 5.11 Maintenance Facilities

**Overview:** This program consists of a collection of BMPs, requirements, controls, and procedures that collectively reduce potential pollutant discharges with stormwater runoff from the NDOT's Maintenance Facilities. These facilities include (as appropriate) stations and yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations, and snow disposal areas. Material source sites are not included with this program as they are addressed in Section 5.10 of this plan.

**Responsibility**: Compliance and Enforcement Manager

#### **5.11.1 Major and Minor Maintenance Facilities**

Maintenance Facilities are classified into one of the following categories:

- Major Facility: Maintenance stations that accommodate multiple crews and serve as a location for equipment repairs beyond routine maintenance.
- Minor A Facility: Maintenance stations that do not accommodate multiple crews and do not conduct equipment repairs beyond routine maintenance. Offsite Maintenance yards that serve as ancillary material and/or equipment storage areas for nearby Maintenance stations are also included in this designation.

Minor B Facility: Stand-alone material stockpiles, e.g., sand/salt piles.<sup>30</sup>

Category designation reflects a site's overall potential for stormwater pollutant discharges (i.e., Major being the highest potential and Minor B being the lowest potential) and hence are managed accordingly per Permit requirements and internal policies and procedures.

The NDOT's Environmental Division coordinates with the three (3) Districts annually regarding Maintenance Facility status (i.e., active vs. non-active) and category designation. Newly constructed facilities are assessed and assigned an appropriate category designation. Existing Maintenance Facilities are reviewed annually to determine if changes in their respective operations warrant a category designation change.

A listing of all active Permit-covered Maintenance Facilities and associated category designations is maintained in the FPPP.

## **5.11.2 Facility Pollution Prevention Plan**

The NDOT is required to prepare SWPPPs for all is Maintenance Facilities subject to Permit coverage (per *Section B.5.13.3* of the Permit). The term "SWPPP" is often associated with construction sites. To avoid any confusion with the naming convention, Maintenance Facility SWPPPs are referred to in this plan as FPPPs.

FPPPs have been developed for each District, i.e., three (3) FPPPs. Each FPPP delineates requirements (including site inspection frequencies) pertaining to each facility category for all Permit covered Maintenance Facilities within each respective District. Each category has general pollution prevention measures that are applicable to every facility; however, site specific requirements/recommendations are provided as appropriate. Applying this approach to FPPP development facilitates the revision process and helps educate Maintenance personnel with pollution prevention efforts occurring District-wide.

The following information is applicable to all FPPP covered Maintenance Facilities: designated FPPP administrator(s), preventative maintenance, good housekeeping, spill prevention and response procedures, and general BMPs for specific pollutant sources; evaluation of non-stormwater discharges; employee training; and inspection procedures. Please note that the NDOT's Maintenance Facility Stormwater Best Management Practices

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<sup>&</sup>lt;sup>30</sup> Sites solely serving the purpose of "chip" storage are not included due to their extremely low pollutant potential and transitory nature.

(BMPs) Manual (referenced below in Section 5.11.3 of this plan) is the primary guidance document for BMP implementation at the NDOT Maintenance Facilities.

The FPPs include activity descriptions, site maps, and descriptions and evaluations of potential pollutant sources for each Major Facility. Information for Minor Facilities include location maps, addresses, types of operation, facility sizes, receiving water drainage basins, and descriptions and evaluations of potential pollutant sources.

FPPPs are reviewed and maintained (as appropriate) annually by the Environmental Division's Stormwater Compliance and Enforcement group. FPPPs may be modified within thirty (30) days of a comprehensive facility stormwater inspection (refer to Section 5.11.4 of this plan) in the event additional or modified facility BMPs are deemed necessary.

Copies of the FPPPs are housed within the Environmental Division and are available electronically to all Maintenance stations. Hard copies of the FPPPs are distributed to Maintenance stations<sup>31</sup> upon request.

The FPPPs are available to the NDEP upon request. The NDOT understands that the NDEP has the right to review the FPPPs and require additional control measures. All notifications by the NDEP shall be submitted to the NDOT in writing.

Records of major FPPP activities, e.g., sweeping, storm sewer system servicing, etc., will be retained for at least five (5) years following Permit expiration (i.e., August 9, 2023).

#### **5.11.3 Maintenance Facility Stormwater BMPs Manual**

The NDOT's Maintenance Facility Stormwater Best Management Practices (BMPs) Manual serves as the primary reference for NDOT District personnel for incorporating BMPs into day-to-day Maintenance Facility operations. The document helps facilitate implementation of the FPPP and serves as a guidance tool when performing Maintenance Facility stormwater inspections.

This document is reviewed and maintained (accordingly) by the Environmental Division's Stormwater Compliance and Enforcement group.

<sup>&</sup>lt;sup>31</sup> For those Maintenance facilities that do not have office buildings to house hard copies of the document (e.g., Minor B facilities), the FPPP is housed within the appropriate Maintenance Station.

# **5.11.4 Maintenance Facility Stormwater Inspections**

Maintenance Facility stormwater inspections provide an opportunity to evaluate site conditions, identify locations of pollutant discharges, and assess BMP needs, whether it be implementation, enhancement, maintenance, or modification. Stormwater inspections also provide the opportunity to assess a facility's compliance with FPPP requirements and provide the opportunity for FPPP review to ensure it is updated and consistent with current facility operations.

Facility inspections are categorized as either comprehensive or routine. All areas of the Maintenance Facility are inspected, notably areas exposed to precipitation and areas where spills, releases, and leaks have occurred or have the potential to occur. Additionally, the following site areas are visited (as appropriate) during an inspection:

- Equipment down-line areas;
- Fueling areas;
- Equipment maintenance areas (indoor and outdoor);
- Material storage areas (including stockpiles);
- Areas receiving stormwater run-on and stormwater runoff discharge points;<sup>32</sup>
- Equipment wash areas (e.g., wash pads);
- Equipment and material loading and unloading areas;
- Waste disposal and storage areas;
- Structural BMPs; and
- Facility ingress/egress points.

#### Comprehensive Stormwater Inspections

Documented inspections performed by Environmental Division staff annually. Inspection reports include the following information (as appropriate):

- Name and title of the inspector;
- Weather information and a description of any discharges observed during the inspection;
- The locations of sediment (or other pollutants) that discharged offsite;

<sup>&</sup>lt;sup>32</sup> Should discharge points be inaccessible, nearby downstream locations (to the extent that the inspections are practicable) will be inspected.

- The locations of BMPs that require maintenance, failed to operate as intended, or proved inadequate;
- Areas requiring additional BMPs;
- Corrective actions required (including changes to the SWPPP and implementation dates);
- The identification of all non-stormwater discharge sources and their associated BMPs;
- The identification of material storage areas and any evidence (or potential for) pollutant discharges from these areas; and
- Incidents of non-compliance with Permit conditions.<sup>33</sup>

Inspection reports, which include recommendations for BMP correction and enhancement (as appropriate), are routed to the appropriate FPPP Administrator for review. A post-construction corrective action report is submitted by the FPPP Administrator to the Environmental Division demonstrating appropriate corrective action in response to concerns noted on the inspection report. Copies of all inspection documentation is housed within the Environmental Division and the appropriate District office. Documentation will be retained for at least five (5) years following the Permit expiration date.

Inspection reports are signed and certified per Section C.26 of the Permit.

Should an inspection report document the need to modify an existing BMP or the need to add additional BMPs, every attempt will be made to have BMP implementation completed prior to the next storm event, but no later than thirty (30) calendar days. In the event BMP implementation extends beyond the next storm event, the reason for the delay will be documented with the post-inspection records submitted to the Environmental Division.

Should an inspection report document the migration of sediment (or other materials) from the Maintenance Facility, the goal is to have the sediment removed prior to the next storm event, but no later than seven (7) calendar days of the inspection. In the event cleanup efforts are delayed due to legal, regulatory, or physical access constraints, cleanup efforts will begin within seven (7) calendar days of obtaining access. The reasons for the cleanup delay will be documented with the post-inspection records submitted to the Environmental Division.

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<sup>&</sup>lt;sup>33</sup> In the event an inspection does not identify incidents of non-compliance with Permit conditions, the inspection report will include a certification that facility activities are compliant with the FPPP and the Permit.

Should an inspection report that maintenance of installed erosion and/or sediment controls is required, the goal is to have the necessary maintenance performed prior to the next storm event, but no later than seven (7) calendar days of the inspection. If maintenance is delayed beyond the seven (7) calendar days, alternative BMPs will be implemented as soon as possible. The reason(s) for the maintenance delay will be documented with the post-inspection records submitted to the Environmental Division.

Inspections are performed by Environmental Division staff who have completed the NDOT's Maintenance Stormwater Training and Stormwater Management for Equipment Shops training courses (refer to Section 5.2 of this plan).

#### Routine Visual Stormwater Inspections

Undocumented inspections performed by the Environmental Division, the FPPP Administrator, or personnel assigned by the FPPP Administrator. These inspections can be performed at any time and provide opportunities to identify and respond to BMP needs more frequently than the comprehensive stormwater inspections.

There are no specific training requirements associated with these inspections.

#### **5.11.5 Maintenance Facility Releases**

In accordance with the Resource Conservation and Recovery Act, a "release" is defined as "Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of a hazardous or toxic chemical or extremely hazardous substance."

Chemical, petroleum, and other releases at the NDOT's Maintenance Facilities may be subject to documentation and reporting requirements as described in *Section B.5.13.2.6.* of the Permit, i.e., a Recordable Release Incident (RRI). Information recorded by the Environmental Division for each RRI will include the following: type and amount of material released, the location and extent of the release, the circumstances of the release, and the name of the parties involved (if known). Protocol for Maintenance Facility staff to report RRI's to the Environmental Division will be documented in the FPPP. A summary of RRIs reported to the Environmental Division will be included in the Annual Report.

Release incidents that meet the following criteria will not be considered an RRI: the release is less than a half-gallon, does not have the potential to discharge to a WOUS, and is cleaned

up within 1 hour of discovery. Non-RRI releases are not subject to Permit documentation and reporting requirements as described in *Section B.5.13.2.6* of the Permit. Additionally, releases observed during a comprehensive Maintenance Facility Inspection will not be considered RRIs; however, the incident and appropriate response measures will be documented and tracked accordingly (refer to Section 5.11.4 of this plan).

Any release incident that meets Spill Reporting criteria will be reported to NDEP and documented accordingly in the IDDE Response Database.

#### 5.12 Public Street Maintenance

**Overview:** This program describes stormwater pollution control measures to reduce the discharge of potential pollutants related to the maintenance of the State Highway System. These measures are consistent with the NDOT's goals of optimizing public safety, efficiently operating the State's transportation system, and effectively preserving and managing public transportation assets.

**Responsibility:** Compliance and Enforcement, Program Development, and Hydraulics Stormwater Design Managers.

# **5.12.1 Highway Maintenance**

Routine highway maintenance is performed to provide a level of service to the traveling public, to maintain (or extend) the service life of highway assets, and to maintain highway assets in proper functioning condition. Maintenance activities (notably roadway and MS4 infrastructure repair and maintenance, vegetation management, and winter operations) are performed in conformance to the NDOT's internal *Maintenance Manual*, which is intended to establish an efficient and standardized approach to maintaining the State Highway System<sup>34</sup> through uniform procedures and best practices. Included in the *Maintenance Manual* are requirements/responsibilities of District Maintenance personnel pertaining to training, environmental compliance, and maintenance operations (notably snow and ice control, roadside maintenance, and roadside cleanup). Please note that this document is maintained by the NDOT's Maintenance and Asset Management Division and not the Environmental Division and thus is not considered a "Stormwater Document;" consequently, document

<sup>&</sup>lt;sup>34</sup> Includes select roads within urbanized areas covered by other individual or general MS4 permits.

updates and revisions are performed at the frequency specified by the Maintenance and Asset Management Division.

The following NDOT stormwater guidance documents are referenced by District Maintenance staff to reduce the discharge of stormwater pollutants to the MEP when performing maintenance activities:

- Construction Site Best Management Practices (BMPs) Manual
- Field Guide for the Detection and Elimination of Illicit Discharges
- Maintenance Facility Best Management Practices (BMPs) Manual

Additionally, the NDOT has adopted AASHTO's *Maintenance Stormwater Field Guide*<sup>35</sup> to serve as stormwater pollution prevention guidance for Maintenance personnel when performing day-to-day activities (including the repair, maintenance, and cleaning of roadways).

The NDOT's infrastructure and corresponding Permit Area is dispersed statewide. Consequently, maintenance activities (and corresponding stormwater pollution prevention measures) are performed in both non-urbanized and urbanized areas and MS4 permitted urbanized areas. Should another MS4 permit entity identify an inconsistency between their respective stormwater management program and impacts from the NDOT's maintenance operations, the NDOT will collaborate with the entity to develop a solution.

#### 5.12.2 Snow and Ice Control

Snow and ice control are needed to ensure open and safe roadways for the traveling public during winter conditions. In response to this need, the NDOT implements *The Statewide Snow and Ice Control (Program) Plan* within the *Maintenance Manual* which provides operational procedures for snow and ice control related tasks, including snow and ice removal and the application of abrasives and deicing/anti-icing agents. Region-specific snow and ice control plans are maintained at the District-level and are also included with the *Maintenance Manual*.

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<sup>&</sup>lt;sup>35</sup> Developed by the American Association of State Highway and Transportation Officials (AASHTO) – Center for Environmental Excellence and subsequently adopted by the NDOT. Document updates/revisions are performed by AASHTO at their specified frequencies.

The NDOT applies abrasives, deicing, and anti-icing agents on State-maintained highways where near freezing or freezing winter temperatures occur to maintain a level of safety for the traveling public at the service levels provided in the District-level snow and ice control plans. Sodium chloride (NaCl) is the primary deicing/anti-icing agent used. Sand is the primary abrasive used, although volcanic cinders are occasionally used in select areas. Information pertaining to application rates, salt concentrations, salt/sand mixture ratios, calibration of sand spreaders, and post-storm sweeping is provided in the *Maintenance Manual* and/or housed at the District-level.

The NDOT strives to determine optimal application rates while minimizing adverse environmental impacts. Road Weather Information System (RWIS) sites, (i.e., a network of meteorological and pavement sensors) are established along State-maintained highways statewide, providing accurate real-time weather information which assists Maintenance with determining optimal times for applying deicing/anti-icing agents without compromising public safety.

#### 5.12.2.1 Testing of Abrasives and Deicing/Anti-Icing Agents

Information pertaining to the source and composition of abrasives and deicing/anti-icing agents are housed within the Maintenance and Asset Management Division and/or the District-level. Abrasive information includes source location, type, and analysis for gradation and percent organic matter<sup>36</sup>, volatile solids, iron, total nitrogen, total phosphorus, total reactive phosphorus, and total dissolved solids. Deicing/anti-icing agent information includes type and analysis for total phosphorus, total nitrogen, iron, and percent sodium chloride. Alternative deicer (e.g., potassium acetate (KAc)) information includes type, total nitrogen, and total phosphorus.

BMP considerations for snow and ice control operations, including application practices and material storage, are referenced in the appropriate BMP guidance documents. As a matter of practice, many facilities use covered storage areas for salt and abrasives and have secondary containment for liquid deicer/anti-icing agent containers to help prevent offsite migration.

that represents deliveries from the originating source. Composite samples shall be taken from every new delivery from a new originating source.

<sup>36</sup> Gradation and percent organic matter shall be determined from composite samples from one stockpile

## 5.12.3 Street Sweeping

NDOT Maintenance Crews routinely sweep the streets and highways within the Permit Area to remove leaf litter, sediment, and other accumulated debris. As part of the NDOT's winter operations, the sweeping of sanded streets in MS4 permitted urbanized areas is performed as soon as weather, logistics, and site conditions permit after snowstorms with the goal of no later than four (4) days after the last snowfall (provided no snowstorms are forecasted within those four (4) days).

Sweeper waste is properly disposed of (e.g., disposed of at a local landfill). Recycling of sweeper waste is a District-specific consideration and as general practice is not performed with significant frequency due to several factors (notably unsuitability of the material).

## **5.12.4 Priority and Watershed Pollutant Reduction Opportunities**

The NDOT's Districts develop priority areas for maintenance activities annually, including schedules for implementation (which vary year-to-year based on factors such as resource availability and regional needs). However, a general level of prioritization is given for each District's major urbanized areas (e.g., Las Vegas Valley, Carson City/Douglas County, Truckee Meadows, and Elko regions) as well as the Lake Tahoe Basin. Specific areas of the State operate under individual highway/roadside management plans which are housed at the District-level. The areas under these management plans may become priority areas for storm sewer system inspection and servicing for any given year depending on District needs. Oil/water separators discharging to the storm sewer system are priorities for inspection and maintenance.

Opportunities to improve existing urban runoff control structures are evaluated during project development. However, the Clear Creek Watershed and the Lake Tahoe Basin have separate stand-alone water quality improvement programs with a focus on erosion control and permanent BMP implementation. Project implementation is dictated primarily on available funding; project schedules are developed by individual project managers.

#### 5.12.5 Stabilization of 3:1 Slope Areas

Roadway segments with slopes 3:1 or greater are assessed on a project-by-project basis. During project development, slope areas exhibiting active erosion with a potential for off-site sediment migration into a WOUS are identified. Mitigation measures are incorporated into the project design (as appropriate) to address the actively eroding slope areas.

District Maintenance personnel are familiar with slope areas within their respective Districts that are problematic from an erosion standpoint. Locations of these areas are submitted to the Hydraulics Division as candidates for future mitigation efforts.

## **5.12.6 Storm Sewer System Inspection and Maintenance**

The NDOT's District personnel perform routine inspections and maintenance of the storm sewer infrastructure within their respective service areas, including post-construction stormwater pollution control BMPs (notably stormwater retention/detention basins, constructed wetlands for water quality purposes, media filtration systems, and oil/water separators). Inspection information includes a facility condition/maintenance (i.e., servicing) determination and an IDDE evaluation. Inspections are documented using GIS mobile field applications; maintenance information is recorded in the NDOT's asset management system. Inspection and maintenance schedules are developed and maintained at the District-level annually. Oil/water separators discharging to the storm sewer system are inspected annually and maintained (as needed).

In the event an inspection determines a significant amount of material is present within a drop inlet (i.e., that which is considered above and beyond what is considered a typical quantity or type of material for a given location), information is provided to the Environmental Division for IDDE and enhanced BMP considerations. In the event an inspection identifies material within a storm drain inlet that may pose a threat to water quality, immediate arrangements for the removal of the material will be made.

Stormwater facilities are assessed for IDDE considerations during the inspection, repair, and/or maintenance of the storm sewer system. Potential IDDE incidents are reported to and addressed by the Environmental Division's Stormwater Compliance and Enforcement group as described in Section 5.8 of this plan.

All material removed from the storm sewer system is managed in accordance with applicable State, federal, and local laws and regulations. Drop inlet maintenance will be reported in the Annual Report in a format that is consistent with the current asset management data collection/reporting framework.

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<sup>&</sup>lt;sup>37</sup> An inventory of post-construction BMPs (including type and location) is included with other storm sewer asset information as described in Section 5.4 of this plan.

5.13 Pesticide and Fertilizer Application

Overview: Pesticides<sup>38</sup> (specifically herbicides) and fertilizers are routinely used by the

NDOT for roadside beautification efforts, vegetation control (including noxious weed

abatement), and maintaining a level of public safety (e.g., driver visibility, fire hazard

reduction, etc.) along the State Highway System. Herbicides are the primary pesticide

applied along the right-of-way. The application of fertilizers is very low Statewide and limited

to select urbanized landscaping areas and post-construction revegetation sites.

This program describes the BMPs being implemented to reduce stormwater pollution from

the application of pesticides and fertilizers.

**Responsibility:** Program Development Manager

**5.13.1 Application Practices** 

The NDOT strictly uses pesticides which are registered for use under the Federal Insecticide,

Fungicide, and Rodenticide Act (FIFRA).

Established procedures and quidelines for the roadside application of herbicides by

Maintenance personnel can be found in the Maintenance Manual. Guidance measures

include:

Equipment use (including calibration);

Training;

Product storage, handling and disposal;

Timing of application;

Environmental considerations.

AASHTO's Maintenance Stormwater Field Guide serves as the primary BMP guidance

document for Maintenance personnel when applying pesticides and fertilizers.

document provides guidance on the timing of application in relation to expected precipitation

events, proximity of treatment area to nearby water bodies, and general practices to minimize

potential product discharge with stormwater runoff.

<sup>38</sup> Pesticide is a general term that encompasses the subset of herbicides, insecticides, fungicides, etc.

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The NDOT's contractors are required to follow all State and federal regulations pertaining to herbicide use. Contract documents direct contractors to only use FIFRA registered herbicides and to implement BMPs during herbicide application (e.g., application during dry weather conditions, prohibiting application in waterways, using herbicides approved for aquatic use when treating riparian vegetation, etc.).

Fertilizers are used sparingly with application rates prescribed per manufacturer's recommendations toto minimize stormwater impacts.

## **5.13.2 Applicator Training**

In accordance with State requirements, Maintenance personnel applying restricted-use herbicides within the Permit Area obtain a government applicator license from the Nevada Department of Agriculture (unless applying general use herbicides and are under the supervision of a licensed government applicator). To obtain licensure, applicants must pass an examination that covers general application practices, pesticide types and uses, environmental considerations (including minimizing impacts to waterways), effects of using combinations of chemicals, etc. Licensed applicators are required to complete a level of continuing education for license renewal. License records for Maintenance personnel are maintained at the District-level.

The NDOT's contractors that apply restricted-use herbicides along the right-of-way are also required to meet State licensure requirements.

Maintenance personnel also receive a level of herbicide and fertilizer applicator training in the Maintenance Stormwater Training Module (refer to Section 5.2.2 of this plan) with curriculum focusing on stormwater/water quality considerations during application (including the use of herbicides approved for aquatic use when applying directly adjacent to waterways).

# **5.13.3 Vegetation Control Program**

The management and implementation of the NDOT's Vegetation Control Program is a collaborative effort among various Divisions. Consequently, aspects of this program are implemented (collectively) from various sections of this plan.

#### 5.13.3.1 Landscaping and Revegetation

For revegetation/landscaping projects, the NDOT emphasizes the use of plant species adapted to a project area's climate. This management strategy reduces/negates the need

for supplemental fertilizer application and irrigation use for plant establishment, thus promoting self-sustaining and long-term site stabilization.

#### 5.13.3.2 Maintenance Activities

District Maintenance Crews are tasked with controlling vegetation growth within the right-of-way. This is typically accomplished via chemical (i.e., herbicide application) or mechanical (e.g., mowing and cutting). Maintenance tasks are performed in accordance with the *Maintenance Manual*, AASHTO's *Maintenance Stormwater Field Guide*, and other guidance documents.

Refer to Section 5.12 of this plan for further information.

#### 5.13.3.3 Vegetation Control Management Plans

The NDOT has not developed, nor implemented, any "Vegetation Control Management Plans." Information pertaining to certain aspects of vegetation management (e.g., revegetation and maintenance) can be found in guidance documents such as the Maintenance Manual, the PDG, and Mapping Ecosystems Along Nevada Highways and the Development of Specifications for Vegetation Remediation.<sup>39</sup>

# **5.14 Discharges to Sanitary Sewer Systems**

**Overview:** The NDOT is to have written approval from a utility or agency prior to discharging stormwater into facilities treating domestic sewage, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage. Stormwater disposal occurs in select regions of the State (most of which consisting of vacuum truck liquids) with NDOT having written authorization from the appropriate utility.

Responsibility: Program Development Manager

#### 5.14.1 Authorizations

The NDOT is authorized from the following entities to discharge stormwater into the sanitary sewer system.

- District I
  - Clark County Public Works

<sup>39</sup> Published by the University of Nevada, Reno, and University of Nevada Cooperative Extension for the NDOT.

# District II

- o Truckee Meadows Water Reclamation Facility
- o Carson City Public Works
- o Incline Village Public Works
- o City of Fallon
- o Storey County Public Works

Copies of these authorizations are provided in Appendix H.

6.0 Measurable Goals

Developing Measurable Goals provides opportunities to monitor progress of implementing

specific aspects of a programmatic BMP. Measurable Goals serve as benchmarks for

facilitating programmatic review and assessment, recognizing achievements, and identifying

areas for enhancement.

Measurable Goals for each programmatic element are presented below and summarized in

Table I.1 (Appendix I). Rationale represents NDOT's reasoning for establishing the

measurable goal; Frequency represents how often the measurable will be implemented; the

Begin date represents the onset of measurable goal implementation; the End date represents

when the measurable goal is forecasted to be completed. For those measurable goals with

an "Annual" Frequency, the measurable goal will be implemented at least once per Permit

Reporting Period. For those measurable goals with a "Continuous" end date, implementation

will occur at the specified Frequency until Permit expiration.

Legal Authority

Review the Standard Specifications for Road and Bridge Construction and perform

updates as appropriate.

Rationale: Ensures that contract standards reflect current programmatic needs

for construction site stormwater compliance on the NDOT's construction

projects.

Frequency: Annual

o Begin: August of 2018

o End: Continuous

Annual Milestone: Performed at least once per Reporting Period.

Review the Terms and Conditions Relating to Right-of-Way Occupancy Permits and

perform updates as appropriate.

Rationale: Ensures that contract documents reflect current programmatic

needs for construction site stormwater compliance on third party/non-NDOT

construction projects performed within the right-of-way.

Frequency: Annual

Begin: August of 2018

End: Continuous

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Annual Milestone: Performed at least once per Reporting Period.

# Stormwater Education Program

• Provide discipline-specific stormwater trainings to NDOT personnel in each District.

 Rationale: Stormwater training is the foundation for educating employees on measures to reduce stormwater pollution.

Frequency: Annual

o Begin: August of 2018

o End: Continuous

 Annual Milestone: Achieve at least 80% compliance of stormwater training requirements each Reporting Period.

## Public Participation/Involvement Program

Maintain the Stormwater Program website and update accordingly.

 Rationale: The NDOT's Stormwater Program website serves as a means for disseminating SWMP related information and for encouraging public participation.

o Frequency: Annual

Begin: August of 2018

o End: Continuous

Annual Milestone: Performed at least once per Reporting Period.

Maintain Stormwater Program social media platforms.

 Rationale: Social media platforms are effective for disseminating SWMP related information to the public and for encouraging public participation.

Frequency: Annual

Begin: August of 2018

o End: Continuous

Annual Milestone: Performed at least once per Reporting Period.

Participate in public outreach events.

 Rationale: The NDOT's Environmental Division values personal interaction with the public statewide and considers it an effective means of communicating SWMP related information.

Frequency: Annual

Begin: August of 2018

o End: Continuous

 Annual Milestone: Participate in at least three events (virtually and/or inperson) each Reporting Period.

## Maps and Outfalls Program

Refine major outfall mapping data

 Rationale: Accurate mapping information of the storm sewer system serves as the foundation for implementing many aspects of the SWMP.

Frequency: Annual

o Begin: August of 2018

End: Continuous

o Annual Milestone: Performed at least once per Reporting Period.

## <u>Discharges to Water Quality Impaired Waters Program</u>

 Develop a plan for identifying and evaluating stormwater discharges from the MS4 into future State 303(d) and TMDL listed WOUS.

 Rationale: Identifying and evaluating potential stormwater discharges into State 303(d) and TMDL listed WOUS will assist with planning and implementing appropriate mitigation measures as necessary.

Frequency: Dependent upon publishing date from NDEP

Begin: Dependent upon publishing date from NDEP

End: Continuous

 Annual Milestone: Performed within six (6) months of publishing by NDEP during applicable Reporting Periods.

#### Construction Site BMPs Program

 Perform oversight and QA construction site stormwater inspections at the specified Plan frequencies.

 Rationale: Inspection oversight helps promote construction site stormwater compliance and to gain perspective on potential training needs.  Frequency: Prior to the onset of earth disturbing activities and prior to granting relief of maintenance, and every thirty (30) days during construction, respectively.

Begin: August of 2018

o End: Continuous

 Annual Milestone: Performed at all applicable construction sites each Reporting Period.

Perform SWPPP reviews on all NDOT construction sites covered under the CGP.

Rationale: Serves as a means for ensuring the NDOT's contractors procure
 CGP coverage as appropriate and have a plan in place for mitigating potential construction site stormwater discharges.

Frequency: Annual

o Begin: August of 2018

o End: Continuous

 Annual Milestone: Performed for all applicable construction sites each Reporting Period.

• Review the Construction Site Best Management Practices (BMPs) Manual and perform updates as appropriate.

 Rationale: Updates are important for ensuring stormwater control measure guidance is current and relevant.

Frequency: Annual

Begin: August of 2018

o End: Continuous

Annual Milestone: Performed at least once per Reporting Period.

• Publish the Stormwater Guidance Manual for Construction Projects and disseminate to all three (3) Districts.

 Rationale: This document provides internal guidance for implementing key aspects of the Construction Site BMPs Program.

Frequency: Once

Begin: January of 2020

End: June of 2020

 Review the Stormwater Guidance Manual for Construction Projects and perform updates as appropriate.

 Rationale: Updates are important for ensuring guidance on construction site stormwater management is current and relevant.

o Frequency: Annual

o Begin: August of 2020

o End: Continuous

o Annual Milestone: Performed at least once per Reporting Period.

# New Development and Redevelopment Program

• Review Headquarters generated designs for new development and redevelopment projects and incorporate post-construction BMPs as appropriate.

 Rationale: This process helps ensure post-construction stormwater BMPs are incorporated into new development and redevelopment projects during the design phase.

Frequency: Annual

Begin: August of 2018

o End: Continuous

 Annual Milestone: Performed as designs are generated during each Reporting Period.

• Review the *Planning and Design Guide* and perform updates as appropriate.

 Rationale: Updates are important for ensuring guidance for designing postconstruction BMPs is current and relevant.

Frequency: Annual

o Begin: August of 2018

o End: Continuous

Annual Milestone: Performed at least once per Reporting Period.

#### Illicit Discharge Detection and Elimination Program

Perform routine monitoring on identified major outfalls.

 Rationale: Performing routine monitoring of major outfalls is an opportunity for identifying and eliminating potential illicit discharges into the storm sewer system. Frequency: Annual

o Begin: August of 2018

o End: Continuous

 Annual Milestone: Perform routine monitoring on 20% of identified major outfalls statewide during each Reporting Period.

 Perform follow-up routine monitoring on the major outfalls that had a confirmed illicit discharge the previous year. This will occur at least once per year until there are no signs of subsequent illicit discharges.

 Rationale: Follow-up inspections will provide an opportunity to ensure subsequent illicit discharges are not occurring.

Frequency: As Needed

o Begin: August of 2018

o End: Continuous/As Needed

 Annual Milestone: Performed on 100% of the major outfalls that had a confirmed illicit discharge the previous year.

• Document and respond to (as appropriate) illicit discharge incidents reported to the Environmental Division's Stormwater Compliance and Enforcement group.

 Rationale: Documentation and response is important for eliminating confirmed illicit discharges, ensuring appropriate follow-up measures are implemented, and for identifying potential "hot spots" for enhanced monitoring.

o Frequency: As Needed

Begin: August of 2018

o End: Continuous/As Needed

 Annual Milestone: Performed on 100% of the reported illicit discharge incidents during each Reporting Period.

• Review the Field Guide for the Detection and Elimination of Illicit Discharges and perform updates as appropriate.

 Rationale: Updates are important for ensuring IDDE guidance is current and relevant.

o Frequency: Annual

Begin: August of 2018

o End: Continuous

o Annual Milestone: Performed at least once per Reporting Period.

• Review the *Illicit Discharge Field Investigation Procedures Manual* and perform

updates as appropriate.

Rationale: Updates are important for ensuring IDDE investigation procedures

are current and relevant.

Frequency: Annual

o Begin: August of 2018

o End: Continuous

Annual Milestone: Performed at least once per Reporting Period.

# Industrial Facility Monitoring and Control Program

• Perform routine monitoring of identified industrial facilities (i.e., non-material source

sites) statewide that directly discharge stormwater runoff into the NDOT's MS4.

o Rationale: Performing routine monitoring of industrial facilities is an opportunity

for identifying and eliminating potential illicit discharges to the storm sewer

system.

Frequency: Annual

o Begin: August of 2018

o End: Continuous

Annual Milestone: Performed on 20% of identified industrial facilities each

Reporting Period.

· Review and update as necessary the list of identified industrial facilities subject to

routine monitoring, including a listing of those facilities that are contributing a known

substantial pollutant loading to the NDOT's MS4.

o Rationale: Industrial designations are dynamic, consequently it is important to

update the listing of industrial facilities to ensure routine monitoring is

conducted at the appropriate facilities.

Frequency: Annual

Begin: August of 2018

o End: Continuous

o Annual Milestone: Performed at least once per Reporting Period.

## Non-Metallic Mineral Mining and Dressing Facility Program

- Identify Permit covered sites with locations mapped in a GIS platform.
  - Rationale: Identifying and mapping the material source sites subject to Permit requirements is the first step to implementing the Non-Metallic Mineral Mining and Dressing Facility Program.

Frequency: N/A

Begin: August of 2018End: August of 2019

- Update material source site mapping data as needed.
  - Rationale: Current mapping information of material source site locations is instrumental for the implementation of the Non-Metallic Mineral Mining and Dressing Facility Program.

o Frequency: Annual

Begin: August of 2018

o End: Continuous

- o Annual Milestone: Performed at least once per Reporting Period.
- Review the *Material Source Site Stormwater Management Guide* and update accordingly.
  - Rationale: This document serves as the primary guidance for the implementation of material source sites BMPs.

Frequency: Annual

o Begin: August of 2020

o End: Continuous

- o Annual Milestone: Performed at least once per Reporting Period.
- Identify material source sites not previously assessed that are subject to Permit coverage following the remand of the Navigable Waters Protection Rule.
  - Rationale: On November 18, 2021, the EPA and the U.S. Army Corps of Engineers announced the proposed rule change in response to the U.S. District Court for the District of Arizona's August 30, 2021, order vacating and remanding the Navigable Waters Protection Rule in the case of *Pascua Yaqui Tribe vs. U.S. Environmental Protection Agency*. The public comment period for the ruling change ended on February 07, 2022. A consequence of the rule

remand is the definition of WOUS has been revised. A re-evaluation of several material source sites is needed to determine Permit coverage applicability.

Frequency: N/A

Begin: March of 2022End: August of 2022

- Develop SWPPPs for material source sites subject to Permit coverage following the remand of the Navigable Waters Protection Rule.
  - Rationale: Upon identifying material source sites subject to Permit coverage resulting from the rule remand, SWPPPs will be developed for Mine Development Phase Sites, Active Mining Phase Sites, and Inactive Mining Phase Sites.
  - Frequency: N/A
  - o Begin:
    - Mine Development Phase Sites: Prior to commencement of any earth disturbing activities.
    - Active Mining Phase Sites: August of 2022
    - Inactive Mining Phase Sites: August of 2022
  - o End:
    - Mine Development Phase Sites: Continuous
    - Active Mining Phase Sites: November of 2022
    - Inactive Mining Phase Sites: February of 2023

### Maintenance Facility Program

- Review the FPPP(s) and update accordingly.
  - Rationale: The FPPP(s) serve as the foundation for stormwater pollution control efforts at Major and Minor Maintenance facilities. Consequently, appropriate updates are critical for ensuring policies, procedures, and control measures are current and relevant.
  - Frequency: Annual
  - Begin: August of 2018
  - o End: Continuous
  - Annual Milestone: Performed at least once per Reporting Period.

Review the Maintenance Facility Stormwater Best Management Practices (BMPs)

Manual and update accordingly.

Rationale: This document serves as the primary guidance for the implementation of BMPs at Minor and Major Maintenance facilities.

Consequently, appropriate updates are needed for ensuring BMP options are

current and relevant.

Frequency: Annual

Begin: August of 2018

End: Continuous

Annual Milestone: Performed at least once per Reporting Period.

## Public Street Maintenance Program

Inspect, record condition, and/or maintain (as needed) the storm sewer system.

 Rationale: Routine inspection and subsequent maintenance of the storm sewer system is critical for proper system functionality and potential pollutant

removal.

Frequency: Annual

Begin: August of 2018

End: Continuous

o Annual Milestone: Performed on at least 10% of the storm sewer system

statewide during each Reporting Period.

Develop and release enhanced GIS mobile field technology supporting storm sewer

asset maintenance.

Rationale: The mobile field technology provides guidance for performing

condition assessments and subsequent maintenance of storm sewer system

assets, replacing the Storm Sewer System Inspection and Maintenance

Guide/Stormwater Operations and Maintenance Plan as the primary resource

for performing storm sewer system asset condition assessments and

determining maintenance needs.

Frequency: Once

Begin: March of 2021

o End: March of 2021

Maintain the GIS mobile field technology supporting storm sewer asset maintenance.

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o Rationale: To ensure mobile field applications are current

Frequency: AnnualBegin: July of 2021

o End: Continuous

Annual Milestone: Performed at least once per Reporting Period.

## Pesticide and Fertilizer Program

• Ensure Maintenance personnel are properly trained for herbicide and fertilizer application.

 Rationale: Training is the foundation for educating employees on measures to reduce potential stormwater pollution from pesticide and fertilizer application.

o Frequency: Annually

o Begin: August of 2018

End: Continuous

Annual Milestone: Performed in conjunction with other appropriate
 Maintenance-specific stormwater training(s) during each Reporting Period.

# Discharges to Sanitary Sewer Systems

 Coordinate with the Districts to ensure written authorizations are obtained from the appropriate municipal authority prior to discharging stormwater into the sanitary sewer system.

 Rationale: To ensure wastewater treatment plants are aware of the stormwater input into their systems, and the stormwater can be handled accordingly.

o Frequency: As needed

o Begin: August of 2018

o End: Continuous

o Annual Milestone: Performed at least once per Reporting Period.

7.0 Supplemental Best Management Practice

**Guidance** 

This section describes stand-alone BMPs not included in ancillary documents referenced in

this Plan.

7.1 Maintenance Activities

**Overview:** Routine maintenance is performed to provide a level of service to the traveling public,

to maintain (or extend) the service life of highway assets, and to maintain highway assets in proper

functioning condition. However, it is essential that maintenance activities are performed in a

manner consistent with the stormwater pollution prevention goals and control measures

prescribed in this plan. Please note that BMP guidance provided in these sub-sections is

supplemental to other stormwater documents referenced in this plan appropriate for maintenance

activities, notably AASHTO's Maintenance Stormwater Field Guide.

**Responsibility:** Program Development

7.1.2 Culvert Flushing

Due to hydraulic constraints, it is common for culverts (notably roadway cross culverts in rural

areas) to accumulate sediment and debris transported from upper watershed areas. Over time,

this accumulation of material can block storm flows, creating a potential hazard to the traveling

public and to roadway infrastructure. To mitigate this risk, it is necessary to clean out obstructed

culverts to ensure storm flows are conveyed as intended.

The practice of utilizing high pressure water from a rodder hose (or similar means) to dislodge

sediment or debris deposited (i.e., stuck) within a culvert is permissible provided the following

quidance is followed:

**General BMPs:** 

Limit earth disturbance to the extent necessary to perform operations;

Operations are limited to ephemeral and intermittent channels;

• Operations are to be performed under dry weather and channel flow conditions;

discharges into channel flows are not permissible;

Waste materials are to be disposed of accordingly;

In-channel work shall not be performed with actively leaking equipment;

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- Ensure spill control/cleanup measures are readily accessible for prompt response; and
- Report potential illicit discharges in accordance with illicit discharge reporting procedures.

## Material Removal and Disposal:

- Contain and collect dislodged material whenever feasible;
- Use a vacuum truck whenever possible to collect dislodged material;
- Limit the use of equipment within a channel; operate equipment outside of the channel whenever possible;
- Limit vegetation removal to the extent necessary (trimming is permissible);
- Restore the channel to its original grade and contours following in-channel material removal;
- Collect any dislodged litter;
- Sediment and debris collected from culverts where the contributing watershed is predominantly rural may be applied in upland areas (including the roadway prism) where material migration into a water course will not occur. Side-casting material along channel banks is not permissible;
- Sediment and debris collected from culverts where the contributing watershed is predominantly urbanized is to be disposed at an appropriate offsite location (e.g., local landfill);
- Temporary stockpile areas are to be placed in locations where material migration into a water course will not occur; and
- Sediment and debris exhibiting staining or strong odors is to be managed accordingly and disposed at an appropriate offsite facility.

## Additional Considerations:

- Coordinate with the Environmental Division prior to beginning culvert flushing operations
  to ensure the appropriate authorizations are secured and to confirm appropriate material
  disposal locations; and
- Collected material may be subject to disposal facility analytical testing requirements.

# **Appendices**

Appendix A
MS4 Permit NV0023329



**Department of Conservation & Natural Resources** 

Brian Sandoval, Governor Bradley Crowell, Director Greg Lovato, Administrator

August 10, 2018

Cliff Lawson Nevada Department of Transportation 1263 S. Stewart St. Carson City, NV 89712

Subject: Issuance of Permit NV0023329 - Nevada Department of Transportation MS4

Dear Mr. Lawson:

In accordance with provisions of the Nevada Water Pollution Control Law Chapter 445A, of the Nevada Revised Statutes, the Department of Conservation and Natural Resources, Division of Environmental Protection has reviewed the application for renewal of National Pollutant Discharge Elimination System discharge permit NV0023329 for the Nevada Department of Transportation MS4.

The Notice of Proposed Action was sent to interested persons and governmental agencies on our mailing list and was published in the Reno Gazette-Journal, Las Vegas Review-Journal and Elko Daily Free Press. The 30-day period for this Notice of Proposed Action closed on **July 16, 2018** at 5:00 P.M. One comment was recieved. In accordance with the proposed Administrative Decision to issue the permit, subject to specific conditions and requirements, the Division of Environmental Protection has issued the enclosed permit for a period of five (5) years.

The new permit shall take effect on August 10, 2018 and will expire at midnight on August 9, 2023, provided all permit conditions are followed and annual fees paid accordingly. In accordance with the permit conditions, an annual review and services fee to maintain the permit is due on July 1, 2019 and every year thereafter until the permit is terminated.

Please contact me at (775) 687-9422 or at andrew.dixon@ndep.nv.gov should you have any questions.

Sincerely,

Andrew Dixon

Bureau of Water Pollution Control

Enclosures: Permit NV0023329

## Permit Type: Municipal Separate Storm Sewer Systems

#### Permit No. NV0023329

#### **Nevada Division of Environmental Protection**

#### **AUTHORIZATION TO DISCHARGE**

In compliance with the provisions of the Clean Water Act, as amended, 33 U.S.C. 1251 et. seq. (CWA), and Chapter 445A of the Nevada Revised Statutes (NRS),

## NEVADA DEPARTMENT OF TRANSPORTATION 1263 S. STEWART STREET CARSON CITY, NV - 89712

is authorized to discharge from a facility located at:

# NEVADA DEPARTMENT OF TRANSPORTATION MUNICIPAL SEPARATE STORM SEWER SYSTEM

STATEWIDE, -, NV - -

LATITUDE: 39.168790, LONGITUDE: -119.7684 TOWNSHIP: T15N, RANGE: R20E, SECTION: S20

to receiving waters named:

WATERS OF THE UNITED STATES.

in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Sections A, B, and C hereof.

This permit shall become effective on August 10, 2018.

This permit and the authorization to discharge shall expire at midnight, August 09, 2023.

Signed this 10th day of August 2018.

**Andrew Dixon** 

Stormwater Supervisor

**Bureau of Water Pollution Control** 

#### **SECTION A**

#### A.1. INTRODUCTION

A.1.1. The Permittee, Nevada Department of Transportation, is authorized to discharge stormwater, and authorized non-stormwater discharges as defined herein, from its municipal separate storm sewer system (MS4) to waters of the U.S. throughout Nevada, excluding Tribal Lands.

#### A.2. EFFLUENT LIMITATIONS

- A.2.1. There shall be no discharge from the facility except as authorized by this permit.
- **A.2.2.** There shall be no discharge of substances that would cause or contribute to an exceedance of water quality standards.
- **A.2.3.** During the period beginning on the effective date of this permit, and lasting until the permit expires, the Permittee is authorized to:

discharge stormwater and authorized non-stormwater discharges from the Permittee's MS4, as defined in Title 40 of the Code of Federal Regulations (CFR) §122.26.

Effluent samples and measurements taken in compliance with the monitoring requirements specified below shall be taken at:

Sample Location	Location Type	Location Name	
MS4	Sum	MS4	

A.2.4. The discharge shall be limited and monitored by the Permittee as specified below. As applicable, exceptions to standard language in this permit are identified and authorized in the Special Approvals / Conditions table:

- A.3. Schedule of Compliance: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Nevada Division of Environmental Protection (Division), including in said implementation and compliance, any additions or modifications, which the Division may make in approving the schedule of compliance. All compliance deliverables shall be addressed to the attention of the Bureau of Water Pollution Control.
- **A.3.1** The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.

SOC - Schedule of Compliance Table

item #	Description	Due Date		
1	Submit a draft revised Stormwater Management Plan per Section B.5.1. for Division review no later than one (1) year from the issue date of this permit.  8/10/2			

# SA - Special Approvals / Conditions Table

Item #	Description
1	The annual reporting period shall be on the State fiscal year (FY); July 1st to June 30th.  Annual Reports shall be due November 1st following each FY reporting period.
2	The Permittee shall submit a final revised Stormwater Management Plan to the Division no later than six (6) months after the Permittee receives comments from the Division on the revised Stormwater Management Plan.
	The following sections do not apply to this permit; they are addressed elsewhere herein: C.1.1.; C.1.2.; C.1.3.; and C.2.
4	If any report, plan, or other submittal required by this permit cannot be submitted on or before the due date, the Permittee shall notify the Division within 72 hours of the Permittee's knowledge of the delay. The Permittee may then request in writing an extension of the submittal deadline and provide an explanation of the reason for the delay and any measures that will be taken to mitigate the delay. The Division shall notify the Permittee in writing of its decision regarding the extension request.
5	The Permittee will be notified of the Division comments in writing and either the Permittee or the Division may request a meeting to discuss said comments. For any report, plan, or other submittal required by this permit, the Permittee shall address the Division comments, if any.
6	All notifications and written documents required by this permit shall be submitted to the Division, Bureau of Water Pollution Control, Stormwater Branch Supervisor.
7	The Permittee shall submit a revised draft stormwater monitoring plan to the Division for review for this permit within six (6) months of the issuance of this permit and shall submit a revised final stormwater monitoring plan for Division approval after the public notice process.

# DLV- Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Annual Report	Annually	11/1/2019
2	Annual fiscal analysis to include allocated resources, expenditures and staff resources.	Annually	11/1/2019

#### SECTION B

Site specific requirements are on the following pages:

- B. Municipal Separate Storm Sewer Systems (MS4)
- B.1. Permit Area
- B.1.1. This permit covers State and interstate highways and their right-of-ways within the jurisdictional boundary of the Permittee, and maintenance facilities and material source sites owned or operated by the Permittee, served by, or otherwise contributing to, discharges into waters of the U.S. from the MS4.
- B.2. Authorized Discharges
- B.2.1. This permit authorizes new or existing discharges composed entirely of stormwater and authorized non-stormwater discharges into the Permittee's MS4. In addition, this permit authorizes stormwater discharges associated with Sector J Non-Metal Mining and Dressing from the Permittee's material source sites. The Permittee is authorized to discharge in accordance with its Division reviewed and approved Stormwater Management Program (SWMP), and the terms and conditions of this permit.
- **B.2.2.** The following are authorized discharges:
- **B.2.2.1. Stormwater discharges.** This permit authorizes stormwater discharges to waters of the U.S. from the Permittee's MS4.
- B.2.2.2. Non-stormwater discharges. The Permittee is authorized to discharge the following non-stormwater sources provided that the Division has not determined these sources to be substantial contributors of pollutants to the Permittee's MS4:
- **B.2.2.2.1.** Potable water line flushing during testing or fire hydrant testing;
- B.2.2.2.2. Diverted stream flows;
- **B.2.2.2.3.** Springs or rising groundwaters;
- B.2.2.2.4. Uncontaminated groundwater infiltration;
- **B.2.2.2.5.** Discharges from potable water sources;
- **B.2.2.2.6.** Residential foundation and/or footing drains;
- **B.2.2.2.7.** Air conditioning condensate;
- **B.2.2.2.8.** Irrigation water from lawns and landscaping;
- **B.2.2.2.9.** Water from residential crawl space pumps;
- **B.2.2.2.10.** Flows from natural riparian habitats and wetlands;

B.2.2.2.11.	De-chlorinated swimming pool discharges;	
B.2.2.2.12.	Individual residential car washing;	
B.2.2.2.13.	Water incidental to street sweeping (including associated sidewalks and medians) and that is not associated with construction activities;	
B.2.2.2.14. B.2.2.2.15.	Discharges or flows from firefighting activities:  Dewatering discharges not requiring a separate permit;	
B.2.2.2.16.	Discharges currently covered under a separate National Pollution Discharge Elimination System (NPDES) permit that pass through the Permittee's MS4; and	
B.2.2.2.17.	Other discharges determined not to be a substantial contributor of pollutants to waters of the U.S. by the Division.	
B.3.	Non-authorized Discharges	
B.3.1.	The following discharges are not authorized by this permit:	
B.3.1.1.	Discharges of non-stormwater, whether or not mixed with stormwater, unless such non-stormwater discharges are included in Section B.2.2.2. of this permit:	
B.3.2.	Except for Sector J Non-Metals Mineral Mining and Dressing, all stormwater discharges associated with industrial activity shall be authorized under General Permit NVR050000.	
B.3.3.	Stormwater discharges associated with construction activity are authorized under General Permit NVR100000.	
B.3.4.	If it is determined that the Permittee's discharge(s) cause or contribute to an instream exceedance of water quality standards, the Division may require corrective action.	
B.3.5.	The Permittee shall comply with all applicable federal, State, or local laws, regulations, or ordinances.	
B.4.	Discharges to Water Quality Impaired Waters	
B.4.1.	Impaired Waters - Nevada 303(d) List of Impaired Waters	
B.4.1.1.	The Permittee must evaluate annually whether stormwater discharges from any part of its MS4 contributes directly or indirectly to the listing of a waterbody on the current Nevada 303(d) List of Impaired Waters (303(d) List) if the water is a water of the U.S. If the Permittee has discharges meeting this criterion, or if there is a Total Maximum Daily Load (TMDL) on receiving waters, the Permittee shall comply with Section B.4.2.	
B.4.1.2.	Annually, the Permittee shall determine whether the MS4 discharges to a water of the U.S. on the 303(d) List. If a water is listed, the Permittee shall	

include a section in the Annual Report describing the parameter(s) for which the water(s) was listed, evaluating BMPs that might practicably be implemented, examining whether these BMPs would make a substantial improvement on water quality, and identifying the BMPs that are selected for implementation.

## B.4.2. Total Maximum Daily Load

- B.4.2.1. The Permittee shall determine whether the MS4 discharges to a waterbody for which a TMDL has been developed and approved by the Division. If there is a TMDL, the Permittee shall comply with Section B.4.2.2.
- **B.4.2.2.** If a TMDL is approved for a water of the U.S. into which the Permittee discharges, the Permittee shall:
- **B.4.2.2.1.** Determine and report whether the approved TMDL is for a pollutant likely to be found in stormwater discharges from the Permittee's MS4;
- B.4.2.2.2. Determine and report whether the TMDL includes a pollutant waste load allocation (WLA) or other performance requirements specifically for stormwater discharge from the Permittee's MS4. For the Lake Tahoe TMDL, the Permittee shall comply with Section B.4.3.
- **B.4.2.2.3.** Determine and report whether the TMDL addresses a flow regime likely to occur during periods of stormwater discharge;
- **B.4.2.2.4.** Assess whether the WLAs are being met through implementation of existing stormwater control measures or if additional control measures are necessary;
- B.4.2.2.5. Document all control measures that are currently being implemented or planned to be implemented and are consistent with the WLA. These measures shall be reported in the Annual Report. A schedule of implementation for all planned controls shall be included in the revised SWMP as described in Section B.5 of this permit;
- B.4.2.2.6. Estimate reductions of pollutants through established and accepted BMP performance studies, calculations, models, or other evidence that demonstrates that the WLA will be addressed through the implementation of the SWMP, and shall be reported in the Annual Report;
- B.4.2.2.7. The monitoring program required by Section B.6.1. of this permit shall be customized to determine whether the stormwater controls are adequate to meet the WLA:
- B.4.2.2.8. If no WLA currently exists, but is developed during the term of this permit, then the Permittee's BMPs outlined in the revised SWMP are expected to be sufficient for the duration of the permit period; and
- B.4.2.2.9. The need for an iterative approach to control pollutants in stormwater discharges is recognized. If the Permittee determines that additional or modified controls are necessary, the SWMP will be updated pursuant to Section B.5. of this permit and will describe the type and schedule for the control additions and/or revisions, and the evaluation used to make the

determination.

- B.4.3. Discharges to Lake Tahoe and Tributaries to Lake Tahoe
- B.4.3.1. The Lake Tahoe TMDL identifies the Permittee as a party responsible for the implementation of pollutant controls to restore historic clarity within Lake Tahoe. The Lake Tahoe TMDL is implemented through the November 2016 Interlocal Agreement (ILA) entered into with the Division.
- B.4.3.2. The Permittee shall comply with all the requirements set forth in the ILA that are applicable to the Permittee. If the ILA is breached by the Permittee, a more regulatory approach may be implemented herein.
- B.5. Stormwater Management Program (SWMP)
- B.5.1. SWMP Revision
- B.5.1.1. Upon issuance of this permit, the Permittee shall review its existing SWMP to determine whether its current programs require revision to meet the requirements of this permit. The Permittee's implementation of the approved SWMP will be considered adequate to reduce the discharge of pollutants from the Permittee's MS4 to the maximum extent practicable (MEP) to protect the quality of waters of the U.S..
- **B.5.1.1.1.** The revised SWMP will be subject to Division review and approval and the public notice steps outlined below in this Section, after which the SWMP will be formally incorporated as terms and conditions of this permit.
- **B.5.1.2.** The Permittee shall review, revise as necessary, and submit a revised SWMP to the Division for approval.
- B.5.1.2.1. The Permittee shall submit a draft revised SWMP to the Division for approval no later than one year from the effective date of this permit. The Division will review the draft SWMP to ensure it meets the minimum requirements of the permit and may require additional information from the Permittee in order to ensure the SWMP meets the permit requirements.
- B.5.1.2.2. The Permittee shall submit a final revised SWMP to the Division for approval no later than six (6) months after receiving comments from the Division on the draft revised SWMP.
- B.5.1.2.2.1. Before the final revised SWMP is submitted for final approval to the Division, the SWMP shall be made available for public comment for a minimum of thirty (30) days; the Permittee will respond to significant public comments; and the Permittee shall hold a public meeting in accordance with NAC 445A.67558; and
- B.5.1.2.2.2. The Permittee shall compile any comments received as part of the process in Section B.5.1.2.2.1., describe the actions taken in response to the public comments, and include this information in the revised SWMP.
- **B.5.1.3.** Within thirty (30) days after the revised SWMP has been submitted to the

	Division, the Permittee shall make the revised SWMP available to the public on its website.
B.5.1.4.	The revised SWMP shall include, sections for the following programs:
B.5.1.4.1.	The Permittee's legal authority;
B.5.1.4.2.	The Permittee's Stormwater Education Program;
B.5.1.4.3.	The Permittee's Public Involvement/Participation Program;
B.5.1.4.4.	The Permittee's MS4 maps and outfalls;
B.5.1.4.5.	The Permittee's discharges to waters of the U.S. on the 303(d) List;
B.5.1.4.6.	The Permittee's Construction Site BMP Program;
B.5.1.4.7.	The Permittee's New Development and Redevelopment Planning Program;
B.5.1.4.8.	The Permittee's Illicit Discharge Detection and Elimination (IDDE) Program;
B.5.1.4.9.	The Permittee's Industrial Facility Monitoring and Control Program;
B.5.1.4.10.	The Permittee's Maintenance Facility Program;
B.5.1.4.11.	The Permittee's Public Street Maintenance Program;
B.5.1.4.12.	The Permittee's Herbicide, Pesticide and Fertilizer Application Program; and
B.5.1.4.13.	The Permittee's discharges to sanitary sewers.
B.5.1.5.	Measurable Goals: The Permittee shall submit, within the SWMP, to the Division narrative and/or numerical measurable goals for tracking the development or implementation of each program element and shall include for each measurable goal the following:
B.5.1.5.1.	A description of the activity, or BMP, to be conducted or completed;
B.5.1.5.2.	Identification of which program element, if any, the measurable goal applies to;
B.5.1.5.3.	The dates, including the month and year, in which the Permittee will begin and achieve each measurable goal. If the activity is to be continuous, the Permittee shall state so;
B.5.1.5.4.	Annual milestones for measurable goals that span more than a single year;
B.5.1.5.5.	The rationale for how and why the Permittee selected each measurable goal; and
B.5.1.5.6.	Tables or charts to summarize the measurable goals, annual milestones, and completion dates.

The Permittee shall provide the title(s) of the position(s) within the Permittee's B.5.1.6. Stormwater Division responsible for implementing and coordinating each program element. B.5.1.7. The Permittee shall describe any proposed programs, if applicable, that the Permittee may implement during the life of this permit to require additional controls on a system wide basis, a watershed basis, a jurisdictional basis, or on individual outfalls. B.5.1.8. The Permittee may partner with other permitted MS4s to develop and implement all or part of the Permittee's SWMP. B.5.1.9. If collaborating with other MS4 permittees, the Permittee's SWMP shall describe which permittee is responsible for implementing each of the control measures. B.5.1.10. Pending submittal of the SWMP, the Permittee shall continue to implement and maintain current BMPs detailed in the Permittee's current approved SWMP. B.5.1.11. The Division may notify the Permittee of the need to modify the SWMP document to be consistent with the Permit or regulatory requirements, in which case the Permittee shall have thirty (30) days to submit the updated document to the Division. B.5.2. Legal Authority: The Permittee shall provide the legal authority to control discharges to its MS4. To demonstrate adequate legal authority, the Permittee shall: B.5.2.1. Provide the specific reference to statute, ordinance, interagency agreements. order or similar means that authorizes or enables the Permittee to: B.5.2.1.1. Control the contribution of pollutants to the MS4 by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity: B.5.2.1.2. Prohibit illicit discharges to its MS4; B.5.2.1.3. Control the discharge to its MS4 of spills, releases, dumping, or disposal of materials other than stormwater: B.5.2.1.4. Control the contribution of pollutants from one portion of the MS4 to another MS4: B.5.2.1.5. Require the Permittee's contractors to comply with applicable regulatory requirements: B.5.2.1.6. Establish civil, administrative, and criminal penalties for violations of applicable regulatory requirements; and B.5.2.1.7. Carry out all inspection, surveillance, and monitoring procedures necessary to

determine compliance and noncompliance with permit conditions including the

prohibition of illicit discharges to the MS4.

- B.5.2.2. The Permittee shall provide written notice to the Division of any formal proposal to modify the regulation or statute regulating stormwater discharges into the MS4. Before any regulation or statute is modified, the Division shall have thirty (30) days to review and comment on the proposed modification.
- B.5.3. MS4 Maps and Outfalls
- B.5.3.1. The revised SWMP shall include maps of the Permittee's MS4, including the location of any major outfall that discharges to waters of the U.S. The maps may be web-based with a URL provided in the SWMP.
- B.5.4. Discharges into Sanitary Sewer Systems
- **B.5.4.1.** For discharges into facilities treating domestic sewage, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, that are not owned or operated by the Permittee, the following shall be provided by the Permittee:
- **B.5.4.1.1.** Written and signed confirmation from each facility authorizing the discharge of pollutants into the facility's sanitary sewer system; and
- **B.5.4.1.2.** All authorizations obtained by the Permittee shall be included with the revised SWMP.
- B.5.5. Stormwater Education Program
- B.5.5.1. The Permittee shall implement a Stormwater Education Program that includes training and, when necessary, intra- and inter-governmental coordination to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater quality impacts.
- B.5.5.2. The Permittee shall implement an Employee Stormwater Training Program and shall outline the Program in the SWMP. The Program shall provide for the Permittee's employees to receive refresher training at least once every three (3) years. The Permittee shall also provide training to new staff within the first twelve (12) months of hire, and to existing staff when job responsibilities change to newly incorporate stormwater duties.
- **B.5.5.3.** The Permittee shall keep records of all employees who receive stormwater training.
- B.5.5.4. The Permittee shall provide stormwater awareness training to educate personnel at all levels of responsibility who are involved in activities that may impact stormwater quality and those staff who may come into contact with, or otherwise observe, an illicit discharge or illicit connection to the MS4.
- B.5.5.5. The Permittee shall provide specific stormwater training to educate personnel who are directly involved in activities that may impact stormwater quality or that may generate or manage non-stormwater discharges. For each topic, the number of trainings offered, the number of employees trained, and other appropriate measurable goals shall be presented in the Annual Report. The

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	employee training program shall address:
B.5.5.5.1.	The Permittee shall train all staff whose responsibilities may include responding to illicit discharges or illicit connections to the MS4. Training shall include:
B.5.5.5.1.1.	The procedures for detection, investigation, (i.e. field screening procedures, sampling methods, field measurements) identification, clean-up, and reporting of illicit discharges and connections, and improper disposal/dumping; and
B.5.5.5.1.2.	The procedures for outfall screening and investigation.
B.5.5.5.2.	The Permittee shall train all staff whose responsibilities may include managing non-stormwater discharges. The training shall include:
B.5.5.5.2.1.	The types of discharges allowed under this permit and those that are prohibited;
B.5.5.5.2.2.	The distinction between non-stormwater discharges and potential pollutant sources;
B.5.5.5.2.3.	The pollutants of concern that may be in non-stormwater discharges; and
B.5.5.5.2.4.	The BMPs that shall be employed to minimize the discharge of pollutants.
B.5.5.5.3.	The Permittee shall train all staff directly involved in performing construction site inspections. Training shall include:
B.5.5.5.3.1.	The requirements of this permit and General Permit NVR100000 for structural and non-structural BMPs on construction sites, such as erosion and sediment control, waste control, and Stormwater Pollution Prevention Plans (SWPPPs);
B.5.5.5.3.2.	Contractors' requirement to obtain coverage under and comply with the General Permit NVR100000; and
B.5.5.5.3.3.	The Permittee's compliance, enforcement, and contractual processes to maintain compliance with the permit conditions.
B.5.5.5.4.	The Permittee shall train all staff involved with controlling stormwater runoff from new development or redevelopment, including those with responsibilities for preliminary design, design, and design review. Training shall include:
B.5.5.5.4.1.	Post-construction stormwater BMPs to prevent or minimize water quality impacts; and
B.5.5.5.4.2.	Design standards, maintenance requirements, and planning as related to stormwater.
B.5.5.5.5.	The Permittee shall train all staff directly involved in MS4 maintenance, street repair, and road improvement. Training shall include:
B.5.5.5.5.1.	Potential sources of contaminants related to repair and maintenance activities;

	and	
B.5.5.5.2.	Proper maintenance, housekeeping, and repair BMPs to prevent discharges to an MS4 or waters of the U.S.	
B.5.5.5.6.	The Permittee shall train all staff who may be involved in waste disposal or spill prevention and response. Training shall include:	
B.5.5.5.6.1.	Procedures to prevent, contain, and respond to spills and releases; and	
B.5.5.5.6.2.	Proper handling, storage, transportation, and disposal of toxic and hazardous materials, including but not limited to used oil and batteries, to prevent or minimize spills, releases or discharges to the MS4.	
B.5.5.5.7.	The Permittee shall train all staff directly involved in the application of pesticides, herbicides, and fertilizers. Training shall include:	
B.5.5.5.7.1.	The potential for stormwater contamination resulting from misapplication or over- application of chemicals; and	
B.5.5.5.7.2.	Proper application procedures and BMPs.	
B.5.5.5.8.	The Permittee shall train all staff working at industrial sites excluding material source sites. Training shall include:	
B.5.5.5.8.1.	The requirements of BMPs, SWPPPs, and the conditions of this permit that relate to on-site activities; and	
B.5.5.5.8.2.	As applicable, used oil and spent solvent management, fueling procedures, general good housekeeping practices, proper painting procedures, and used battery management.	
B.5.5.6.	The Permittee shall provide information in the revised SWMP that discusses how the Permittee will ensure that the Permittee's construction contractors have been adequately trained in BMP installation and maintenance, the ability to recognize activities that may impact stormwater quality, and the procedures in place to prevent or report an illicit discharge or illicit connection to the MS4.	
B.5.6.	Public Involvement/Participation Program	
B.5.6.1.	The Permittee shall implement a Public Education/Outreach Program to provide information to the public about actions individuals can take to reduce transportation related pollutants and improve water quality. The Permittee shall implement or participate in a Stormwater Education Program that uses different types of media and targets a wide range of audiences. The Program shall include a description of:	
B.5.6.1.1.	The methods for disseminating information;	
B.5.6.1.2.	The target audiences and how they were selected; and	
B.5.6.1.3.	The target pollutants and sources and how they were selected.	

- **B.5.6.2.** The Permittee shall implement educational and public information activities to distribute education materials on stormwater quality.
- B.5.6.2.1. The Permittee shall implement a Public Involvement/Participation Program to encourage public involvement and participation and to promote, publicize, and facilitate public reporting of illicit discharges and illegal dumping into or from the Permittee's MS4.
- B.5.6.2.2. The Permittee shall implement a reporting system to facilitate and track public reports of spills, releases, discharges, and dumping to its MS4 or receiving waters. The Permittee shall develop procedures for receiving and investigating public complaints. The Permittee shall post or advertise telephone numbers or other information to direct the public in reporting illicit discharges and illegal dumping. The Permittee shall evaluate and, where appropriate, the Permittee shall post these numbers in places where illicit discharges and illegal dumping are found to be a recurring problem.
- **B.5.6.2.2.1.** The Permittee shall record and report the number of reports received from the public and investigated in the Annual Report.
- **B.5.6.2.3.** The Permittee shall implement the Adopt-a-Highway Program, or, if not feasible, another highway trash clean-up program.
- B.5.6.2.4. The Permittee shall report the number of volunteer groups participating in the Adopt- a-Highway Program, or other highway trash clean-up program, the number of miles cleaned, and the amount of trash collected in the Annual Report.
- B.5.6.2.5. The Permittee shall implement a program that includes coordination mechanisms among divisions, groups, sections, and districts to ensure compliance with the terms of this permit. The Permittee shall also have mechanisms to coordinate with other government agencies and MS4 communities when necessary to address issues of common concern related to implementation of this permit. The revised SWMP shall include the following BMPs:
- **B.5.6.2.5.1.** The Permittee shall implement intra-governmental (internal) coordination procedures to ensure compliance with the terms of this permit and to ensure implementation of SWMP activities. The Permittee shall describe these procedures in the SWMP; and
- **B.5.6.2.5.2.** The Permittee shall develop partnerships and cooperative outreach programs, where feasible, with other MS4s and jurisdictions and shall describe these partnerships and programs in the SWMP.
- B.5.7. Construction Site BMP Program
- B.5.7.1. The revised SWMP shall include a description of the Permittee's Construction Site BMP Program to implement and maintain structural and non-structural BMPs to reduce pollutants to the MEP in stormwater runoff from construction sites. The Program shall include:
- **B.5.7.1.1.** A plan to control construction in the Permittee's rights-of-way. This includes

both construction by the Permittee, construction done under contract for the Permittee, and construction done by local government agencies or other third parties on Permittee's or non-Permittee's projects. The plan shall include: Review of construction site plans;

- B.5.7.1.2.
- B.5.7.1.3. implementation and maintenance of structural and non-structural BMPs;
- B.5.7.1.4. Site inspections and enforcement;
- B.5.7.1.5. A description of non-structural and structural BMPs for construction sites;
- B.5.7.1.6. A description of procedures for identifying priorities for inspecting sites and enforcing control measures that consider the nature of the construction activity, topography, and the characteristics of soils and receiving water quality; and
- B.5.7.1.7. A description of the BMPs that the Permittee or its contractors selected, implemented, maintained, and updated on the Permittee's construction projects to minimize the discharge of pollutants to the MEP.
- B.5.7.2. The Program shall be implemented year-round on all construction projects. The SWMP shall be revised to address these requirements and have a program and a schedule for inspections.
- The Program shall be in conformance with requirements of General Permit B.5.7.3. NVR100000.
- B.5.8. Permittee's Contractors Performing Construction Activities
- B.5.8.1. The Permittee shall require its contractors to comply with General Permit NVR100000 for regulated construction projects, including the contractor's requirement to file a Notice of Intent (NOI) and obtain authorization under General Permit NVR100000 for each construction project or site that disturbs one (1) acre or more, or less than one (1) if it is part of a larger project. The contractor shall also file a Notice of Termination (NOT) for each construction project or site, either terminating their responsibility if final stabilization has been achieved, or transferring it to the Permittee for completion.
- B.5.8.2. The Permittee shall ensure that the contractor's NOI references the construction site as the Permittee's project and shall keep a copy of the Division authorization certificate in the SWPPP.
- The Permittee shall ensure that all applicable provisions of General Permit B.5.8.3. NVR100000 and this permit are implemented for the Permittee projects and shall implement a system to enforce these provisions. The Permittee shall be responsible for inspection oversight.
- B.5.8.4. The Permittee shall assume responsibility for the site until final stabilization has been achieved for the entire project. The Permittee shall be responsible for removing all temporary sediment control BMPs that may impede stormwater flow as soon as practicable after final stabilization.

- B.5.8.5. The Permittee shall include a list of all construction projects covered by permit NVR100000 in the Annual Report, including the name of the project and its associated construction stormwater permit number(s) (e.g. CSW-xxxx), that have achieved final stabilization and that the Permittee considers to be complete.
- **B.5.8.6.** The Permittee shall provide in the Annual Report, a list and description of all violations and their resolutions, including any enforcement actions taken against its contractors.
- B.5.9. Discharges from New Development and Redevelopment Program
- B.5.9.1. The Permittee shall develop and implement comprehensive planning procedures and BMPs to prevent or minimize water quality impacts from areas of new development and redevelopment statewide. This applies to projects that result in land disturbance of greater than or equal to one (1) acre including projects less than one (1) acre that are part of a larger common plan of development. The revised SWMP shall include a post-construction stormwater pollution control program including maintenance of post-construction stormwater pollution control BMPs. For the purposes of this permit, post-construction stormwater pollution control BMPs include, but are not limited to: stormwater retention/detention basins; constructed wetlands for water quality purposes; media filtration systems; oil/water separators; check dams; grassy swales; or other similar BMPs. The Permittee shall describe the program in the revised SWMP.
- **B.5.9.2.** The Permittee shall promote source reduction approaches such as Low Impact Development (LID) techniques, where applicable, in its discussion of the program.
- **B.5.9.3.** The Permittee shall describe the BMPs that will protect water quality and reduce the discharge of pollutants to the MEP.
- B.5.9.4. The Permittee shall install stormwater pollution controls for all newly developed or redeveloped roadways that discharge stormwater runoff to waters of the U.S. on the 303(d) List. For other areas within the MS4, the Permittee shall evaluate the need for permanent post-construction stormwater pollution control BMPs.
- B.5.9.5. The Permittee shall also install post-construction controls for all newly developed or redeveloped roadways within the MS4 compliance areas where appropriate. Runoff from these roadways and the MS4 shall be treated by post-construction stormwater pollution control BMPs prior to the runoff leaving the Permittee's MS4 and/or entering waters of the U.S.
- **B.5.9.6.** All stormwater shall be discharged in a manner that does not cause nuisance conditions or erosion in receiving channels or on down gradient properties.
- **B.5.9.7.** The Permittee shall inventory, inspect, and maintain all post-construction stormwater pollution control BMPs. A program summary shall be included in the Annual Report.
- B.5.10. Illicit Discharge Detection and Elimination Program

B.5.10.1. The revised SWMP shall include a description of the Permittee's Illicit Discharge Detection and Elimination (IDDE) Program, including a schedule to detect and remove illicit discharges and improper disposal into the MS4. The Program shall include: A description of the Program, including inspections, to implement and enforce B.5.10.1.1. statutes, regulations, ordinances, orders, or similar means to prevent illicit discharges to the MS4. This program description shall address all types of illicit discharges; however, non-stormwater discharges or flows listed in Section B.2.2. of this permit shall only be addressed where such discharges are identified by the Permittee as sources of pollutants to waters of the U.S.; B.5.10.1.2. A description of procedures to conduct on-going field screening activities including areas or locations that will be evaluated by such field screens; A description of procedures to be followed to investigate portions of the MS4 B.5.10.1.3. that, based on the results of the field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-stormwater; B.5.10.1.4. A description of procedures to prevent, contain, and respond to spills and releases that may discharge into the MS4; B.5.10.1.5. A description of a program to facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from theMS4: A description of educational activities, public information activities, and other B.5.10.1.6. appropriate activities to facilitate the proper management and disposal of used oil: and B.5.11. Industrial Facility Monitoring and Control Program B.5.11.1. The revised SWMP shall describe the Permittee's program to monitor and control pollutants in stormwater discharges to MS4 from municipal landfills, hazardous waste treatment, disposal, and recovery facilities, industrial facilities that are subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and industrial facilities that the Permittee determines are contributing a pollutant loading to the MS4. The Program shall: B.5.11.1.1. Identify priorities and procedures for inspections and establishing and implementing control measures for such discharges; and B.5.11.1.2. Describe a monitoring program for stormwater discharges associated with the industrial facilities identified in this Section, to be implemented during the term of the Permit in accordance with the monitoring programs defined in Section B.6.1. B.5.11.2. The Permittee shall complete an inventory of all industrial facilities that the Permittee determines are contributing a pollutant loading to the MS4:

To include all Division industrial stormwater permitted facilities and other

B.5.11.2.1.

facilities that may pose a potential direct impact to the MS4; B.5.11.2.2. Include in the Annual Report the number of industrial facilities that the Permittee determines are contributing a pollutant loading to the MS4; and B.5.11.3. For Non-Metallic Minerals facilities owned or operated by the Permittee, the Permittee shall comply with the provisions for Non-Metallic Minerals except fuels, Standard Industrial Classification 14, Sector J (Section B.5.12). B.5.12. Non-Metallic Mineral Mining and Dressing Facility Requirements B.5.12.1. Material Source Site Activities: B.5.12.1.1. The Permittee's material source site activities covered by this permit include borrow pits, cinder pits, sand and gravel operations, stone quarries and activities composed primarily of the following: B.5.12.1.1.1. Exploration for stone, sand, gravel and cinder; development of material source pits; the excavation and storing mined materials; and B.5.12.1.1.2. Non-metallic mineral processing and mineral services (i.e. processing material sources), which includes but is not limited to, plant and truck screening, making pre-mix material, bulk material handling and storage. B.5.12.1.2. All of the Permittee's material source site activities are categorized into the following groups: B.5.12.1.2.1. Mine Development Phase: This phase is subject to the requirements of this permit because it involves soil disturbing activities such as clearing, grading, and excavation. B.5.12.1.2.2. Active Mining Phase: This phase is subject to the requirements of this permit because it involves actively mining material sources. B.5.12.1.2.3. Inactive Mining Phase: This phase is subject to the requirements of this permit because the material sources have the potential to discharge stormwater associated with industrial activity. B.5.12.1.3. The Permittee shall maintain an inventory of such sites with stockpiles that have a potential to discharge to waters of the U.S. Where applicable, BMPS shall be implemented at these sites to minimize the potential for pollutant discharges to stormwater. B.5.12.2. Covered Stormwater Discharges: B.5.12.2.1. Stormwater discharges from exploration and development of material source sites (Mine Development Phase), active mining facilities (Active Mine Phase). and inactive mining facilities (Inactive Mine Phase) are covered under this permit. Discharges are regulated from stormwater contacting the following areas:

B.5.12.2.1.1.

Overburden and topsoil piles;

B.5.12.2.1.2. Onsite haul roads: B.5.12.2.1.3. Runoff from dams or dikes when constructed of overburden or excavated material and no process fluids are present B.5.12.2.1.4. Office or administrative building, parking, and housing areas if discharges are mixed with other site stormwater discharges; B.5.12.2.1.5. Chemical storage areas; B.5.12.2.1.6. Docking facilities; B.5.12.2.1.7. Fuel storage and dispensing areas; B.5.12.2.1.8. Vehicle and equipment maintenance areas and buildings; B.5.12.2.1.9. Un-stabilized, disturbed areas outside of the active excavation areas; B.5.12.2.1.10. Processing areas and processing waters. B.5.12.3. Prohibited Discharges: Only those non-stormwater discharges identified in Section B.2 are allowed. Other discharges, including but not limited to, wastewater from concrete washout and soaps and solvents used in equipment cleaning are not authorized by this permit. B.5.12.4. Design and location requirements: Minimize the discharge of pollutants from pollutant sources by minimizing exposure, using secondary containment, spill kits, or other equivalent measures; locating pollution sources away from surface waters, storm drain inlets, and drainage ways; and cleaning spills immediately. B.5.12.5. Pollution prevention requirements for wash waters: Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters shall be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge. B.5.12.6. Pollution prevention requirements for the storage, handling, and disposal of construction products, materials, and wastes: Minimize the exposure to stormwater of building materials, building products, constructions wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials that may be present on the site. Minimization of exposure is not required in cases where the exposure to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use). Restrictions on use of treatment chemicals for sediment: B.5.12.7. B.5.12.7.1. Use conventional erosion and sediment controls prior to and after application of chemicals:

Select chemicals suited to soil type, and expected turbidity, pH, and flow rate;

B.5.12.7.2.

B.5.12.7.3.	Minimize the discharge risk of stored chemicals;
B.5.12.7.4.	Comply with State/local requirements;
B.5.12.7.5.	Use chemicals in accordance with good engineering practices and specifications of chemical manufacturer;
B.5.12.7.6.	Ensure proper training of applicators;
B.5.12.7.7.	Provide proper SWPPP documentation; and
B.5.12.7.8.	The use of cationic treatment chemicals is ineligible for coverage under this permit, unless the permittee notifies NDEP in advance and the Administrator authorizes the coverage under this permit. The Permittee must include appropriate controls and implementation procedures designed to ensure that any approved use of cationic treatment will not lead to a violation of water quality standards.
B.5.12.7.9.	Only mine dewatering discharges composed entirely of stormwater or uncontaminated ground water seepage from construction sand and gravel, industrial sand, and crushed stone mining facilities are authorized by this permit.
B.5.12.8.	Material Source Site Management:
B.5.12.8.1.	The Permittee shall implement the following at all material source sites that discharge to a waters of the U.S. and are subject to the conditions of this permit:
B.5.12.8.1.1.	Provide a map and summary of the active or inactive status of each site in the Permittee's Annual Report;
B.5.12.8.1.2.	Prepare SWPPPs for all Mine Development Phase material source sites prior to the beginning of earth disturbing activity;
B.5.12.8.1.3.	Prepare SWPPPs for all Active Mining Phase material source sites within one year of the effective date of this permit;
B.5.12.8.1.4.	Prepare SWPPPs for all Inactive Phase material source sites, that have not yet achieved permanent stabilization, within 3 years of the effective date of this permit;
B.5.12.8.1.5.	During initial SWPPP preparations, the Permittee shall identify and prioritize any corrective actions needed to minimize pollutant discharges to stormwater.
B.5.12.8.1.6.	Develop BMPs in accordance with good engineering practices, for all material source site activities that include clearing, grading, excavating, mining, crushing, stockpiling, hauling, and all ancillary operation for each Mine Development Phase, Active Mining Phase and Inactive Mining Phase source site that has not achieved permanent stabilization status.
B.5.12.8.1.7.	Maintain an updated inventory of material source sites, including correcting

previous information, adding or removing sites, list of nearest waters of the

- U.S. they may discharge to, and a map showing sites; and
- **B.5.12.8.1.8.** Adhere to the management practices described in the Permittee's BMP guidance manuals.
- **B.5.12.9.** BMP Management for all Material Source Sites:
- B.5.12.9.1. The Permittee is responsible for implementing the following BMPs at all material sources sites under exclusive Permittee control, or at joint-use sites during times when the Permittee is actively operating. (For joint-use sites, the BMPs apply only in relation to the Permittee activities.)
- **B.5.12.9.2.** For all Material Source Site activities, minimize the amount of soil exposed.
- B.5.12.9.2.1. The Permittee shall select and install a combination of erosion and/or sediment control BMPs to achieve effective pollutant removal. All BMPs shall be installed and maintained in accordance with any relevant manufacturer specifications and good engineering practices. Consideration shall be made for the following:
- B.5.12.9.2.1.1. The expected frequency, intensity, and duration of precipitation;
- **B.5.12.9.2.1.2.** The nature of stormwater flow at the site, including factors such as impervious surfaces, slopes and site drainage features;
- **B.5.12.9.2.1.3.** The range of soil particle sizes expected to be present on the site.
- B.5.12.9.2.2. Where necessary to minimize pollutant discharges, divert stormwater away from potential pollutant sources through implementation of control measures such as the following, where feasible: interceptor or diversion controls (e.g., dikes, swales, curbs, berms); pipe slope drains, conveyance systems (e.g., channels or gutters, open-top box culverts, and water bars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalent.
- B.5.12.9.2.3. The Permittee shall provide velocity dissipation devices at appropriate locations. These devices shall be installed when necessary to provide a flow velocity that will not erode inlet/outlet sediment basin locations, a receiving water or an MS4 conveyance;
- B.5.12.9.2.4. At a minimum, the Permittee shall install silt fences, vegetative buffer strips, or equivalent sediment control BMPs for all down slope boundaries (and side slope boundaries deemed appropriate as dictated by individual site conditions) of the development area unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm is provided. Where no calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained shall be provided where attainable until final stabilization has been achieved.
- B.5.12.9.2.5. Except where the intended function of the site accounts for disturbed earth such that it will become actively mined or controls are effectively controlling disturbance, the following stabilization requirements shall be implemented:,

- B.5.12.9.2.5.1. Temporary stabilization measures shall be initiated immediately in portions of the site where earth-disturbing activities temporarily ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating vegetative stabilization measures is not possible within fourteen (14) days after earth-disturbing activities has temporarily ceased, temporary stabilization measures shall be initiated as soon as practicable. The Permittee shall ensure that temporary stabilization BMPs are maintained until permanent stabilization status is achieved, or site is transferred to another owner.
- B.5.12.9.2.5.2. In areas of the site where earth-disturbing activities have permanently ceased, final stabilization measures shall be initiated immediately. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating vegetative stabilization measures is not possible within fourteen (14) days after earth-disturbing activities have permanently ceased, final stabilization measures shall be initiated as soon as practicable. Until final stabilization is achieved, temporary stabilization measures shall be used.
- **B.5.12.9.2.5.3.** If there is a potential discharge to a water on the 303(d) list that is impaired for sediment or nitrogen that is also a waters of the U.S., complete initial stabilization activities within seven (7) days of stopping construction work.
- **B.5.12.9.2.6.** Ensure that sites exiting directly onto paved roads use appropriate BMPs to remove sediment from vehicle and equipment tires to minimize track-out.
- **B.5.12.9.2.7.** Stockpiles shall be managed to minimize erosion from stormwater. Sediment controls shall be used to minimize sediment runoff from stock piled materials.
- B.5.12.9.2.8. If the Permittee installs stormwater conveyance channels, the channels shall be designed to avoid un-stabilized areas on the site and reduce erosion. Erosion controls and velocity dissipation devices within and along the conveyance shall be used.
- **B.5.12.9.2.9.** For stormwater discharges within 50-feet of a water of the U.S. the Permittee shall provide a 50-foot undisturbed natural buffer between the development activity and the waters of the U.S. Where infeasible to provide an undisturbed natural buffer, erosion and sediment controls shall be implemented to achieve an equivalent sediment load reduction.
- **B.5.12.9.2.10.** Where steep slope disturbances are necessary, minimize the disturbance through the implementation of standard erosion and sediment controls.
- **B.5.12.9.2.11.** Where final vegetative stabilization will occur, use techniques to support vegetative growth.
- **B.5.12.10.** Dewatering:
- **B.5.12.10.1.** Discharging groundwater or accumulated stormwater that is removed from excavations, trenches, foundations, vaults or other similar points of accumulation is prohibited, unless such waters are first effectively managed by appropriate BMPs (e.g., sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, oil/water separators or filtration systems).

- **B.5.12.10.2.** Uncontaminated, non-turbid dewatering water can be discharged without being routed to a control.
- **B.5.12.10.3.** Discharges shall meet the following requirements:
- B.5.12.10.3.1. No discharge of visible floating solids or foam;
- **B.5.12.10.3.2.** Remove oil, grease, and other pollutants from dewatering water via an oilwater separator or suitable filtration device:
- **B.5.12.10.3.3.** Utilize vegetated upland areas of the site, to the extent feasible, to infiltrate dewatering water before discharge. In no case shall waters of the U.S. be considered part of the treatment area;
- **B.5.12.10.3.4.** Implement velocity dissipation devices at all points where dewatering water is discharged into a waters of the U.S.;
- **B.5.12.10.3.5.** Haul backwash water for disposal or return it to the beginning of the treatment process; and
- **B.5.12.10.3.6.** Clean or replace the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.
- **B.5.12.10.3.7.** Treatment chemical restrictions: Use of polymers, flocculants, or other chemicals to treat dewatering water shall comply with the requirements in Section B.5.12.7.
- B.5.12.10.4. Monitoring Based on Effluent Limitations for Non-Metals Mine dewatering discharges at crushed stone or construction sand and gravel facilities: Upon issuance of this permit the Permittee shall monitor once per year at each outfall containing the discharges identified in Table B.5.12. below. Include the results of any monitoring in the Annual Report.

Table B.5.12. Materials Source Site Dewatering Limits

Parameter	Effluent Limit	Monitoring Frequency	Sample Type
pН	6.0 – 9.0 S.U.	Annually	Grab

- B.5.12.10.5. Numeric Effluent Limitation Exceedance Requirements:
- B.5.12.10.5.1. If monitoring required in Section B.5.12.10.4 exceeds a numeric effluent limit, the Permittee shall submit an Exceedance Report to NDEP no later than 30 calendar days after receiving the water quality results. The facility's Exceedance Report shall include the following:
- B.5.12.10.5.1.1. Facility name, physical address and location;
- B.5.12.10.5.1.2. Name of the receiving water;
- B.5.12.10.5.1.3. Monitoring data from the current and previous monitoring event(s);
- **B.5.12.10.5.1.4.** An explanation of the situation, including what actions the Permittee has completed or intends to complete (if corrective actions are not yet completed)

to correct the violation; and

- B.5.12.10.5.1.5. Contact name, title and phone number.
- **B.5.12.11.** Inspection Requirements:
- **B.5.12.11.1.** The following inspection requirements apply to all Material Source sites owned or operated by the Permittee:
- B.5.12.11.1.1. The Permittee shall conduct an annual Comprehensive Inspection of all BMPS at all Active Mining Phase sites that discharge to waters of the U.S.; and
- **B.5.12.11.1.2.** The Permittee shall conduct once every three (3) years a Comprehensive Inspection of all BMPs at all Inactive Mining Phase sites that discharge to waters of the U.S.
- B.5.12.11.1.3. For Mine Site Preparation Phase the Permittee shall conduct site inspections once every fourteen (14) calendar days and within 24 hours a storm event of 0.25 inches or greater. For sites that discharge to a 303(d) listed water that is also a waters of the U.S., inspections shall be conducted once every seven (7) days and within 24 hours of a storm event 0.25 inches or greater.
- **B.5.12.11.2.** The inspection process for all types of facilities shall include where applicable:
- **B.5.12.11.2.1.** An assessment of the integrity of stormwater discharge diversions, conveyance systems, and containment structures;
- **B.5.12.11.2.2.** Inspections of erosion and sediment control BMPs to ensure proper operation;
- **B.5.12.11.2.3.** Inspections shall include all areas of the site disturbed by clearing, grading and excavation activities and areas used for storage of materials that are exposed to precipitation;
- **B.5.12.11.2.4.** Minimum inspection checks: Check whether all stormwater controls are installed and operational, whether any new or modified stormwater controls are needed, for conditions that could lead to a spill or leak, for visual signs of erosion/sedimentation at points of discharge, the quality and characteristic of any discharge, and whether the controls are operating effectively.
- **B.5.12.11.2.5.** Inspections of locations where vehicles enter or exit the site for evidence of off-site sediment tracking.
- **B.5.12.11.3.** Additional inspection requirements: Except for earth disturbing activities conducted prior to active mining, perform inspections at least quarterly unless adverse weather conditions make the site inaccessible. Active sites that discharge to waters of the U.S. and which are on the 303(d) List or waters that are impaired for sediment or nitrogen shall be inspected monthly.
- **B.5.12.12.** Maintenance of BMPs for material source sites:

B.5.12.12.1. The Permittee shall maintain all erosion and sediment control BMPs and other protective BMPs in effective operating condition. If BMPs are not operating effectively, the Permittee shall perform maintenance as soon as possible to ensure continued effectiveness of stormwater BMPs. If maintenance before the next storm event is impracticable, the situation and reasons shall be documented in the SWPPP; and B.5.12.12.2. If existing BMPs need to be modified or, if additional BMPs are required, the Permittee shall complete implementation as soon as possible. If implementation before the next storm event is impracticable, the situation shall be documented in the SWPPP and alternative BMPs implemented as soon as possible. B.5.12.12.3. Sediment shall be removed from sediment traps or sediment ponds whenever the design capacity has been reduced by 50 percent. B.5.12.12.4. Sediment tracked directly onto paved roads shall be addressed at the end of each work day. B.5.12.13. **SWPPP Requirements for Material Source Sites:** B.5.12.13.1. A SWPPP shall be prepared for all Material Source Site Development activities prior to the commencement of any earth disturbing activities. B.5.12.13.2. The Permittee shall prepare SWPPPs for all Active Mining Phase material source sites within one year of the effective date of this permit and for all Inactive Phase material source sites that have not yet achieved permanent stabilization, within 3 years of the effective date of this permit. SWPPPS shall provide the following: B.5.12.13.2.1. Identification of the Stormwater Pollution Prevention Team B.5.12.13.2.2. Site Description B.5.12.13.2.3. Schedules and Procedures B.5.12.13.2.4. Identify each outfall authorized by this permit and describe the rational for any substantially similar outfall determinations B.5.12.13.3. Where the SWPPP refers to procedures in other facility documents, such as a Spill Prevention, Control and Countermeasure (SPCC) Plan, copies of the relevant portions of those documents shall be kept with the SWPPP. B.5.12.13.4. A description of the mining associated activities that can potentially affect the stormwater discharges, and identify the location of the site relative to major transportation routes and communities; B.5.12.13.5. The locations of the following (as applicable to each site): B.5.12.13.5.1. Excavation or processing (screening, washing, crushing, etc.) site boundaries; B.5.12.13.5.2. Access and haul roads:

B.5.12.13.5.3. Outline of the drainage areas of each stormwater outfall within the facility with indications of the types of discharges from the drainage areas; B.5.12.13.5.4. Outdoor equipment storage, fueling, and maintenance areas; B.5.12.13.5.5. Outdoor manufacturing areas (outdoor storage, materials handling and materials disposal areas; B.5.12.13.5.6. Outdoor chemical storage areas; B.5.12.13.5.7. Overburden, materials, soils or waste storage areas; B.5.12.13.5.8. Location of impoundments, pit drainage areas, and off-site points discharge for stormwater or pit dewatering to waters of the U.S.; **B.5.12.13.5.9.** Waters of the U.S.; B.5.12.13.5.10. Boundary of tributary areas that are subject to effluent limitations guidelines; B.5.12.13.6. Identify potential pollutants likely to be present for each area of the site where stormwater discharges occur. Pollutant sources to evaluate include, but are not limited to: mined material stockpiles, bulk material stockpiles, topsoil or overburden stockpiles (including grubbed vegetation for the site, if any); the likelihood of contact with stormwater; quantity of chemicals used, produced, or discharged; and history of significant leaks or spills of toxic or hazardous pollutants. B.5.12.13.7. To the extent that the Permittee uses any of the control measures identified in Section B.5.12.9., they shall be documented in the SWPPP. Control measures not identified in this Section shall be described in the SWPPP. B.5.12.13.8. The Permittee shall complete an inspection report (Compliance Evaluation Report) summarizing the annual and triennial Comprehensive Inspections. summary of inspections shall be submitted in the Annual Report, and shall include inspection findings, deficiencies and correction made to each site. B.5.12.13.9. SWPPPs that do not meet all the provisions of this permit are considered incomplete. Operating under an incomplete or inadequate SWPPP is a violation of this permit. B.5.12.14. Inventory Requirements: B.5.12.14.1. Complete an inventory of all active facilities/mines; B.5.12.14.2. Complete an inventory of all inactive/unstaffed facilities/mines; B.5.12.14.3. Include in the Annual Report the number of active facilities/mines; and B.5.12.14.4. Include in the Annual Report the number of inactive-unstaffed facilities/mines. B.5.13. Stormwater Discharges from Maintenance Facilities

B.5.13.1.	The Permittee shall describe its statewide maintenance facility program in the revised SWMP. The revised SWMP shall describe the measures the Permittee uses to control discharges from the Permittee Maintenance Facilities. The following measures shall apply to the Permittee maintenance facilities statewide:
B.5.13.1.1.	The Permittee shall implement its maintenance facility program to reduce pollutants in discharges to the MEP;
B.5.13.1.2.	The program shall include policies and procedures to prevent or reduce stormwater impacts from any maintenance facility that may discharge to waters of the U.S. or to the MS4;
B.5.13.1.3.	The Permittee shall properly select, install, and maintain all BMPs in accordance with any relevant manufacturer specifications and good engineering practices; and
B.5.13.1.4.	The Permittee shall implement BMPs to reduce or eliminate the discharge of pollutants from maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt and sand storage locations and snow disposal areas.
B.5.13.2.	The Permittee shall implement the following BMPs at its maintenance facilities:
B.5.13.2.1.	The Permittee shall prevent litter, debris, and chemicals that could be exposed to stormwater from becoming a pollutant source in stormwater discharges; and
B.5.13.2.2.	The Permittee shall implement good housekeeping and material management BMPs for operating and maintaining all of the Permittee's maintenance facilities.
B.5.13.2.3.	The Permittee shall describe and implement BMPs that prevent or minimize contamination of stormwater runoff from all areas used for vehicle or equipment storage. The Permittee shall implement the following BMPs, or alternatives that will provide equivalent protection:
B.5.13.2.3.1.	Confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to designated areas;
B.5.13.2.3.2.	Use drip pans under vehicles and equipment;
B.5.13.2.3.3.	Store vehicles and equipment indoors, whenever practicable;
B.5.13.2.3.4.	Install berms or dikes around the vehicle and equipment storage areas;
B.5.13.2.3.5.	Use absorbents to clean spilled liquids;
B.5.13.2.3.6.	Roof or cover storage areas, whenever practicable; and
B.5.13.2.3.7.	Clean pavement surfaces to remove oil and grease. Use dry cleanup

	methods, or, if water is used, capture and properly dispose of the cleaning water.
B.5.13.2.4.	The Permittee shall describe and implement BMPs that prevent or minimize contamination of stormwater runoff from all areas used for vehicle or equipment maintenance. The Permittee shall implement the following BMPs, or alternatives that will provide equivalent protection:
B.5.13.2.4.1.	Perform maintenance activities indoors, whenever practicable;
B.5.13.2.4.2.	Use drip pans under vehicles and equipment;
B.5.13.2.4.3.	Keep an organized inventory of materials used in the shop;
B.5.13.2.4.4.	Drain all parts of fluid prior to disposal;
B.5.13.2.4.5.	Use dry cleanup methods. Prohibit wet clean up practices if these practices may result in the discharge of pollutants to stormwater drainage systems; and
B.5.13.2.4.6.	Treat, recycle, or properly dispose of collected stormwater runoff and minimize run on/runoff of stormwater to and from maintenance areas.
B.5.13.2.5.	The Permittee shall describe and implement BMPs that prevent or minimize contamination of stormwater runoff from all areas used for material storage. The Permittee shall implement the following BMPs, or alternatives that will provide equivalent protection:
B.5.13.2.5.1.	Maintain all material storage vessels that are kept outdoors (e.g., for used oil/oil filters, spent solvents, paint wastes, hydraulic fluids) to prevent contamination of stormwater and plainly label them (e.g., used oil, spent solvents, etc.);
B.5.13.2.5.2.	Move storage indoors, whenever practical;
B.5.13.2.5.3.	Install berms/dikes around the areas;
B.5.13.2.5.4.	Minimize run on of stormwater to the materials storage areas;
B.5.13.2.5.5.	Use dry cleanup methods; and
B.5.13.2.5.6.	Treat, recycle, or properly dispose of collected stormwater runoff.
B.5.13.2.6.	The Permittee shall implement practices and procedures to prevent, contain, and respond to spills and releases from maintenance facilities using the following practices:
B.5.13.2.6.1.	To prevent spills and releases, the Permittee shall implement management practices and procedures for handling toxic and hazardous materials by the Permittee staff at the Permittee maintenance facilities;
B.5.13.2.6.2.	The Permittee shall implement practices and procedures for handling spills and releases of toxic materials by staff at the Permittee maintenance facilities

	to prevent or minimize discharges to the MS4 or receiving waters;
B.5.13.2.6.3.	The Permittee shall immediately respond to spills and releases by staff at the Permittee maintenance facilities to prevent toxic materials or pollutants from entering the MS4 and receiving waters;
B.5.13.2.6.4.	The Permittee shall track and record chemical and petroleum and other
	releases at the Permittee maintenance facilities, including information on the type and amount of material released, the location and extent of the release, the circumstances of the release, and the name of the parties involved; and
B.5.13.2.6.5.	The Permittee shall maintain records of chemical and petroleum and other releases to the MS4 or receiving waters and include the records in the Annual Report.
B.5.13.2.6.5.1.	Chemical and petroleum and other releases shall be tracked and reported in the Annual Report unless they meet all of the following criteria:
B.5.13.2.6.5.2.	The release is known to be less than a half-gallon; and
B.5.13.2.6.5.3.	The release has not and will not reach the waters of the U.S.; and
B.5.13.2.6.5.4.	The release is cleaned up within 1 hour of discovery and the cleanup is consistent with the facility SWPPP.
B.5.13.3.	The Permittee shall prepare SWPPPs for all its maintenance facilities. These SWPPPs shall have BMP programs that reduce pollutants.
B.5.13.4.	Generic SWPPP elements can be used for activities that are performed at more than one maintenance facility, however, each site must be evaluated separately and provided with appropriate site specific BMPs.
B.5.13.5.	The Division has the authority to require the submittal of a SWPPP at any time, to require changes to a SWPPP, and to require the implementation of the provisions of a SWPPP. SWPPPs shall include the following elements:
B.5.13.5.1.	The Permittee shall develop and implement SWPPPs for the following Permittee-owned and/or operated facilities that do not have individual stormwater permits:
B.5.13.5.1.1.	Vehicle maintenance facilities including equipment rehabilitation, mechanical repairs, painting, fueling, and lubrication;
B.5.13.5.1.2.	Asphalt and concrete batch plants, that are not individually permitted;
B.5.13.5.1.3.	Waste transfer stations;
B.5.13.5.1.4.	Exposed stockpiles of materials, including stockpiles of road deicing salt, salt and sand, sand, roto-mill material, etc.; and
B.5.13.5.1.5.	Sites used for snow dumps, and/or for temporary storage of sweeper tailings or other waste piles.

B.5.13.5.2.	The Permittee shall provide a complete list of these active facilities (including the address of the facility, type of operation, size of the facility, and receiving water drainage basin) as part of the revised SWMP. This list shall indicate which sites are considered major and which are considered minor and explain the reasons for the designations.
B.5.13.5.3.	SWPPPs for major facilities shall contain the following:
B.5.13.5.3.1.	Activity description;
B.5.13.5.3.2.	Facility site map; and
B.5.13.5.3.3.	A description of potential pollutant sources, including an evaluation of that potential.
B.5.13.5.4.	Stormwater Management Controls:
B.5.13.5.4.1.	The description of stormwater management controls shall address the following components, including a schedule for implementing such controls:
B.5.13.5.4.1.1.	SWPPP administrator;
B.5.13.5.4.1.2.	Preventive maintenance;
B.5.13.5.4.1.3.	Good housekeeping;
B.5.13.5.4.1.4.	Spill prevention and response procedures;
B.5.13.5.4.1.5.	BMPs for pollutant sources;
B.5.13.5.4.1.6.	Evaluation for non-stormwater discharges;
B.5.13.5.4.1.7.	Employee training;
B.5.13.5.4.1.8.	Inspection procedures; and
B.5.13.5.4.1.9.	A summary of compliance with the SWPPPs shall be included in the Annual Report.
B.5.13.5.4.2.	Minor facilities shall be grouped together by type, and one SWPPP shall be developed for each group. Grouped runoff control plans shall contain:
B.5.13.5.4.3.	A map showing the location of each facility in the group on a map;
B.5.13.5.4.4.	For each facility in the group, include the address, type of operation, size of the facility, and receiving water drainage basin;
B.5.13.5.4.5.	A description of potential pollutant sources, including an evaluation of that potential;
B.5.13.5.4.6.	A description of the standard operating procedures or stormwater management controls shall address the following components, if appropriate:

**B.5.13.5.4.6.1.** Preventive maintenance measures: B.5.13.5.4.6.2. Good housekeeping: B.5.13.5.4.6.3. Spill prevention and response procedures: B.5.13.5.4.6.4. BMPs: B.5.13.5.4.6.5. Evaluation for non-stormwater discharges; and B.5.13.5.4.6.6. Inspection procedures. B.5.13.5.5. Copies of the major facility SWPPPs shall be kept on the facility site and on file with the Permittee's headquarters office. These plans shall be submitted to the Division upon request. B.5.13.5.6. Copies of the minor facility group SWPPPs may be kept on file with each District Office or at the Permittee's headquarters office. These plans shall be submitted to the Division upon request; B.5.13.5.7. Both major and minor facilities shall be inspected by the Permittee at least one (1) time each year, after the SWPPP has been completed; B.5.13.5.8. The Permittee shall implement the provisions of the SWPPP required under this part as a condition of this permit. The Division reserves the right to review those plans, and to require additional measures to prevent and control pollution, as needed; and B.5.13.5.9. SWPPPs may be amended at any time and any amendments shall be described in the Annual Report. B.5.14. Comprehensive Maintenance Facility Inspection B.5.14.1. The Permittee shall conduct a Comprehensive Maintenance Facility Inspection at least once each year. The Permittee shall also conduct routine visual inspections to ensure that the SWPPP addresses any significant changes to the facility operations or BMP implementation procedures. B.5.14.2. The Permittee shall complete an inspection report for all comprehensive maintenance facility inspections. The report shall include: B.5.14.2.1. The inspection date: B.5.14.2.2. The name(s) and title(s) of the person(s) making the inspection. The list of qualified personnel shall either be on or attached to the report or alternatively, if the SWPPP documents the qualifications of the inspectors by name, that

portion of the SWPPP may be referenced;

of the inspection;

Weather information and a description of any discharges occurring at the time

B.5.14.2.3.

B.5.14.2.4.	The location(s) of discharges of sediment or other pollutants from the site, if any;
B.5.14.2.5.	The location(s) of BMPs that need to be maintained, that failed to operate as designed, or proved inadequate for a particular location;
B.5.14.2.6.	The location(s) where additional BMPs are needed that did not exist at the time of inspection;
B.5.14.2.7.	The corrective action(s) required, including any changes to the SWPPP and implementation dates;
B.5.14.2.8.	The identification of all sources of non-stormwater discharges, if any, and the associated BMPs;
B.5.14.2.9.	Where applicable, the identification of material storage areas, and evidence of or potential for pollutant discharges from these areas;
B.5.14.3.	Inspection reports shall identify any incidents of non-compliance with the permit conditions. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the activities are in compliance with the SWPPP and this permit; and
B.5.14.4.	The report shall be signed and certified in accordance with Section C.25. of this permit and copies included in the SWPPP and the Annual Report.
B.5.15.	Scope of Inspections
B.5.15.1.	The Permittee shall inspect all areas of the site exposed to precipitation, as well as areas where spills, releases and leaks have occurred. Inspectors shall look for evidence of, or the potential for, pollutants entering the drainage system;
B.5.15.2.	Inspections of the maintenance yard shall include all the following areas/activities:
B.5.15.2.1.	Storage areas for vehicles and equipment awaiting maintenance;
B.5.15.2.2.	Fueling areas, including mobile fueling;
B.5.15.2.3.	Indoor and outdoor vehicle/equipment maintenance areas;
B.5.15.2.4.	Material storage areas;
B.5.15.2.5.	Material source stockpile(s) to determine if piles are protected from run on, runoff, if materials are contributing to off-site discharges;
B.5.15.2.6.	Vehicle/equipment cleaning areas and loading/unloading areas; and
B.5.15.2.7.	On-site waste storage or disposal;
B.5.15.3.	The Permittee shall inspect and document all RMPs identified in the SWPPP

along with areas inspected and the conditions found;

- **B.5.15.4.** The Permittee shall inspect discharge locations to determine whether BMPs are effective in preventing impacts to waters of the U.S., where accessible;
- **B.5.15.5.** Where discharge locations are inaccessible, the Permittee shall inspect nearby downstream locations to the extent that the inspections are practicable; and
- **B.5.15.6.** The Permittee shall inspect locations where vehicles enter or exit the site for evidence of off-site sediment tracking.
- B.5.15.7. Based on the results of the inspection, the Permittee shall modify the SWPPP as necessary to include additional or modified BMPs designed to correct problems identified. The Permittee shall complete revisions to the SWPPP and modify or add BMPs as necessary within thirty (30) days following the inspection. The Permittee shall implement tracking and follow-up procedures to ensure that appropriate action is taken in response to issues noted during inspections.
- B.5.15.8. If sediment or other materials escape the site, the Permittee shall remove the off-site accumulations of sediment or other materials at a frequency sufficient to minimize off-site impacts. The removal shall take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints. The Permittee shall use all reasonable efforts to obtain access, and in such instances, removal and stabilization shall take place within seven (7) days of obtaining access.
- **B.5.15.9.** Inspections shall be performed by qualified personnel as defined in Section B.7.10. of this permit; and
- B.5.15.10. The Permittee shall retain a record of each inspection and of any actions taken as part of the SWPPP for at least five (5) years from the expiration date of this permit;
- **B.5.15.11.** For existing BMPs that need to be modified or, if additional BMPs are necessary for any reason, implementation shall be completed within thirty (30) days, and before the next storm event;
- B.5.15.12. All BMPs including erosion and sediment control BMPs identified in the SWPPP shall be maintained in effective operating condition. If site inspections identify BMPs that are not operating effectively, maintenance shall be performed within seven (7) days of discovery and before the next anticipated storm event to maintain the continued effectiveness of stormwater BMPs. If implementation before the next storm event is impracticable, the reason(s) for delay must be documented in the SWPPP and alternative BMPs must be implemented as soon as possible; and
- **B.5.15.13.** The Permittee shall develop or update its list of maintenance yards subject to stormwater permitting requirements within their control. The list shall be included in the Annual Report.
- **B.5.16.** Public Street Maintenance Program in Urbanized Areas

- B.5.16.1. The revised SWMP shall discuss how the Permittee intends to operate and maintain public streets and roads that are under the Permittee's jurisdiction, and are within urbanized areas that are covered by other individual or general MS4 permits in a manner so as to reduce the discharge of pollutants to the MEP, including those related to road repair, street sweeping, snow removal, sanding activities, and herbicide application, in accordance with their present Program. The program shall include the following information and measurable goals:
- B.5.16.1.1. Snow and ice management practices on streets, roads, and highways in urbanized areas shall be implemented in a manner consistent with Permittee policies and guidelines. These guidelines shall include prescriptions for sand application rate, maximum salt concentrations, calibration of sand spreaders, and sweeping of sanded streets;
- **B.5.16.1.2.** Salt and sand storage practices shall be implemented as necessary to minimize, to the extent practicable, migration off-site;
- **B.5.16.1.3.** Leaf litter and debris on all streets in urbanized areas shall be swept a minimum of two (2) times per year, once in the spring and once in the fall;
- B.5.16.1.4. Sweeping of sanded streets in urbanized areas shall be performed as soon as weather, logistics, and site conditions permit after snow storms, but no later than four (4) days after the last snowfall, provided that no snowstorms are forecasted to occur within those four (4) days;
- **B.5.16.1.5.** Sweeper wastes shall be disposed of properly. Recycling of sweeper wastes shall be considered. The amount of sweeper waste accumulated, recycled, and/or disposed shall be documented and included in the Annual Report.
- B.5.16.1.6. If magnesium chloride is used for snow management, application practices shall be used to minimize any negative effects to waters of the U.S. to the MEP. Results of any studies on magnesium chloride shall be considered, when relevant.
- **B.5.16.1.7.** A narrative summary of the program will be included in the Annual Report.
- B.5.17. Measures to Control Discharges from Roadways
- B.5.17.1. The Permittee shall implement its programs of roadway and MS4 repair, maintenance and cleaning, vegetation management, and winter storm policies to reduce the release of pollutants to, and discharges of pollutants from, the MS4. The revised SWMP shall include policies and procedures to prevent or reduce stormwater impacts to waters of the U.S. or the MS4 while conducting operation and maintenance activities. The revised SWMP shall address the following programs:
- **B.5.17.1.1.** Highway Maintenance Activities:
- **B.5.17.1.1.1.** Develop and implement maintenance programs for the Permittee's MS4 to reduce runoff pollutant concentrations and volumes entering waters of the U.S.;

- **B.5.17.1.1.2.** Identify priority and watershed pollutant reduction opportunities (e.g., improvements to existing urban runoff control structures);
- B.5.17.1.1.3. Establish schedules for implementing appropriate controls; and
- B.5.17.1.1.4. Develop a system to identify, track, and prioritize timely stabilization and repairs to road segments where slopes are 3:1 or greater and actively eroding and sediment is leaving the Permittee's right-of-way to a location that could be carried into a water of the US or is discharging to a waters of the U.S. This system shall be described in the revised SWMP, and each Annual Report thereafter shall summarize erosion abatement projects conducted during the year. The Permittee shall identify road segments with slopes that are prone to erosion and discharge of sediment and stabilize these slopes to the MEP.
- B.5.17.1.2. Snow and ice control:
- **B.5.17.1.2.1.** Where abrasives and/or de-icing agents are used on highways, the following shall be recorded:
- B.5.17.1.2.1.1. Location of the source of abrasives materials;
- B.5.17.1.2.1.2. Types and chemistry of de-icing agents;
- **B.5.17.1.2.1.3.** Deicing salt shall be analyzed for: total phosphorus, total nitrogen, iron, and percent sodium chloride;
- **B.5.17.1.2.1.4.** Alternative deicers shall be analyzed for total nitrogen and total phosphorus;
- B.5.17.1.2.1.5. Type and chemistry of abrasives with the gradation and percent organic matter. Gradation and percent organic matter shall be determined from composite samples. The composite samples shall be taken from one stockpile that represents all deliveries from the originating source. Composite samples shall be taken from every new delivery from a new originating source;
- **B.5.17.1.2.1.6.** Abrasives shall be analyzed for volatile solids, iron, total nitrogen, total phosphorus, total reactive phosphorus, and total dissolved solids; and
- **B.5.17.1.2.1.7.** Volume of abrasives and deicing agents used on individual highway segments shall be documented in the Annual Report.
- **B.5.17.1.3.** Stormwater drainage system facilities maintenance:
- **B.5.17.1.3.1.** The Permittee shall remove all debris and sediment from those inlets that pose a threat to water quality on an annual basis. All debris and sediment removed from drain inlets shall be managed in accordance with all applicable laws and regulations. The number of inlets from which sediment and debris was removed shall be documented and included in the Annual Report; and
- B.5.17.1.3.2. Drain inlets which contain significant materials must be considered for an IDDE investigation and considered for an enhanced BMP program focused on reducing the sources of the material found in the inlet.

B.5.18.	Storm Sewer System and Highway Maintenance
B.5.18.1.	The Permittee shall implement the following BMPs for operating and maintaining roadways and drainage ways to minimize discharges to and from the MS4 in all the permitted areas:
B.5.18.1.1.	Inventory Post-Construction Stormwater Pollution Control BMPs:
B.5.18.1.1.1.	The Permittee shall develop and maintain an inventory of its post-construction stormwater pollution control BMPs;
B.5.18.1.1.2.	The post-construction stormwater pollution control BMPs inventory shall include type and location; and
B.5.18.1.1.3.	The Permittee shall include the inventory of stormwater retention/detention basins, constructed wetlands for water quality purposes, media filtration systems, oil/water separators, and other major post-construction stormwater pollution control BMPs as part of the revised SWMP.
B.5.18.1.2.	Inspect Storm Sewer System:
B.5.18.1.2.1.	The revised SWMP shall outline a program, including measurable goals, to inspect and record conditions of the MS4 including roadways used for stormwater conveyance, catch basins, storm drain inlets, open channels, washes, culverts, and retention/detention basins to identify potential sources of pollutants and determine maintenance needs; and
B.5.18.1.2.2.	The Permittee shall maintain records of inspections and conditions found and shall present the number of inspections in the Annual Report.
B.5.18.1.3.	Develop Maintenance Schedules and Priorities:
B.5.18.1.3.1.	The Permittee shall identify routine maintenance schedules and maintenance priorities for its MS4, including roadways to minimize pollutant discharges from the MS4; and
B.5.18.1.3.2.	The Permittee shall evaluate priorities annually and update the maintenance schedule as necessary based on the evaluations.
B.5.18.1.4.	Perform Repair, Maintenance, and Cleaning:
B.5.18.1.4.1.	The Permittee shall repair, maintain, and clean its roadways used for stormwater conveyance and its MS4 to minimize the discharge of pollutants to the MEP, including floatable debris, from the MS4;
B.5.18.1.4.2.	When implemented, oil/water separators shall be inspected and maintained on a set schedule, at a minimum annually, to ensure optimal effectiveness of the device; and
B.5.18.1.4.3.	During repair, maintenance, or cleaning activities, the Permittee shall ensure that all stormdrain inlets are assessed for evidence of illicit discharges or illegal dumping, such as significant loads of a specific pollutant(s) or material(s). Upon discovery, the Permittee shall initiate an investigation to

target likely sources and implement a BMP program to reduce the sources of the pollutant or material to the MEP.

Implement BMPs for Repair, Maintenance, and Cleaning:

- **B.5.18.1.5.1.** The Permittee shall implement appropriate BMPs to reduce the potential for releases of pollutants to the MS4 or to waters of the U.S. when performing repair, maintenance, or cleaning of its MS4, including roadways;
- **B.5.18.1.5.2.** The Permittee shall implement BMPs to minimize the discharge of pollutants from unpaved roads, shoulders, and parking lots, such as permanent stabilization/erosion control BMPs and paving unpaved roads, and parking lots; and
- **B.5.18.1.5.3.** The Permittee shall properly dispose of waste removed from its MS4 and the Permittee's facilities, including dredge spoil, accumulated sediments, and floatable or other debris. The amount removed and disposed of shall be documented and included in the Annual Report.
- **B.5.18.1.6.** Roadside Management Program:

B.5.18.1.5.

- **B.5.18.1.6.1.** The Permittee shall implement the BMPs described in its BMP guidance documents.
- B.5.19. Herbicide, Pesticide, and Fertilizer Program
- **B.5.19.1.** The Permittee shall develop a program to reduce the discharge of pollutants related to the application of herbicides, pesticides, and fertilizers to the MEP. This program shall include:
- **B.5.19.1.1.** Implement Pesticide and Fertilizer Application Procedures:
- B.5.19.1.1.1. The Permittee shall implement practices and procedures for the Permittee staff and commercial applicators to only use Federal Insecticide, Fungicide, and Rodenticide Act-approved pesticides/herbicides at the Permittee facilities and roadside right-of-ways. The Permittee shall design these practices to avoid chemical application, when feasible, and to minimize the amount of chemicals applied;
- B.5.19.1.1.2. As part of the revised SWMP, the Permittee shall develop BMPs to address the timing of applications in relation to expected precipitation events, proximity to water bodies, and other practices to minimize the runoff of pollutants. Applications of herbicides shall be performed during dry-weather periods to the extent possible, using methods to limit overspray;
- **B.5.19.1.1.3.** If the Permittee must apply pesticides in any area that is within, or directly adjacent to a waters of the U.S., only pesticides approved for aquatic use shall be used;
- **B.5.19.1.1.4.** The Permittee shall review application practices annually and update procedures as needed to minimize runoff of pollutants;
- **B.5.19.1.1.5.** The Permittee shall require certification/licensing of staff and commercial

applicators that apply restricted use pesticides at the Permittee's facilities, public areas, and right-of-ways; and

- **B.5.19.1.1.6.** The Permittee shall submit a narrative summary of the program in the Annual Report.
- **B.5.19.1.2.** Vegetation Control Program:
- **B.5.19.1.2.1.** The Permittee shall develop a Vegetative Control Program to reflect the following elements:
- **B.5.19.1.2.1.1.** The use of appropriate native and adapted vegetation throughout all rights-of-way for the purpose of preventing erosion and removing pollutants in stormwater runoff:
- **B.5.19.1.2.1.2.** Application of herbicides in a manner that minimizes or eliminates the discharge of herbicides to receiving waters. Factors to be considered include timing in relation to expected precipitation events, proximity to water bodies, and the effects of using combinations of chemicals;
- **B.5.19.1.2.1.3.** If application of nutrients is required, the application shall be at rates necessary to establish and maintain vegetation without causing significant nutrient impact to the receiving water; and
- B.5.19.1.2.1.4. In places where the Permittee has already developed vegetation control management plans, the Permittee shall implement these plans and integrate them into their overall statewide plan. In instances where elements of these plans are to be changed or dropped, the Permittee shall discuss any changes in the Annual Report.
- B.5.20. Sharing Responsibility: The Permittee may either share responsibility or assign responsibility with one or more regulated MS4, and may implement BMPs individually or as a group. The SWMP shall include a description of the BMP and how responsibility is being shared or assigned.
- B.5.21. Annual Review and Updating the SWMP
- **B.5.21.1.** The Permittee must complete an annual review of the SWMP in conjunction with preparation of the Annual Report required under Section B.6.3. of this permit.
- **B.5.21.2.** The Permittee may update the SWMP in accordance with the following procedures:
- **B.5.21.2.1.** Changes adding, but not subtracting or replacing components, controls, or requirements to the SWMP may be made at any time upon written notification to the Division.
- B.5.21.2.2. Changes replacing an ineffective, unfeasible, or inappropriate programmatic BMP specifically identified in the SWMP with an alternate BMP or a change to any protocol or procedure within the SWMP shall be submitted to the Division for approval. Submittals are tentatively approved unless comments are received from the Division within thirty (30) days. The Permittee's modification

submittal shall include the following:

- **B.5.21.2.2.1.** An analysis of why the BMP is ineffective, infeasible including cost prohibitive, or otherwise should be revised or replaced; and
- **B.5.21.2.2.2.** An analysis of why the replacement BMP is expected to be more effective, feasible, or appropriate than the BMP to be replaced.
- B.5.22. Updating the Permittee's Manuals
- B.5.22.1. The Permittee shall annually review all of its stormwater manuals and update as needed. The Permittee shall describe all updates to these manuals in the Annual Report.
- B.6. Monitoring, Recordkeeping, and Reporting
- B.6.1. Stormwater Monitoring
- B.6.1.1. The Permittee shall submit a revised draft stormwater monitoring plan to the Division for review for this permit within six (6) months of the issuance of this permit and shall submit a revised final stormwater monitoring plan for Division approval after the public notice process. In developing the plan, the Permittee shall evaluate and update as necessary how monitoring may assist in making decisions about program compliance, the appropriateness of identified best management practices, and progress toward achieving identified measurable goals. The Division shall have thirty (30) days to review and comment on the draft stormwater monitoring plan, after which the Permittee will follow the public notice steps outlined in this Section. Pending approval of the monitoring plan, the Permittee shall implement the existing monitoring plan.
- B.6.1.1.1. The revised stormwater monitoring plan will be subject to Division review and approval and the public notice steps outlined below in this Section, after which the stormwater monitoring plan will be formally incorporated as terms and conditions of this permit.
- B.6.1.1.2. Before the final revised plan is submitted to the Division for approval, the plan shall be made available for public comment for a minimum of thirty (30) days. The Permittee shall respond to significant public comments, and the Permittee shall hold a public meeting in accordance with NAC 445A.67558; and
- B.6.1.1.3. The Permittee shall compile any comments received as part of the process in Section B.6.1.1.2., describe the actions taken in response to the public comments, and include this information in the revised stormwater monitoring plan.
- B.6.1.1.4. The Permittee shall submit a final revised stormwater monitoring plan to the Division for approval no later than six (6) months after receiving comments from the Division on the draft revised stormwater monitoring plan.
- **B.6.1.2.** When the Permittee conducts monitoring at the MS4, the Permittee is required to comply with the following:

- B.6.1.2.1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. This requirement does not prevent the Permittee from analyzing or reporting samples that are representative of a limited situation (e.g. concentration at peak flow);
   B.6.1.2.2. Test procedures for the analysis of pollutants shall conform to regulations (40 CFR, Part 136) published pursuant to Section 304(h) of the CWA;
   B.6.1.3. Records of monitoring information shall include:
- **B.6.1.3.1.** The date, exact place, and time of sampling or measurements;
- **B.6.1.3.2.** The names(s) of the individual(s) who performed the sampling or measurements;
- **B.6.1.3.3.** The date(s) analyses were performed;
- **B.6.1.3.4.** The names of the individuals who performed the analyses;
- **B.6.1.3.5.** The analytical techniques or methods used; and
- **B.6.1.3.6.** The results of such analyses.
- **B.6.1.4.** Analyses shall be performed by a State of Nevada-certified laboratory. Laboratory reports shall be provided, if requested by the Division.
- **B.6.1.5.** If the Permittee performs stormwater monitoring more frequently than required by the stormwater monitoring plan, the results of such monitoring shall be reported. The monitoring results and analyses shall be submitted as part of the Annual Report.
- B.6.1.6. The Permittee shall evaluate whether existing data collection programs should be modified to improve characterization of stormwater discharges, effects of different BMPs on water quality, or ambient water quality. This information shall be submitted for review as part of the annual monitoring plan.
- **B.6.1.7.** The Permittee must complete an annual review of the stormwater monitoring plan in conjunction with preparation of the Annual Report required under Section B.6.3. of this permit.
- **B.6.1.7.1.** Changes shall be submitted to the Division for approval. Submittals are tentatively approved unless comments are received from the Division within thirty (30) days.

# B.6.2. Record Keeping

B.6.2.1. The Permittee shall retain records of all monitoring information, including, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, a copy of this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the termination date of this permit. This period may be extended at the direction of the Division at any time.

D.0.2.2.	Permittee shall retain a copy of the SWMP required by this permit at a location accessible to the Division. The Permittee shall make the records, including a copy of the SWMP, available to the public, if requested to do so.
B.6.3.	Annual Reports
B.6.3.1.	The Permittee shall submit the Annual Report to the Division by November 1 of each year of the permit term. Each Annual Report shall cover the period beginning July 1 of the previous year through June 30 of the current year.
B.6.3.2.	Each year, the Permittee shall review its SWMP and report to the Division on the status of the program, whether the Permittee has identified any modifications, and the plans for implementing those modifications.
B.6.3.3.	The Annual Report shall include:
B.6.3.3.1.	Status of the Permittee's compliance with permit conditions;
B.6.3.3.2.	An assessment of the appropriateness of the identified BMPs, and revisions to previous assessments, if appropriate;
B.6.3.3.3.	Progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP;
B.6.3.3.4.	Status of the achievement of measurable goals;
B.6.3.3.5.	Results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP, a description of any identified improvements to or degradation in water quality attributable to the program, and a description of any identified effects on attainment of water quality standards attributable to the program;
B.6.3.3.6.	A summary of the stormwater activities the Permittee plans to undertake during the next year including a tentative implementation schedule and a fiscal analysis;
B.6.3.3.7.	Changes to the SWMP, including changes to any BMPs or any identified measurable goals that apply to the program elements;
B.6.3.3.8.	Notice that the Permittee is relying on another government entity to satisfy some of the permit obligations, as applicable;
B.6.3.3.9.	Estimated reductions in loadings of pollutants from discharges of constituents from MS4 expected as the result of the municipal stormwater quality management program. The assessment shall also identify known impacts of stormwater controls on waters of the U.S.;

A summary of all permit required inspections performed and enforcement activity taken during the report cycle;

B.6.3.3.10.

- **B.6.3.3.11.** A summary of public education and outreach activity performed during the report cycle;
- **B.6.3.3.12.** Annual expenditures for the reporting period, with a breakdown for the major elements of the SWMP, and the budget for the following year;
- **B.6.3.3.13.** An original signed copy of all reports and plans required herein shall be submitted to the Division at the following address:

Stormwater Branch Supervisor
Bureau of Water Pollution Control
Nevada Division of Environmental Protection
901 S. Stewart St., Suite 4001
Carson City, NV 89701

B.6.4. Electronic reporting will be required by December 21, 2020 or sooner as the Division's electronic reporting system becomes available and active. Electronic reporting is required by the National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule.

# B.6.5. Changes by the Division

- B.6.5.1. Changes to the permit requested by the Division shall be made in writing, set forth the timeframe for the Permittee to develop the changes, and offer the Permittee the opportunity to propose alternative program changes to meet the objective of the requested modification. If the Permittee does not agree to the requested changes, changes required by the Division will be made in accordance with Nevada Administrative Code (NAC) 445A.261 and NAC 445A.263.
- **B.6.5.2.** The Division may require changes to the SWMP, as needed, to:
- **B.6.5.2.1.** Address impacts on receiving water quality caused, or contributed to, by discharges from the MS4; or
- **B.6.5.2.2.** Include more stringent requirements necessary to comply with new federal or State statutory or regulatory requirements.
- B.6.6. Responsibility for Stormwater Management Program Implementation
- B.6.6.1. The Permittee shall implement the SWMP on all areas added to the Permittee's MS4 or for which the Permittee becomes responsible for implementation of stormwater quality controls no later than six (6) months from addition of the new areas and immediately for newly constructed areas.
- B.7. Section B Definitions
- B.7.1. 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 U.S. 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.

- **B.7.2. Control Measure** means any BMP or other method used to prevent or reduce the discharge of pollutants to waters of the U.S.
- **B.7.3. Discharge** means any addition of a pollutant or pollutants to waters of the U.S.
- **B.7.4. Illicit Connection** means any man-made conveyance connecting an illicit discharge directly to an MS4.
- B.7.5. Illicit Discharge means any discharge to an MS4 that is not entirely composed of stormwater, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from firefighting activities.
- B.7.6. Inactive mine means sites that are not being actively mined, but which have an identifiable owner/operator. Inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim.
- **B.7.7. MEP** is an acronym for Maximum Extent Practicable, the technology-based discharge standard for MS4 to reduce pollutants in stormwater discharges.
- B.7.8. Municipal Separate Storm Sewer 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, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under Section 208 of the CWA that discharges to waters of the U.S.; (ii) Designed or used for collecting or conveying stormwater; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40CFR§122.2.
- B.7.9. Outfalls defined:
- B.7.9.1. Outfall means a point source as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the U.S. 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.
- B.7.9.2. Major municipal separate storm sewer outfall (or major outfall) means a municipal separate storm sewer (MS4) outfall that discharges from a single pipe with an inside diameter of thirty-six (36) inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than fifty (50) acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall

that discharges from a single pipe with an inside diameter of twelve (12) inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of two (2) acres or more).

- **B.7.10.** Qualified Person means a person knowledgeable in the principles and practice of erosion and sediment controls and who possesses the skills to assess conditions at the site that could impact stormwater quality and the effectiveness of the BMPs selected to control the quality of the stormwater discharges.
- **B.7.11. Stormwater** means stormwater runoff, snowmelt runoff, and surface runoff and drainage.
- **B.7.12. Stormwater Management Program (SWMP)** refers to a comprehensive program to manage the quality of stormwater discharged from the MS4.

#### C.1. MONITORING AND REPORTING:

- C.1.1. Schedule: Discharge Monitoring Reports (DMRs) shall be received by the 28th day of the month following the third month of each quarter (reporting period). Quarterly and annual reporting periods are based on the standard annual cycle, January 1 through December 31.
- C.1.1.1 If required, all Annual, Biosolids Monitoring Report (BMR), Pretreatment, Total Inorganic Nitrogen (TIN), Salinity Control, and Whole Effluent Toxicity Testing (WET) annual reports are due as defined in the Deliverable Table (DLV).
- **C.1.1.2** An original signed copy of these, and all other reports required herein, shall be submitted to the State at the following address:

Division of Environmental Protection Bureau of Water Pollution Control 901 South Stewart Street, Suite 4001 Carson City, Nevada 89701

C.1.2. Annual Report: The fourth quarter report shall contain plots of concentration (y-axis) versus date (x-axis) for each analyzed constituent identified in the Monitoring Table. The plots shall include data from the preceding five years, if available. Plotting is not required for any constituent that have routinely been below the detection limit or if less than three data points exist. Any data point from the current year that is greater than the limits identified in the applicable tables and conditions above must be explained by a narrative.

Once reporting through the Nevada NetDMR system has been performed for a continuous five year period annual plots are no longer required.

- C.1.3. Reporting: Monitoring results obtained in accordance to the requirements of the permit, supporting laboratory data, and supporting documents shall be submitted through the Nevada NetDMR system.

  https://netdmr.ndep.nv.gov/netdmr/public/home.htm
- C.1.4. Sampling and measurements: Samples and measurements taken when required shall be representative of the volume and nature of the monitored discharge and must comply with any Division approved sampling plan as required by the Schedule of Compliance. Analyses shall be performed by a Nevada certified laboratory. Results from this lab must accompany the DMR. If no discharge occurs during the reporting period, report "no discharge" shall be indicated on the submitted DMR.
- **C.1.5.** Recording the Results: For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information:
- C.1.5.1. The exact place, date, and time of sampling;
- C.1.5.2. The dates the analyses were performed;
- C.1.5.3. The person(s) who performed the analyses;

- C.1.5.4. The analytical techniques or methods used; and
- **C.1.5.5.** The results of all required analyses.
- C.1.6. Additional Monitoring by Permittee: If the Permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, and the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased frequency shall also be indicated.
- C.1.7. Test Procedures: Test procedures for the analysis of pollutants shall conform to regulations (40 CFR, Part 136) published pursuant to Section 304(h) of the CWA, under which such procedures may be required unless other procedures are approved by the Division. Other procedures used may be:
- C.1.7.1. Selected from SW-846;
- C.1.7.2. Selected from 40 CFR 503; or
- **C.1.7.3.** An alternate test procedure approved by the Division, Environmental Laboratory Services.
- **C.1.7.4.** All laboratory analyses conducted in accordance with this discharge permit must have detection at or below the permit limits.
- C.1.7.5. All analytical results must be generated by analytical laboratories certified by the Nevada Laboratory Certification Program
- **C.1.8. Reporting Limits:** Unless otherwise approved by the Division, the approved method of testing selected for analysis must have reporting limits which are:
- **C.1.8.1.** Half or less of the discharge limit; or, if there is no limit,
- C.1.8.2. Half or less of the applicable water quality criteria; or, if there is no limit or criteria,
- **C.1.8.3.** The lowest reasonably attainable using an approved test method.
- C.1.8.4. This requirement does not apply if a water quality standard is lowered after the issuance of this permit; however, the Permittee shall review methods used and by letter notify the Division if the reporting limit will exceed the new criterion, and if so the Division may reopen the permit to impose new monitoring requirements.
- C.2. Operations and Maintenance (O&M) Manual:
- C.2.1. An O&M Manual shall be prepared and submitted to the Division for review and approval in accordance with the Division Operations and Maintenance Manual guidance (WTS-2).
- **C.2.2.** The Permittee shall inspect the site at the frequency prescribed in the O&M Manual.

- C.2.3. The Permittee shall maintain an operations logbook (hardcopy or electronic) on-site as referenced in the O&M Manual.
- **C.2.3.1.** The logbook shall include the name of the operator, date, time, and general condition of the facility.
- C.3. Planned changes: The Permittee shall give notice to the Division as soon as possible of any planned physical alterations or additions to the permitted facility and receive approval prior to commencing construction. Notice is required only when the alteration or addition to a permitted facility:
- C.3.1. May meet one of the criteria for determining whether a facility is a new source (40 CFR 122.29 (b));
- C.3.2. Could significantly change the nature or increase the quantity of pollutants discharged; or
- C.3.3. Results in a significant change to the Permittee's sludge management practice or disposal sites.
- C.4. Anticipated non-compliance: The Permittee shall give advance notice to the Division of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- C.5. Change in Discharge: All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the Permit. Any anticipated facility expansions or treatment modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new application or, if such changes will not violate the effluent limitations specified in this Permit, by notice to the permit issuing authority of such changes. Any changes to the permitted treatment facility must comply with NAC 445A. The Permit may be modified to specify and limit any pollutants not previously limited.
- C.6. Facilities Operation-Proper Operation and Maintenance: The Permittee shall at all times maintain in good working order and properly operate all treatment and control facilities, collection systems, and pump stations installed or used by the Permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures.
- C.7. Adverse Impact Duty to Mitigate: The Permittee shall take all reasonable steps to minimize the impact of releases to the environment resulting from noncompliance with any permit limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. The Permittee shall carry out such measures, as reasonable, to prevent significant adverse impacts on human health or the environment. If the monitoring program (as required by this permit) identifies exceedances of ambient water quality standards at the boundary of any approved mixing zone, the Permittee

shall notify the Division of the exceedances and describe any mitigation measures being implemented as part of the quarterly monitoring report requirements.

- C.8. Noncompliance, Unauthorized Discharge, Bypass and Upset
- C.8.1. Any diversion, bypass, spill, overflow or discharge of treated or untreated wastewater from a permitted facility under the control of the Permittee is prohibited except as authorized by this permit. The Division may take enforcement action for a diversion, bypass, spill, overflow, or discharge of treated or untreated wastewater except as authorized by this permit. In the event the Permittee has knowledge that a diversion, bypass, spill, overflow or discharge not authorized by this permit is probable or has occurred, the Permittee shall notify the Division.
- **C.8.2. Notification:** The Permittee is responsible for carrying out notification in the event of a diversion, bypass, spill, overflow or discharge not authorized by this permit with the following schedule;
- **C.8.2.1. Immediately:** Permittee shall be responsible for the timely notification of potentially impacted downstream users for the protection of human health and the environment.
- **C.8.2.2. Spiil Hotline:** Notifying the Division through the NDEP Spill Hotline, 1-888-331-6337, as soon as practicable after the dispatch of emergency respondents and mitigating actions and no later than twenty-four (24) hours from the time of discovery.
- C.8.2.3. 5-Day Report: A written report shall be submitted to the Division within five (5) days of the discovery of a diversion, bypass, spill, overflow, upset, or discharge detailing the entire incident including;
- C.8.2.3.1. Time and date of discharge:
- C.8.2.3.2. Exact location and estimated amount of discharge;
- C.8.2.3.3. Flow path and any bodies of water which the discharge contacts;
- C.8.2.3.4. The specific cause of the discharge; and
- C.8.2.3.5. The preventive and/or corrective actions taken.
- C.8.3. The Permittee shall report all instances of noncompliance not reported under Section C.8. (Noncompliance, Unauthorized Discharge, Bypassing and Upset) at the time monitoring reports are submitted. The reports shall contain the information listed in Section C.8. (Noncompliance, Unauthorized Discharge, Bypassing and Upset).
- C.8.4. Bypass not exceeding limitations: The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of the applicable Section of Section C.8. (Noncompliance, Unauthorized Discharge, Bypassing and Upset including Prohibition of Bypass).

- C.8.5. Anticipated bypass: If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of bypass.
- **C.8.6. Prohibition of Bypass:** Bypass is prohibited, and the Division may take enforcement action against a Permittee for bypass, unless:
- **C.8.6.1.** Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- C.8.6.2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
- **C.8.6.3.** The Permittee submitted notices as required under Section C.8. (Noncompliance, Unauthorized Discharge, Bypassing and Upset).
- **C.8.7. Approved Bypass:** The Division may approve an anticipated bypass, after considering its adverse effects, if the Division determines that it will meet the three conditions listed in Section C.8.6.
- **C.8.8. Effect of an upset:** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section C.8 (Noncompliance, Unauthorized Discharge, Bypassing and Upset: Conditions necessary for a demonstration of an upset) are met.
- C.8.9. Conditions necessary for a demonstration of an upset: A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, that:
- C.8.9.1. An upset occurred and that the Permittee can identify the cause(s) of the upset;
- C.8.9.2. The permitted facility was at the time being properly operated;
- C.8.9.3. The Permittee submitted notice of the upset as required under this Section; and
- **C.8.9.4.** The Permittee complied with any remedial measures required under Section C.8. (Noncompliance, Unauthorized Discharge, Bypassing and Upset).
- **C.8.10. Enforcement:** In selecting the appropriate enforcement option, the Division shall consider whether or not the noncompliance was the result of an upset. The burden of proof is on the Permittee to establish that an upset occurred.
- C.9. Removed Substances: Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be properly disposed as described in the SWMP.
- C.10. Right of Entry and Inspection: The Permittee shall allow the Administrator and/or

his authorized representatives, upon the presentation of credentials, to:

- C.10.1. Enter at reasonable times upon the Permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit;
- **C.10.2.** Have access to and copy any records required to be kept under the terms and conditions of this permit at reasonable times;
- **C.10.3.** Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations required in this permit; and
- **C.10.4.** Perform any necessary sampling or monitoring to determine compliance with this permit at any location for any parameter.
- C.11. Transfer of Ownership or Control: In the event of any change in control or ownership of facilities from which the authorized discharge emanates, the Permittee shall notify the succeeding owner or controller of the existence of this permit, by letter, a copy of which shall be forwarded to the Division. The Division 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. The Division shall approve ALL transfers of permits.
- C.12. Availability of Reports: Except for data determined to be confidential under NRS 445A.665, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of the Division. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NRS 445A.710.
- C.13. Furnishing False Information and Tampering with Monitoring Devices: Any person who intentionally or with criminal negligence makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained by the provisions of NRS 445A.300 to 445A.730, inclusive, or by any permit, rule, regulation or order issued pursuant thereto, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required to be maintained under the provisions of NRS 445A.300 to 445A.730, inclusive, or by any permit, rule, regulation or order issued pursuant thereto, is guilty of a gross misdemeanor and shall be punished by a fine of not more than \$10,000 or by imprisonment. This penalty is in addition to any other penalties, civil or criminal, provided pursuant to NRS 445A.300 to 445A.730, inclusive.
- C.14. Penalty for Violation of Permit Conditions: NRS 445A.675 provides that any person who violates a permit condition is subject to administrative and judicial sanctions as outlined in NRS 445A.690 through 445A.705, inclusive.
- C.15. Permit Modification, Suspension or Revocation: After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
- **C.15.1.** Violation of any terms or conditions of this permit;

- **C.15.2.** Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- C.15.3. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- C.15.4. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;
- C.15.5. Material and substantial alterations or additions to the permitted facility or activity;
- C.15.6. The Division has received new information;
- C.15.7. The standards or regulations have changed; or
- **C.15.8.** The Division has received notification that the permit will be transferred.
- **C.16. Minor Modifications:** With the consent of the Permittee and without public notice, the Division may make minor modifications in a permit to:
- C.16.1. Correct typographical errors;
- C.16.2. Clarify permit language;
- C.16.3. Require more frequent monitoring or reporting;
- C.16.4. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the permit and does not interfere with attainment of the final compliance date;
- C.16.5. Allow for change in ownership;
- **C.16.6.** Change the construction schedule for a new discharger provided that all equipment is installed and operational prior to discharge;
- C.16.7. Delete an outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits; or
- **C.16.8.** Reallocate the IWLA as long as the ΣIWLA does not change.
- C.17. Toxic Pollutants: Notwithstanding Section C (Permit Modification, Suspension or Revocation), if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the CWA for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the Permittee so notified.

- C.18. Liability: Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable Federal, State or local laws, regulations, or ordinances. However, except for any toxic effluent standards and prohibitions imposed under Section 307 of the CWA or toxic water quality standards set forth in NAC 445A.144, compliance with this permit constitutes compliance with CWA Sections 301, 302, 306, 307, 318, 403, 405(a) and (b), and with NRS 445A.300 through 445A.730, inclusive.
- C.19. Property Rights: The issuance of this permit does not convey any property rights, in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- **C.20. Severability:** The provisions of this permit are severable, and if any provision of this permit, or the application of any provisions of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- **C.21. Duty to Comply:** The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action; permit termination; revocation and reissuance, or modification; or denial of a permit renewal application.
- C.22. Need to Halt or Reduce Activity Not a Defense: It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this permit.
- C.23. Duty to Provide Information: The Permittee shall furnish to the Division, within a reasonable time, any relevant information which the Division 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 shall also furnish to the Division, upon request, copies of records required to be kept by this permit.
- **C.24. Other information:** Where the Permittee becomes aware of failure to submit any relevant facts in a permit application or the submittal of incorrect information in a permit application or in any report to the Division, the Permittee shall promptly submit such facts or information.
- C.25. Reapplication: If the Permittee desires to continue to discharge, he shall reapply not later than 180 days before this permit expires on the application forms then in use. The Permittee shall submit the sludge information listed in 40 CFR 501.15(a)(2) with the renewal application. The renewal application shall be accompanied by the fee required by NAC 445A.232.
- C.26. Signatures, Certification Required on Application and Reporting Forms: All applications, reports, or information submitted to the Division shall be signed and certified by making 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

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 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."

- **C.26.1.** All applications, reports or other information submitted to the Division shall be signed by one of the following:
- C.26.2. A principal executive officer of the corporation (of at least the level of vice president) or his authorized representative who is responsible for the overall operation of the facility from which the discharge described in the application or reporting form originates;
- C.26.3. A general partner of the partnership;
- C.26.4. The proprietor of the sole proprietorship; or
- **C.26.5.** A principal executive officer, ranking elected official or other authorized employee of the municipal, state or other public facility.
- C.27. Changes to Authorization: If an authorization under Section C.25 (Signatures, Certification Required on Application and Reporting Forms) 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 Section C.25 (Signatures, Certification Required on Application and Reporting Forms) must be submitted to the Division prior to or together with any reports, information, or applications to be signed by an authorized representative.

#### C.28. Definitions:

**25-year, 24-hour storm event** means a precipitation event with a probable recurrence interval of once in twenty-five years, as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May, 1961, or equivalent regional or State rainfall probability information developed from this source.

100-year, 24-hour storm event means a precipitation event with a probable recurrence interval of once in one hundred years, as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May, 1961, or equivalent regional or State rainfall probability information developed from this source.

Acute Toxicity means the concentration that is lethal to 50 percent of the test organisms within 96 hours.

**Agricultural land** means land on which a food crop, a feed crop, or a fiber crop is grown. This includes rangeland and land used as pasture.

Agronomic rate means the whole sludge application rate (dry weight basis) designed: To provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover crop, or vegetation grown on the land; and to minimize the amount of nitrogen that passes below the root zone of the crop or vegetation grown on the

land to the groundwater.

Biosolids are non-hazardous sewage sludge or domestic septage.

**Bypass** means the intentional diversion of waste streams from any portion of a treatment facility.

Chronic precipitation event means a series of wet weather conditions that precludes reducing the volume of properly designed, constructed, operated, and maintained waste storage and/or treatment facilities and that total a volume in excess of the 25-year, 24-hour storm event.

Composite Sample (for flow-rate measurements) sample means the arithmetic mean of no fewer than six individual measurements taken at equal time intervals for 24 hours, or for the duration of discharge, whichever is shorter.

Discrete sample means any individual sample collected in less than 15 minutes.

Feed crops means crops produced primarily for consumption by animals.

**Food crops** means crops consumed by humans. These include, but are not limited to, fruits, vegetables, and tobacco.

Land application means the spraying or spreading of sewage sludge onto the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil so that the sewage sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

**Land application** area means land under the control of the Permittee, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied.

**Manure** means animal excrement and is defined to include bedding, compost, and raw materials or other materials commingled with animal excrement or set aside for disposal.

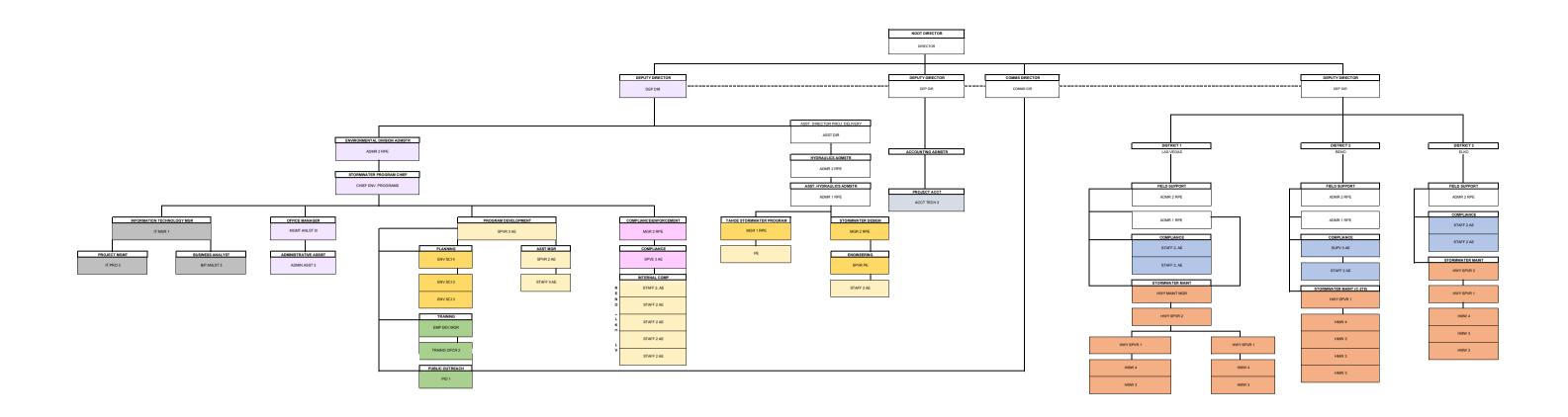
**Process wastewater** means water directly or indirectly used in the operation of the facility.

Sewage sludge means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not excuse noncompliance to the extent caused by operational error, improperly designed include treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Vegetated buffer means a permanent strip of dense perennial vegetation

established parallel to the contours of and perpendicular to, the dominant slope for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential pollutants leaving being released. Appendix B
Stormwater Division Organizational Chart



# Appendix C

NDEP Letter Regarding Maintenance Facility Industrial Category

L. H. HODGION Administrator

STATE OF NEVADA BOB MILLER Covernor

PETER G. MORROS Director

Administration: (702) 687-4670 Fex 687-5858

Fex (702) 685-0868 TDD 687-4676

Air Quality Mining Regulation and Reclamation Water Quality Planning Water Pollution Control

Waste Management Corrective Actions Federal Facilities



DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

# DIVISION OF ENVIRONMENTAL PROTECTION

Capitol Complex

333 W. Nye Lane

Carson City, Nevada 89710

June 30, 1994

Mr. Harry Wright Environmental Services Division Nevada Dept. of Transportation INTERDEPARTMENTAL

Subject: Stormwater Permit Coverage Not Required For Maintenance

Yards

Dear Mr. Wright:

This letter is being sent at your request to confirm our conversation this afternoon. Regulations adopted by the U.S. EPA give 11 industrial categories to which the stormwater permitting requirement applies (40 CFR § 122.26(b)(14)(i) - (xi)). maintenance yards operated by the Department of Transportation do not fall under any of these. The closest one is category viii, transportation facilities. However, for roadway travel, that category is restricted to facilities primarily involved in the transportation of goods or passengers, or the U.S. Postal Since the primary function of the NDOT maintenance Service. facilities is to maintain the roadways, they are not included. Please give me a call at 687-4670 extension 3149 if you have any questions or would like to discuss this further.

Sincerely,

Robert J. Saunders

Environmental Engineer

Bureau of Water Pollution Control

Saunders

# Who is subject to Phase I the NPDES Storm Water Program and needs a rmit?

The term "Storm Water Discharges Associated with Industrial Activity", defined in federal regulations 40 CFR 122.26(b)(14)(i)-(xi), determined which industrial facilities are potentially subject to Phase I of the storm water program. If you are subject to the program you need to apply for a permit. The definition uses either SIC (Standard Industrial Classification) codes or narrative descriptions to characterize the activities. You are responsible for identifying your facility's SIC code. The definition's 11 categories ((i) - (xi)) are listed below. You should review these 11 categories and decide if your type of facility is described by any of them (either by SIC code or by narrative descriptions). Please note that categories iii, viii, and xi have special conditions, or exceptions (described below) which may make a facility NOT subject to the program, and therefore not required to apply, even though the facility's activity matches one of the SIC codes.

#### category (i)

Facilities subject to storm water effluent limitations guideline, new source performance standards, or toxic pollutant effluent standards under 40 CFR subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi)). These types of facilities include the following:

```
facilities include the following:

40 CPR Subchapter N
405 Dalry products processing
406 Orain mills
407 Canned & preserved fruits & vag. processing *
408 Canned & preserved seafood processing *
408 Canned & preserved seafood processing
409 Beet, crystalline & liquid cane augar refining
410 Textile mills
411 Cement manufacturing
412 Feedlots
14 Organic Chemicals plastics and synthetic fibers
15 Inorganic chemical manufacturing
417 Featilizer manufacturing
418 Fertilizer manufacturing
419 Fetroleum refining
```

5 Inorganic chemical manufacturing
17 Soap and detergent manufacturing
18 Fettilizer manufacturing
19 Fettoleum refining
10 Iron and steel manufacturing
11 Nonferrous metal manufacturing
12 Nonferrous metal manufacturing
12 Phomphate manufacturing
13 Steam electric power
14 Ferroelloy manufacturing
15 Leather tanning and finishing
16 Class manufacturing
17 Manufacturing
18 Rubber manufacturing
18 Rubber manufacturing
19 Timber products processing
19 Pulp, paper, and paperboard
19 Builder's paper and board mills
19 Metal finishing
10 Metal finishing
11 Coal Mining
12 Mineral mining 6 processing
13 Pharmaceutical manufacturing
14 Coal Mining
15 Pharmaceutical manufacturing
17 Paving and roofing materials
18 Paving and roofing materials
18 Festicide Chemicals
18 Festicide Chemicals
18 Festicide Chemicals
18 Festicide Chemicals
18 Patatics modding and forming
18 Plastics modding and forming
18 Plastics modding and casting
18 Porcelain enameling
19 Porcelain enameling
10 Porcela

#### category (ii)

Facilities classified by the following SIC codes:

lumber and wood products (except 2434 wood kitchen cabineta, see (xi))
paper & allied products (except 265 paperboard 26

containers, 267 converted paper, see (xi)) chemicals & allied products (except 28) drugs, see (xi))

petroleum & coal products 311

leather tanning & finishing stone, clay & glass production (except 123 products of purchased glass, see (xi))

primary metal industry 3441 fabricated atructural metal

373 ship and bost building and repair

#### category (ili) Mineral Industry

Facilities classified as SIC codes 10-14 including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990), and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator, inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, benefication, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim).

SIC Code

metal mining (metallic mineral/ores)

12 coal mining
13 oil and gas extraction
14 non-metallic minerals except fuels

Oil and gas operations that discharge contaminated storm water at any time between November 16, 1987 and October 1, 1992, and that are currently not authorized by an NPDES permit, must apply for a permait. Operators of oil and gas exploration, production, processing, or treatment operations or transmission facilities, that are not required to submit a permit application as of October 1, 1992 in accordance with 40 CFR 122.26(c)(1)(iii), but that after October 1, 1992 have a discharge of a reportable quantity of oil or a hazardous substance (in a storen water discharge) for which notification is required pursuant to either 40 CFR 110.6, 117.21, or 302.6, must apply for a permit.

## category (iv) Ha zardous Waste

Hazardous waste treatment, storage, or disposal facilities including those that are operating under interim status or a permit under Subtitle C of RCRA.

## category (v) Landfills

Landfills, land application sites, and open dumps that receive or have received any imdustrial waste (waste that is received from any of the facilities described under categories (i) - (xi)) including those that are subject to regulations under Subtitle D of RCRA.

#### category (vi)

Facilities involved in the recycling of materials, including metal scrap yards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as SIC 5015 (used renotor vehicle parts) and 5093 (scrap and waste materials).

# category (vii) Steam Electric Plants

Steam electric power generating facilities, including coal handling sites.

#### category (vlii) Transportation

Transportation facilities class ified by the SIC codes listed below which have vehicle maintenance shops, equipment cleaning operations, or airpost deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under categories (i)-(vii) or (ix)-(xi) are associated with industrial activity, and need permit coverage.

#### SIC Code

40 railroad transportention

local and interurban passenger transit

trucking & warehousing (except 4221-25. 42 see (x1))

US postal service 43

44 water transportation

transportation by air 5171 petroleum bulk stations and terminals

#### category (ix) Treatment Works

Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system. used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the Clean Water

#### category (x) Construction

Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than 5 acres of total land area which are not part of a larger common plan of development or sale.

[The construction "operator" must apply for permit coverage under the General Storm Water Permit for Construction Activities. The "operator" is the party or parties that either individually or taken together meet the following two criteria: 1) they have operational control over the site specification; 2) they have the day-10-day operational control of those activities at the site necessary to ensure compliance. For a typical commercial construction site, the owner and general contractor must both apply. For a typical residential development, the developer and all builders must apply. Each builder must apply even if they individually disturb less than 5 acres if the overall development is 5 or more acres. Only one Pollution Prevention Plan is required per site even though there may be multiple parties.)

## category (xi) Light industry

Facilities classified by the following SIC codes:

SIC Code

food and kindred product

21 tobacco products

22 textile mill products

apparel and other textile product 23

2434 wood kitchen cabinets 25

furniture and fixtures

265 paperboard containers and boxes

miscellaneous converted paper products printing and publishing

drugs 283

285 paints and allied products

rubber and miscellaneous plastic

leather and products (except 311) 31

323 products of purchased glass

fabricated metal products (except 3441) 35

industrial machinery and equipment 36

electronic and other electric equipment transportation equipment (except 373) 37

38 instruments and related products

miscellaneous manufacturing 39

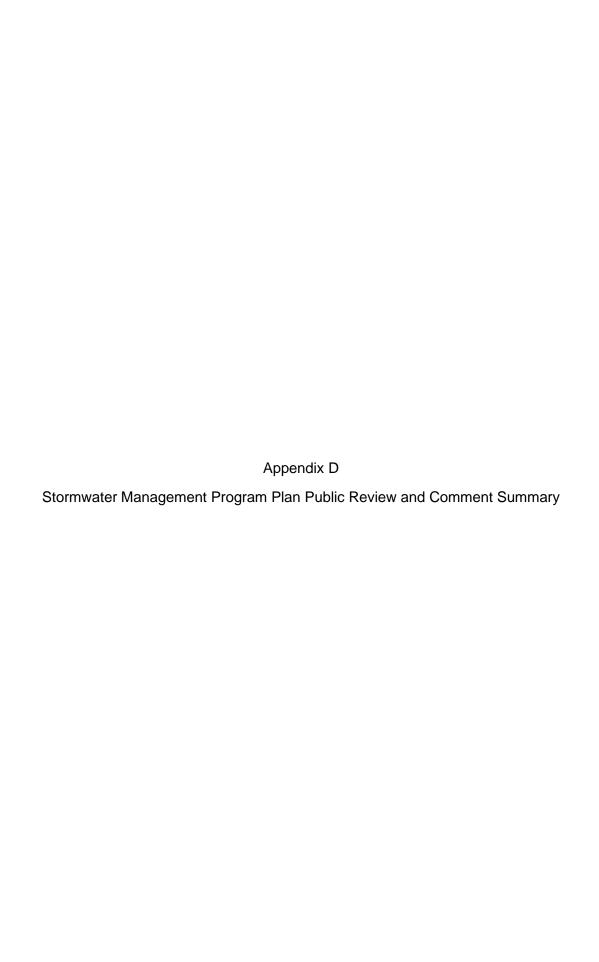
4221 farm product storage

4222 refrigerated storage

4225 general warehouse and storage

(and which are not otherwise included in categories (ii) -(x)) with storm water discharges from all areas (except access roads and rail lines) where material handling equipment, or activities, raw materials, immediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate produce, finished product, by-product, or waste product.

updated 9/4/97



# Stormwater Management Program Plan Public Review and Comment Questions/Comments/Answers/Follow-Up Action

The NDOT's Stormwater Management Program (SWMP) Plan (Plan) was available for public review and comment from February 3<sup>rd</sup> thru March 6<sup>th</sup>, 2020. During this time frame, a public meeting was held at the NDOT's Headquarters in Carson City on February 18<sup>th</sup>, 2020. The public meeting was broadcast live to NDOT's District Headquarters offices in Elko and Las Vegas and streamed live on social media via Facebook Live. Attendance rosters show there were eight (8) people in attendance in Carson City, two (2) people in attendance in Elko, and two (2) people in attendance in Las Vegas. There were five (5) people who watched the presentation via Facebook Live.

Below is a listing (paraphrased) of the questions/comments the NDOT received during the public review and comment period, including responses and any follow-up actions taken/proposed by the NDOT.

**Question 1:** How does the NDOT envision reporting (annually) to NDEP its progress with achieving SWMP measurable goals?

<u>Response:</u> The NDOT's progress with achieving SWMP measurable goals will be reported as part of the SWMP Annual Report submitted to NDEP. It is expected that reporting will be in a simple format that is consistent with the Plan.

Follow-Up Action: None

**Question 2:** What will the measurable goal information output for routine maintenance activities (e.g. storm sewer system inspection, quantity of sand/salt applied, quantity of sand/salt removed via sweeping, volume of material removed from the storm sewer system, etc.) look like with the NDOT's asset management/GIS systems?

Response: The NDOT is currently transitioning to a new asset management system. Given that the new system is still undergoing development and subsequent testing, the data output from EAMS (as it pertains to stormwater management related tasks) is currently unknown.

Follow-Up Action: None

**Question 3:** Does the Nevada Division of Environmental Protection (NDEP) review the NDOT's Plan following the public comment period?

<u>Response:</u> Yes, the NDEP approved the Plan prior to public review and comment. However, questions/comments the NDOT receives during the public review and comment period along with the NDOT's responses are to be documented in the Plan and resubmitted to the NDEP for final review and approval.

<u>Follow-Up Action:</u> Incorporate into the Plan the public questions/comments received during the public review and comment period along with the NDOT's responses and submit to the NDEP for review and approval.

**Question 4:** Where is the NDOT's Road Weather Information System (RWIS) information available for viewing?

Response: RWIS information is available for viewing on the NDOT's website.

Follow-Up Action: None

**Question 5:** Where does the analysis information for the NDOT's abrasives and de-icing agents reside?

<u>Response:</u> Analysis information for the abrasives and de-icing agents the NDOT is currently using is housed in the Environmental Division – Stormwater Section.

Follow-Up Action: None

**Question 6:** Is the Storm Sewer System Inspection and Maintenance Guide referenced in Section 5.12.7 of the Plan the same document as the NDOT's Stormwater Operations & Maintenance Plan?

Response: Yes, this is the same document.

Follow-Up Action: None

**Question 7:** Will the NDOT elaborate on the bmp assessment monitoring that is referenced in the NDOT's Stormwater Monitoring Plan, i.e. is the NDOT monitoring trends at specific sites or monitoring the performance of structural control devices?

<u>Response:</u> The NDOT is conducting bmp effectiveness (i.e. performance) monitoring of structural control devices as described in the NDOT's Stormwater Monitoring Plan.

Follow-Up Action: None

**Question 8:** Is the bmp effectiveness monitoring described specifically in the NDOT's Stormwater Monitoring Plan?

<u>Response:</u> Yes, bmp effectiveness monitoring is described specifically in the NDOT's Stormwater Monitoring Plan. Results of the bmp effectiveness monitoring are reported, specifically, in the SWMP Annual Report submitted to NDEP.

Follow-Up Action: None

**Question 9:** Is the annual SWMP programmatic bmp assessment performed in-house or are there outside groups performing this work and reviewing SWMP measurable goals?

<u>Response:</u> Currently, the assessment of SWMP programmatic bmps as well as evaluating progress with achieving SWMP measurable goals is performed annually by the NDOT staff.

Follow-Up Action: None

**Question 10:** Does the NDOT use monitoring data to assist with evaluating structural bmps for potential inclusion in future projects?

<u>Response:</u> Yes, the Environmental Division – Stormwater Section has staff dedicated to reviewing and evaluating structural bmp monitoring data. These efforts will assist NDOT with identifying structural bmps for future project consideration.

Follow-Up Action: None

## Appendix E

Impaired and TMDL Waterways Evaluation Summaries

Table E.1. 2020-2022 Water Quality Integrated Report - Summary of Waterbodies Impaired by Potential Transportation Related Pollutants.

Waterbody ID	Water Name	Parameter	Potentially Impacted from NDOT's MS4
	Northwest Region		
NV01-NW-01-A_00	Boulder Reservoir	Phosphorus-Total (SV)	No
NV01 NW 02 A_00	Blue Lakes	Cadmium (1-hour)	No
		Cadmium (96-hour)	No
		Phosphorus-Total (SV)	No
NV01-NW-03-A_00	Catnip Reservoir	Iron (96-hour)	No
		Phosphorus-Total (SV)	No
NV01-NW-04-B_00	Wall Canyon Reservoir	Dissolved Oxygen (SV)	No
		Iron (96-hour)	No
		Phosphorus-Total (SV)	No
NV01 NW 05 B_00	Knott Creek Reservoir	Dissolved Oxygen (SV)	No
		Phosphorus-Total (SV)	No
NV01 NW 06 B_00	Onion Valley Reservoir	Cadmium (96-hour)	No
		Dissolved Oxygen (SV)	No
		Phosphorus-Total (SV)	No
NV01 NW 07_02	Alder Creek at Little Alder Creek	Phosphorus-Total (SV)	No
		Temperature (SV)	No
		Escherichia coli (AGM)	No
		Escherichia coli (SV)	No
NV01-NW-09_00	Craine Creek	Phosphorus-Total (SV)	No
		Escherichia coli (AGM)	No
		Escherichia coli (SV)	No
NV01-NW-21_01	Wall Canyon Creek	Iron (96-hour)	No
		Phosphorus-Total (SV)	No
		Escherichia coli (AGM)	No
NIV (00 DI 04 00	Black Rock Region	Db T - t - 1 (O) ()	NI-
NV02-BL-01_00	Smoke Creek	Phosphorus-Total (SV)	No
NV02 BL 02 B_00	Squaw Creek Reservoir	Dissolved Oxygen (SV)	No
		Iron (96-hour)	No
NI /02 DI 02 A 00	Name Creak	Phosphorus-Total (SV)	No
NV02 BL 03 A_00	Negro Creek	Phosphorus-Total (SV)	No
NV02-BL-05-A_00	Mahogany Creek	Cadmium (96-hour)	No
NV02 BL 07 A_00	Bilk Creek, Upper	Iron (96-hour)	No
NIV02 BL 08 B 00	Pills Crook at Pills Crook Pagaryain	Phosphorus-Total (SV)	No No
NV02-BL-08-B_00	Bilk Creek at Bilk Creek Reservoir	Iron (96-hour)	No
NI/02 BL 00 B 00	Bilk Creek Reservoir	Escherichia coli (AGM)	No
NV02-BL-09-B_00	Blik Creek Reservoir	Dissolved Oxygen (SV)	No
NIV02 PL 11 A 01	Quinn Bivor Foot Fork	Temperature (SV)	No No
NV02-BL-11-A_01	Quinn River, East Fork	Iron (96-hour)	No
NIV.02 DI 44 A 02	Oution Divon Courth Forts	Phosphorus-Total (SV)	No
NV02 BL 11 A_02	Quinn River, South Fork	Iron (96-hour)	No
NIV (00 F) 44 00	Postfala Consula	Phosphorus-Total (SV)	No
NV02 BL 14_00	Buffalo Creek	Phosphorus-Total (SV)	No

Table E.1. (Cont'd)			
NV02-BL-15_00	Alta Creek	Iron (96-hour)	No
		Phosphorus-Total (SV)	No
		Escherichia coli (AGM)	No
		Escherichia coli (SV)	No
NV02-BL-19_00	Crowley Creek	Iron (96-hour)	No
_	•	Phosphorus-Total (SV)	No
		Temperature (SV)	No
NV02 BL 20 00	Falls Canyon Creek	Cadmium (96-hour)	No
NV02 BL 23 00	McDermitt Creek	Phosphorus-Total (SV)	No
NV02-BL-40 00	Birthday Mine Creek	Iron (96-hour)	No
14V02-BE-40_00	Birtiday Wille Oreck	Phosphorus-Total (SV)	No
	Snake River Region	Priospriorus-Fotal (SV)	INU
NV03-BR-16 00	Bruneau River	Temperature (CV)	No
NV03-BR-10_00	Bruneau River	Temperature (SV)	
NIV (00 ID 40 00	LIN BY EVEL	Turbidity (SV)	No
NV03-JR-12_00	Jarbidge River, East Fork	Cadmium (96-hour)	No
		Lead (96-hour)	No
		Total Suspended Solids (SV)	No
		Turbidity (SV)	No
NV03-JR-14_00	Jarbidge River, below Jarbidge	Cadmium (1-hour)	No
		Cadmium (96-hour)	No
		Copper (1-hour)	No
		Lead (96-hour)	No
		Zinc (1-hour)	No
NV03-OW-25-B_00	Wild Horse Reservoir	Cadmium (96-hour)	Yes
		Dissolved Oxygen (SV)	Yes
		Phosphorus-Total (SV)	Yes
		Zinc (1-hour)	Yes
		Zinc (96-hour)	Yes
NV03-OW-27 00	Owyhee River, South Fork	Phosphorus-Total (SV)	Yes
14703-077-27_00	Owynee raver, Sodair i ork	Temperature (SV)	Yes
		Total Suspended Solids (SV)	Yes
NIV (00 OVA 00 00	NEW O	Turbidity (SV)	Yes
NV03-OW-33_00	Mill Creek	Iron (96-hour)	No
NV03-OW-34_00	Mill Creek	Manganese	Yes
		Nickel (MDS)	Yes
		Zinc (1-hour)	Yes
		Zinc (96-hour)	Yes
NV03-OW-44_00	Taylor Canyon	Phosphorus-Total (SV)	Yes
NV03-OW-48_00	Burns Creek	Total Dissolved Solids (SV)	Yes
NV03-OW-49_00	Mill Creek	Nitrate (SV)	No
		Phosphorus-Total (SV)	No
		Total Dissolved Solids (SV)	No
		Total Suspended Solids (SV)	No
NV03-OW-50 00	Jeritt Canyon Creek	Total Dissolved Solids (SV)	No
NV03-OW-51 01	Snow Canyon Creek	Total Dissolved Solids (SV)	Yes
NV03-OW-51 02	Snow Canyon Creek, East Fork	Total Dissolved Solids (SV)	No
NV03-OW-51_02 NV03-OW-52_00	Badger Creek	Iron (96-hour)	No
14703-044-32_00	Dauger Creek	110H (90-HOUL)	INU

Table E.1. (Cont'd)			
NV03-OW-68_00	Tomasina Gulch	Iron (96-hour)	No
NV03 OW 79_00	Dry Creek Reservoir	Dissolved Oxygen (SV)	No
NV03 OW 82_00	Dry Creek	Cadmium (96-hour)	Yes
		Copper (1-hour)	Yes
		Copper (96-hour)	Yes
		Iron (96-hour)	Yes
		Temperature (SV)	Yes
		Turbidity (SV)	Yes
		Zinc (1-hour)	Yes
NV03-OW-83_00	Rio Tinto Gulch	Manganese	No
		Zinc (1-hour)	No
		Zinc (96-hour)	No
NV03-OW-85_00	Starvation Canyon Creek	Phosphorus-Total (SV)	No
_	·	Total Suspended Solids (SV)	No
NV03-OW-87 00	Gracie Creek	Total Dissolved Solids (SV)	No
NV03-SR-02 00	Salmon Falls Creek	Iron (96-hour)	Yes
_		Phosphorus-Total (SV)	Yes
		Total Suspended Solids (SV)	Yes
		Turbidity (SV)	Yes
NV03 SR 03 00	Shoshone Creek	Temperature (SV)	Yes
NV03-SR-05 B 00	Salmon Falls Creek, South Fork	Temperature (SV)	No
NV03 SR 09 B 00	Cottonwood Creek at the South Fork of Salmon Falls Creek	Temperature (SV)	No
NV03-SR-35 00	Little Goose Creek	Temperature (SV)	No
		Total Suspended Solids (SV)	No
		Turbidity (SV)	No
NV03-SR-37 00	Cedar Creek	Escherichia coli (SV)	No
NV03-SR-38 00	Trout Creek	Escherichia coli (AGM)	No
		Iron (96-hour)	No
		Phosphorus-Total (SV)	No
		Temperature (SV)	No
		Turbidity (SV)	No
NV03-SR-43 00	Sun Creek	Temperature (SV)	No
NV03-SR-45_00	Trout Creek	Iron (96-hour)	No
55 5.1 15_55	Trout Groot	Temperature (SV)	No
NV03-SR-47 00	Trout Creek, West Fork	Phosphorus-Total (SV)	No
	Trode Groom, Proof Form	Total Suspended Solids (SV)	No
		Turbidity (SV)	No
NV03-SR-53 00	Jakes Creek	Temperature (SV)	Yes
11130 011 00_00	CUROU CIOCH	Turbidity (SV)	Yes
NV03-SR-55 00	Jakes Creek, South Fork	Temperature (SV)	No
NV03-SR-57 00	Cottonwood Creek, North Fork	Temperature (SV)	No
NV03-SR-60_00	Deer Creek	Temperature (SV)	No
NV03-SR-62_00	Deer Creek, West Fork	Temperature (SV)	No
14730-017-02_00	Humboldt River Region	Temperature (OV)	110
NV04-HR-01 00	Humboldt River near Osino	Phosphorus-Total (SA)	Yes
NV04-HR-03_00	Humboldt River at Battle Mountain	Iron (96-hour)	Yes
14704111100_00	Turnbold tiver at Dattie Modifically	non (au-nour)	163

Table E.1. (Cont'd)			
NV04-HR-04_00	Humboldt River at State Highway 789	Iron (96-hour)	Yes
		Turbidity (SV)	Yes
NV04 HR 05_00	Humboldt River at Imlay	Iron (96-hour)	Yes
		Turbidity (SV)	Yes
NV04 HR 06_00	Humboldt River at Woolsey	Iron (96-hour)	Yes
		Phosphorus-Total (SV)	Yes
		Total Suspended Solids (AM)	Yes
NV04-HR-07-C_00	Humboldt River at Rodgers Dam	Escherichia coli (AGM)	Yes
		Iron (96-hour)	Yes
		Total Dissolved Solids (SV)	Yes
NV04 HR 08 D_01	Humboldt River at the Humboldt Sink	Chloride (1-hour)	Yes
		Chloride (96-hour)	Yes
		Escherichia coli (AGM)	Yes
		Iron (96-hour)	Yes
		Total Suspended Solids (SV)	Yes
		Turbidity (SV)	Yes
NV04 HR 12 A_00	Secret Creek	Temperature (SV)	No
NV04-HR-15-B_00	Lamoille Creek at the Humboldt River	Temperature (SV)	Yes
NV04-HR-165_00	North Antelope Creek	Iron (96-hour)	No
NV04-HR-166_00	Willow Creek	Iron (96-hour)	No
NV04-HR-173_00	Thomas Creek	Escherichia coli (AGM)	No
NV04-RR-175_00	Stormy Creek	Total Dissolved Solids (SV)	No
NV04-HR-178_00	Emigrant Spring Drainage	Iron (96-hour)	No
		Phosphorus-Total (SV)	No
NV04-HR-182_00	Mosquito Canyon Creek	Iron (96-hour)	Yes
		Manganese	Yes
		Total Dissolved Solids (AA)	Yes
NV04-HR-188_00	Slaven Canyon Creek	Total Dissolved Solids (AA)	No
NV04-HR-198_00	Little Rock Creek	Temperature (SV)	No
NV04-HR-25-A_08	Lake Creek-Maggie Creek tributaries	Nickel (MDS)	No
		Temperature (SV)	No
		Zinc (1-hour)	No
NN/04 LID OF A OO	D: 0	Zinc (96-hour)	No
NV04-HR-25-A_09	Dip Creek-Maggie Creek tributaries	Phosphorus-Total (SV)	No
NV04-HR-26-B_00	Maggie Creek at Jack Creek	Phosphorus-Total (SV)	No
NV04-HR-34-A_00	Willow Creek at Willow Creek Reservoir	Phosphorus-Total (SV)	No
NVOA LID OF D OO	Millou Crosts December	Temperature (SV)	No
NV04-HR-35-B_00	Willow Creek Reservoir	Cadmium (96-hour)	No
		Dissolved Oxygen (SV)	No No
		Iron (96-hour)	No
		Manganese	No No
		Phosphorus-Total (SV)	No No
		Temperature (SV) Turbidity (SV)	No No
		Zinc (1-hour)	No No
		Zinc (96-hour)	No

Table E.1. (Cont'd)			
NV04-HR-56-B_00	Starr Creek	Escherichia coli (AGM)	Yes
		Temperature (SV)	Yes
NV04-HR-58_00	Pine Creek	Phosphorus-Total (SA)	Yes
		Total Dissolved Solids (AA)	Yes
NV04-HR-63_00	Jackstone Creek	Escherichia coli (AGM)	Yes
		Escherichia coli (SV)	Yes
		Phosphorus-Total (SA)	Yes
NV04-HR-67_00	Sherman Creek	Phosphorus-Total (SA)	Yes
NV04-HR-81_00	Rye Patch Reservoir	Chloride (SV)	Yes
		Phosphorus-Total (SA)	Yes
		Total Dissolved Solids (AA)	Yes
NV04-HR-95_00	Woodruff Creek	Phosphorus-Total (SA)	Yes
		Total Suspended Solids (AM)	Yes
		Turbidity (SV)	Yes
NV04-LH-191_00	Goosey Lake Creek	Temperature (SV)	No
NV04-LH-192_00	Snowstorm Creek	Temperature (SV)	No
NV04-LH-45-A_00	Little Humboldt River, North Fork at the national forest boundary	Temperature (SV)	No
NV04-LH-46-B_00	Little Humboldt River, North Fork at the South Fork of the Little Humboldt River	Escherichia coli (AGM)	No
		Temperature (SV)	No
NV04-LH-47-C_00	Little Humboldt River	Escherichia coli (AGM)	Yes
		Escherichia coli (SV)	Yes
		Iron	Yes
		Iron (96-hour)	Yes
		Phosphorus-Total (SV)	Yes
		Total Suspended Solids (SV)	Yes
		Turbidity (SV)	Yes
NV04-LH-48-A_00	Little Humboldt River, South Fork at the Elko-Humboldt county line	Temperature (SV)	No
NV04-LH-51-B_00	Martin Creek below the national forest boundary	Phosphorus-Total (SV)	No
NV04 LH 65_00	Road Creek	Cadmium (96-hour)	No
NV04-LH-95-B_00	Chimney Reservoir	Iron (96-hour)	No
		Phosphorus-Total (SV)	No
		Turbidity (SV)	No
		Temperature (SV)	No
NV04 LH 99_00	Secret Creek	Temperature (SV)	No
		Turbidity (SV)	No
NV04 MR 09 A_00	Mary's River, Upper	Phosphorus-Total (SV)	Yes
		Temperature (SV)	Yes
NV04-MR-11-A_00	Tabor Creek	Cadmium (1-hour)	No
		Nickel (1-hour)	No
		Turbidity (SV)	No
		Zinc (1-hour)	No
NV04-MR-121_00	T Creek	Temperature (SV)	No
NV04-NF-114_00	Pie Creek	Temperature (SV)	Yes
NV04-NF-125_00	Water Canyon Creek	Total Dissolved Solids (SV)	No
<del>_</del>	·	Total Suspended Solids (SV)	No
NV04 NF 126_02	Sammy Creek	Total Dissolved Solids (SV)	No
_	·	Total Suspended Solids (SV)	No

Table E.1. (Cont'd)			
NV04-NF-127_00	Dry Creek-Humboldt River, North Fork and tributaries at the national forest boundary	Nickel	No
		Total Dissolved Solids (SV)	No
		Total Suspended Solids (SV)	No
NV04-NF-137_00	Gance Creek	Temperature (SV)	Yes
NV04 NF 142_00	Cabin Creek	Temperature (SV)	No
NV04-NF-16-A_01	Humboldt River, North Fork-Humboldt River, North Fork and tributaries at the national forest boundary	Total Suspended Solids (SV)	No
NV04-NF-16-A_02	Humboldt River, North Fork-Humboldt River, North Fork and tributaries at the national forest boundary	Manganese	No
		Total Dissolved Solids (SV)	No
		Total Suspended Solids (SV)	No
NV04-NF-17-B_00	Humboldt River, North Fork at Beaver Creek	Iron (96-hour)	Yes
		Phosphorus-Total (SV)	Yes
		Temperature (SV)	Yes
		Total Suspended Solids (SV)	Yes
		Turbidity (SV)	Yes
NV04-NF-56-B_00	Humboldt River, North Fork at the Humboldt River	Phosphorus-Total (SV)	Yes
NV04 NF 75_00	Beaver Creek	Temperature (SV)	No
NV04 NF 76_00	Beaver Creek, East Fork	Temperature (SV)	No
NV04-NF-93_00	Sheep Creek	Nickel	No
		Phosphorus-Total (SV)	No
		Total Dissolved Solids (SV)	No
		Total Suspended Solids (SV)	No
NV04_RR-158_00	Little Sawmill Creek	Temperature (SV)	No
NV04-RR-174_00	Marysville Creek	Escherichia coli (AGM)	No
NV04-RR-37-A_00	Reese River at Indian Creek	Temperature (SV)	No
NV04-RR-38-B_00	Reese River at State Route 722	Temperature (SV)	No
NV04-RR-43-A_00	Mill Creek	Phosphorus-Total (SV)	No
		Turbidity (SV)	No
NV04 SF 112_00	Little Porter Creek	Phosphorus-Total (SV)	No
NV04-SF-113_00	Pearl Creek	Temperature (SV)	No
		Turbidity (SV)	No
NV04-SF-116_00	Robinson Creek	Temperature (SV)	No
		Turbidity (SV)	No
NV04-SF-131_00	Tenmile Creek	Escherichia coli (AGM)	Yes
		Iron (96-hour)	Yes
		Temperature (SV)	Yes
		Total Suspended Solids (SV)	Yes
		Turbidity (SV)	Yes
NV04-SF-20-A_00	Huntington Creek at the White Pine-Elko county line	Temperature (SV)	No
NV04-SF-21-B_00	Huntington Creek at Smith Creek	Temperature (SV)	Yes
NV04-HR-05_00	Green Mountain Creek at Toyn Creek	Temperature (SV)	No
NV04-SF-23-B_00	Toyn Creek at Corral Creek	Temperature (SV)	No
NV04-SF-24-A_00	Toyn Creek at Green Mountain Creek	Temperature (SV)	No
NV04-SF-57-B_00	Huntington Creek at the South Fork of the Humboldt River	Total Dissolved Solids (SV)	Yes
NV04-SF-62_00	Dixie Creek	Escherichia coli (AGM)	No
		Phosphorus-Total (SV)	No

Table E.1. (Cont'd)			
NV04-SF-82_00	South Fork Reservoir	Nitrogen-Total (SA)	Yes
		Temperature (SV)	Yes
	Truckee River Region		
NV06 SC 40 C_00	Washoe Lakes	Iron (96-hour)	Yes
		Phosphorus-Total (SV)	Yes
		Total Dissolved Solids (SV)	Yes
NV06-SC-41-C 00	Steamboat Creek at the gaging station	Escherichia coli (AGM)	Yes
_		Escherichia coli (SV)	Yes
		Phosphorus-Total (SV)	Yes
NV06-SC-42-D 00	Steamboat Creek at the Truckee River	Escherichia coli (AGM)	Yes
_		Iron (96-hour)	Yes
		Manganese	Yes
NV06 SC 43 A 00	Franktown Creek, Upper	Cadmium (96-hour)	No
NV06 SC 53 A 00	Whites Creek, Upper	Cadmium (1-hour)	No
_		Cadmium (96-hour)	No
NV06 SC 55 A_00	Thomas Creek	Cadmium (96-hour)	No
NV06 SC 56 B 00	Thomas Creek	Escherichia coli (AGM)	No
NV06-SC-62 00	Evans Creek	Escherichia coli (AGM)	Yes
NV06-SC-63-B 01	Whites Creek, North Fork-Whites Creek at Steamboat Creek	Escherichia coli (AGM)	Yes
NV06-SC-63-B 03	Whites Creek, Middle Fork-Whites Creek at Steamboat Creek	Escherichia coli (AGM)	Yes
11100 00 00 0_00	Trince Grook, initials Fork Trince Grook at Steamboat Grook	Phosphorus-Total (SV)	Yes
NV06-SC-69 00	Dry Creek	Escherichia coli (AGM)	Yes
NV06-TB-106 00	Unnamed Creek near Diamond Peak	Dissolved Oxygen (SV)	No
11100 12 100_00	Janona Janona Janona Janona	Phosphorus-Total (SV)	No
NV06-TB-12 00	Third Creek, East Fork; Third Creek, West Fork; and Third Creek	Cadmium (1-hour)	Yes
		Cadmium (96-hour)	Yes
NV06-TB-13_00	Third Creek, East Fork at State Route 341	Cadmium (1-hour)	No
	······································	Cadmium (96-hour)	No
NV06-TB-16 00	Incline Creek, East Fork; Incline Creek West Fork; and Incline Creek	Iron (96-hour)	Yes
		Phosphorus-Total (SV)	Yes
NV06-TB-20 00	Marlette Creek-Lake Tahoe Tributaries	Cadmium (96-hour)	Yes
		Phosphorus-Total (AA)	Yes
NV06-TB-22 00	North Canyon Creek-Lake Tahoe tributaries	Iron (96-hour)	Yes
NV06-TB-25 00	Spooner Lake-Lake Tahoe tributaries	Temperature (SV)	Yes
		Turbidity (SV)	Yes
NV06-TB-26 00	Glenbrook Creek	Escherichia coli (AGM)	Yes
11100 12 20_00	Cionbiodit Greek	Iron (96-hour)	Yes
		Phosphorus-Total (AA)	Yes
NV06 TB 33 00	Edgewood Creek at Palisades Drive	Phosphorus-Total (AA)	No
NV06-TB-34_00	Eagle Rock Creek	Phosphorus-Total (AA)	No
NV06-TR-01 00	Truckee River at the state line	Cadmium (96-hour)	Yes
NV06-TR-03 00	Truckee River at East McCarran	Temperature (SV)	Yes
NV06-TR-04 00	Truckee River at Lockwood Bridge	Turbidity (SV)	Yes
NV06-TR-05_00	Truckee River at Derby Dam	Temperature (SV)	Yes
	Truckes tares at Borby Built	Turbidity (SV)	Yes
NV06-TR-57-D_00	Lagomarsino Creek (Long Valley Creek)	Iron (96-hour)	Yes
11100 11107 B_00	Edgoridionio Orook (Eorig Valley Orook)	Manganese	Yes
		Manganese	103

Table E.1. (Cont'd)			
NV06-TR-65_00	Sparks Marina	Dissolved Oxygen (SV)	Yes
		Manganese	Yes
		Nitrogen-Total (AA)	Yes
		Phosphorus-Total (AA)	Yes
		Total Dissolved Solids (AA)	Yes
NV06-TB-76 00	Alum Creek	Temperature (SV)	Yes
_		Total Dissolved Solids (AA)	Yes
NV06-TR-77 00	Chalk Creek	Nitrate (SV)	Yes
_		Orthophosphate (SV)	Yes
		Phosphorus-Total (AA)	Yes
		Total Dissolved Solids (AA)	Yes
		Temperature (SV)	Yes
	Carson River Region		
NV08-CR-01 00	Carson River, West Fork at the State line	Cadmium (1-hour)	No
NV08-CR-02 00	Bryant Creek near the State line	Phosphorus-Total (SV)	No
NV08-CR-03 00	Carson River, East Fork at the State line	Total Suspended Solids (SV)	No
		Turbidity (SV)	No
NV08 CR 04_00	Carson River, East Fork at US Highway 395 south of Gardnerville	Cadmium (1-hour)	Yes
	• · · · · · · · · · · · · · · · · · · ·	Iron (96-hour)	Yes
		Temperature (SV)	Yes
NV08-CR-05 01	Carson River, East Fork at Muller Lane	Temperature (SV)	Yes
NV08-CR-05_02	Carson River, East Fork at the West Fork	Temperature (SV)	Yes
NV08-CR-06_01	Carson River at Genoa Lane	Escherichia coli (AGM)	Yes
		Iron (96-hour)	Yes
NV08-CR-06 02	Carson River at Genoa Lane	Temperature (SV)	Yes
NV08-CR-07 00	Carson River at Cradlebaugh Bridge	Dissolved Oxygen (SV)	Yes
		Temperature (SV)	Yes
NV08-CR-08 00	Carson River at the Mexican Ditch Gage	Escherichia coli (AGM)	Yes
_		Iron (96-hour)	Yes
		Manganese	Yes
		Temperature (SV)	Yes
NV08-CR-09 00	Carson River near New Empire	Iron (96-hour)	Yes
NV08-CR-11 00	Carson River at Lahontan Reservoir	Iron (96-hour)	Yes
		Manganese	Yes
NV08-CR-13-C_01	Lower Carson River	Iron (96-hour)	Yes
NV08-CR-13-C 02	Carson River, Lower	Iron (96-hour)	Yes
NV08 CR 20 A 00	Ash Canyon	Cadmium (1-hour)	No
_	,	Cadmium (96-hour)	No
NV08-CR-24-C 00	Diagonal Drain	Dissolved Oxygen (SV)	Yes
_	, and the second se	Iron (96-hour)	Yes
		Phosphorus-Total (SV)	Yes
		Total Dissolved Solids (SV)	Yes
NV08-CR-26-C 00	Harmon Reservoir	Iron (96-hour)	No
NV08-CR-28-D_00	Stillwater Marsh west of Westside Road	Escherichia coli (AGM)	Yes
NV08-CR-29 00	Brockliss Slough, including East and West Branches	Escherichia coli (SV)	Yes
		Iron (96-hour)	Yes
		Phosphorus-Total (SV)	Yes

Table E.1. (Cont'd)			
NV08-CR-32_00	Indian Creek	Phosphorus-Total (AA)	No
		Temperature (SV)	No
NV08-CR-46_00	Lahontan Reservoir	Dissolved Oxygen (SV)	Yes
		Iron	Yes
		Iron (96-hour)	Yes
		Manganese	Yes
NV08-CR-47 00	Ambrosetti Pond	Temperature (SV)	Yes
_		Phosphorus-Total (AA)	Yes
		Turbidity (SV)	Yes
NV08-CR-53 00	Virginia Creek (Six Mile Canyon)	Total Dissolved Solids (AA)	Yes
NV08-CR-53 01	Bonanza Creek	Cadmium	No
_		Cadmium (96-hour)	No
		Nickel	No
		Total Dissolved Solids (AA)	No
	Walker River Region	()	
NV09-WR-01 00	Walker River, West Fork at the state line	Phosphorus-Total (AA)	No
NV09-WR-04 00	Walker River, West Fork at the East Fork of the Walker River	Iron (96-hour)	Yes
_		Phosphorus-Total (AA)	Yes
NV09-WR-07 00	Walker River, East Fork at Bridge B-1475	Phosphorus-Total (AA)	Yes
		Temperature (SV)	Yes
NV09-WR-08 00	Walker River, East Fork at the West Fork of the Walker River	Iron	Yes
	<i>,</i>	Iron (96-hour)	Yes
		Manganese	Yes
		Phosphorus-Total (AA)	Yes
NV09-WR-09 00	Walker River at the Walker River Indian Reservation	Iron (96-hour)	Yes
		Temperature (SV)	Yes
NV09-WR-10 00	Walker River at Walker Lake	Phosphorus-Total (AA)	Yes
		Total Dissolved Solids (AA)	Yes
		Temperature (SV)	Yes
NV09-WR-11 00	Walker Lake	Phosphorus-Total (SV)	Yes
_	North Pond-Mason Valley Wildlife Management Area-Bass, Crappie and North Ponds and Hinkson	. ,	
NV09-WR-13-C_01	Slough	Dissolved Oxygen (SV)	No
	2.54gii	Phosphorus-Total (SV)	No
		Total Dissolved Solids (SV)	No
NV09-WR-18-A 00	Corey Creek	Phosphorus-Total (SV)	No
11.55 111 1571_00	55.5 <sub>1</sub> 5156K	Total Dissolved Solids (SV)	No
NV09-WR-19 00	Rough Creek	Phosphorus-Total (AA)	No
NV09-WR-20 00	Rough Creek	Iron (96-hour)	No
	Trough Grook	Phosphorus-Total (AA)	No
NV09-WR-21_00	Bodie Creek	Phosphorus-Total (AA)	No
11700 1711 21_00	Central Region	. Heepherde Fotal (784)	. 10
NV10-CE-26-B 00	Ruby Marsh	Temperature (SV)	No
NV10 CE 27 A 00	Angel Lake	Cadmium (1-hour)	No
	:g-: =====	Cadmium (96-hour)	No
		Zinc (1-hour)	No
		Zinc (96-hour)	No
L		(55 11641)	

Table E.1. (Cont'd)			
NV10-CE-30-C_00	Gleason Creek at State Highway 485	Copper (1-hour)	Yes
		Copper (96-hour)	Yes
NV10-CE-31-D_00	Gleason Creek at Murry Creek	Copper (1-hour)	Yes
		Copper (96-hour)	Yes
NV10-CE-35-A_00	East Creek	Escherichia coli (AGM)	No
NV10 CE 37 A 00	Timber Creek	Cadmium (96-hour)	No
NV10 CE 57 00	Illipah Creek	Iron (96-hour)	Yes
_	Colorado River Region		
NV13 CL 04 00	Inner Las Vegas Bay	Dissolved Oxygen (SV)	Yes
NV13-CL-07 00	Virgin River at Mesquite	Dissolved Oxygen (SV)	Yes
_		Iron (96-hour)	Yes
		Phosphorus-Total (AA)	Yes
		Temperature (SV)	Yes
NV13-CL-08 00	Virgin River at the state line	Phosphorus-Total (AA)	No
NV13-CL-09 00	Virgin River at Lake Mead	Fecal Coliform (SV)	Yes
	3	Phosphorus-Total (AA)	Yes
		Turbidity (SV)	Yes
NV13-CL-10 00	Beaver Dam Wash	Temperature (SV)	No
NV13-CL-11 01	Muddy River at the Warm Springs Bridge	Escherichia coli (AGM)	Yes
NV13CL-11 02	Muddy River at the Glendale Bridge	Turbidity (SV)	Yes
NV13-CL-12 01	Muddy River at the Wells Siding Diversion	Iron (96-hour)	Yes
NV13-CL-12 02	Muddy River at Lake Mead	Escherichia coli (AGM)	Yes
111 10 02 12_02	mady throi at Lake Meda	Escherichia coli (SV)	Yes
		Fecal Coliform (SV)	Yes
		Phosphorus-Total (AA)	Yes
		Turbidity (SV)	Yes
NV13-CL-20-B_00	Hay Meadow Reservoir	Dissolved Oxygen (SV)	Yes
144 10 GE 20 B_00	Tray Moddow Nobol Voli	Total Dissolved Solids (SV)	Yes
NV13-CL-21-C 00	Nesbitt Lake	Total Dissolved Solids (SV)	Yes
NV13-CL-25-C 00	Echo Canyon Reservoir	Temperature (SV)	No
NV13-CL-32_00	Meadow Valley Wash	Temperature (SV)	Yes
NV13-CL-34_00	Tule Field Reservoir	Total Dissolved Solids (SV)	Yes
NV13-CL-35 00	Cold Springs Reservoir	Total Dissolved Solids (SV)	Yes
NV13-CL-38_00	Lake Mohave	Temperature (SV)	No
NV13 CL 39 00	Flamingo Wash	Iron (96-hour)	Yes
147 13 GE 39_00	i lanlingo wasii	Total Suspended Solids (SV)	Yes
NV13-CL-42 00	Duck Creek	Temperature (SV)	Yes
14V 10-0L-42_00	Duck Oleck	Total Dissolved Solids (SV)	Yes
NV13-CL-45 00	Las Vegas Wash above Treatment Plants	Escherichia coli (AGM)	Yes
14 V 13-OL-43_00	Las vegas vvasii abuve Healillelii Flatiis	Iron (96-hour)	Yes
		Total Dissolved Solids (SV)	Yes
		Total Dissolved Solids (SV)  Total Suspended Solids (SV)	Yes
NV13-CL-49 00	Pittman Wash	Total Dissolved Solids (SV)	Yes
NV 13-CL-49_00	Pillman wasn	Total Dissolved Solids (SV)	res

Table E.2. 2020-2022 Water Quality Integrated Report - Summary of TMDL Waterbodies Impaired by Potential Transportation Related Pollutants.

Waterbody ID	Water Name	Parameter	Impaired Reach(es Potentially Impacte from NDOT's MS4
NV03-OW-18_00	Owyhee River, above Mill Creek-From Wildhorse Reservoir to its confluence with Mill Creek	Iron (Total)	Yes
		Phosphorus (Total)	Yes
		Temperature	Yes
		Total Suspended Solids	Yes
		Turbidity	Yes
NV03-OW-19_01	Owyhee River, below Mill Creek-From its confluence with Mill Creek to the border of the Duck Valley Indian Reservation	Copper (Dissolved)	Yes
		Iron (Total)	Yes
		Phosphorus (Total)	Yes
		Temperature	Yes
		Total Suspended Solids	Yes
		Turbidity	Yes
NV03-OW-34_00	Mill Creek-From Rio Tinto Mine to the Owyhee River	Cadmium (Total and Dissolved)	No
		Copper (Total and Dissolved)	No
		Dissolved Oxygen	No
		Iron (Total)	No
		Phosphorus (Total)	No
		Temperature	No
		Total Dissolved Solids	No
		Total Suspended Solids	No
		Turbidity	No
NV03-OW-83_00	Rio Tinto Gulch-From its origin to Mill Creek	Cadmium (Total and Dissolved)	No
		Copper (Total and Dissolved)	No
		Dissolved Oxygen	No
		Iron (Total)	No
		Phosphorus (Total)	No
		Temperature	No
		Total Dissolved Solids	No
		Total Suspended Solids	No
		Turbidity	No
NV04-HR-02_00	Humboldt River at Palisade-From Osino to Palisade	Phosphorus (Total)	Yes
		Total Suspended Solids	Yes
NV04-HR-03_00	Humboldt River at Battle Mountain-From Palisade to Battle Mountain	Phosphorus (Total)	Yes
		Total Suspended Solids	Yes
NV04-HR-04_00	Humboldt River at State Highway 789-From Battle Mountain to Comus	Phosphorus (Total)	Yes
		Total Dissolved Solids	Yes
		Total Suspended Solids	Yes

IV04-HR-05_00	Humboldt River at Imlay-From Comus to Imlay	Phosphorus (Total)	Yes
		Total Dissolved Solids	Yes
		Total Suspended Solids	Yes
V04-MR-98_00	Hanks Creek-From its origin to its confluence with Marys River	Temperature	No
IV04-SF-62_00	Dixie Creek-From its origin to its confluence with Marys River	Temperature	No
NV06-TB-08_00	Lake Tahoe-The entire lake (Nevada portion)	Dissolved Oxygen	Yes
		Phosphorus (Dissolved)	Yes
		Total Soluble Inorganic N as N	Yes
		Clarity <sup>1</sup>	Yes
		Plankton Count <sup>1</sup>	Yes
NV06-TR-04 00	Truckee River at Lockwood Bridge-From East McCarran Blvd to Lockwood	Total Nitrogen	Yes
1000-110-04_00	Truckee Niver at Lockwood Bridge-1 form Last McCarrait Bivd to Lockwood	Total Phosphorus	Yes
		Total Dissolved Solids	Yes
IV06-TR 05 00	Truckee River at Derby Dam-From Lockwood to Derby Dam	Nitrogen (Total)	Yes
V 00-11\_03_00	Truckee triver at berby barrer form bookwood to berby barre	Phosphorus (Total)	Yes
		Total Dissolved Solids	Yes
NV06-TR-06 00	Truckee River at the Pyramid Lake Paiute Reservation-From Derby Dam to Wadsworth	Nitrogen (Total)	Yes
1V00-1K-00_00	Truckee River at the Fyramiu Lake Falute Reservation-From Delby Dam to Wadsworth	Phosphorus (Total)	Yes
		Total Dissolved Solids	Yes
IV08-CR-02 00	Bryant Creek near the state line-At the Nevada-California state line	Iron (Total)	No
1VU0-CR-U2_UU	bryant Creek flear the state line-At the Nevada-Camornia state line	` ,	
		Nickel (Total)	No
		Total Suspended Solids	No
		Turbidity	No
IV08-CR-04_00	Carson River, East Fork at US Highway 395 south of Gardnerville-From the Nevada-California state line to Riverview Mobile Home Park at US Highway 395 south of Gardnerville, except for the length of the river within the exterior borders of the Washoe Indian Reservation	Phosphorus (Total)	No
		Total Suspended Solids	Nο
		Total Suspended Solids Turbidity	No No
	Carson River Fast Fork at Muller Lane-From the Riverview Mobile Home Park at US Highway 395	Turbidity	No No
NV08-CR-05_01	Carson River, East Fork at Muller Lane-From the Riverview Mobile Home Park at US Highway 395 to Muller Lane, except for the length of the river within the exterior borders of the Washoe Indian Reservation	Turbidity	
IV08-CR-05_01	to Muller Lane, except for the length of the river within the exterior borders of the Washoe Indian	Turbidity  Phosphorus (Total)	No
IV08-CR-05_01	to Muller Lane, except for the length of the river within the exterior borders of the Washoe Indian	Turbidity	No Yes
IV08-CR-05_01 IV08-CR-05_02	to Muller Lane, except for the length of the river within the exterior borders of the Washoe Indian	Turbidity  Phosphorus (Total)  Total Suspended Solids	No Yes Yes
	to Muller Lane, except for the length of the river within the exterior borders of the Washoe Indian Reservation	Turbidity  Phosphorus (Total)  Total Suspended Solids  Turbidity  Total Phosphorus	Yes Yes Yes Yes
	to Muller Lane, except for the length of the river within the exterior borders of the Washoe Indian Reservation	Turbidity  Phosphorus (Total)  Total Suspended Solids Turbidity  Total Phosphorus  Total Suspended Solids	Yes Yes Yes Yes Yes Yes
- IV08-CR-05_02	to Muller Lane, except for the length of the river within the exterior borders of the Washoe Indian Reservation  Carson River, East Fork at the West Fork-From Muller Lane to the West Fork, Carson River	Turbidity  Phosphorus (Total)  Total Suspended Solids Turbidity  Total Phosphorus  Total Suspended Solids Turbidity	Yes Yes Yes Yes Yes Yes Yes Yes
	to Muller Lane, except for the length of the river within the exterior borders of the Washoe Indian Reservation	Turbidity  Phosphorus (Total)  Total Suspended Solids Turbidity  Total Phosphorus  Total Suspended Solids	Yes Yes Yes Yes Yes Yes

<sup>&</sup>lt;sup>1</sup>Decreased water clarity and increased plankton count, though not pollutants per se, are water quality parameters of concern associated with the Lake Tahoe TMDL, specifically, that can be influenced by increased loadings of specific transportation related pollutants (notably nitrogen, phosphorus, and sediment). The Lake Tahoe TMDL lists the NDOT as a party responsible for the implementation of pollutant controls to help protect and restore Lake Tahoe's clarity, which plankton count and sediment directly influence.

Carson River at Genoa Lane-Carson River, East Fork from Muller Lane to the West Fork, Carson River West Fork from Muller Lane to the East Fork and Carson River from the confluence of the	Phosphorus (Total)	Yes
East and West Forks to Genoa Lane		. 55
	Total Suspended Solids	Yes
	Turbidity	Yes
Carson River at Cradlebaugh Bridge-From Genoa Lane to US Highway 395 at Cradlebaugh		
Bridge, except for the length of the river within the exterior borders of the Washoe Indian Reservation	Phosphorus (Total)	Yes
	Total Suspended Solids	Yes
	Turbidity	Yes
Carson River at the Mexican Ditch Gage-From Cradlebaugh Bridge to Mexican Ditch Gage	Phosphorus (Total)	Yes
	Total Suspended Solids	Yes
	Turbidity	Yes
Carson River near New Empire-From Mexican Ditch Gage to New Empire	Phosphorus (Total)	Yes
	Total Suspended Solids	Yes
	Turbidity	Yes
Carson River at Dayton Bridge-From New Empire to Dayton Bridge	Phosphorus (Total)	Yes
	Total Suspended Solids	Yes
	Turbidity	Yes
Carson River at Lahontan Reservoir-From Dayton Bridge to Lahontan Reservoir (segment NV08- CR-12 00 combined with this segment in 2018 NAC revisions)	Phosphorus (Total)	Yes
	Total Suspended Solids	Yes
	Turbidity	Yes
Brockliss Slough, including East and West Branches-its entire length	Turbidity	Yes
Walker River, East Fork from stateline to Bridge B-1475	Total Suspended Solids	Yes
Walker River, East Fork at the West Fork of the Walker River-From Bridge B-1475 to its confluence with the West Fork Walker River	Total Suspended Solids	Yes
Walker River at the Walker River Indian Reservation-From the confluence of the East Fork and West Fork Walker River to the boundary of the Walker River Indian Reservation	Total Suspended Solids	Yes
Walker Lake-Entire Lake	Total Dissolved Solids	Yes
Las Vegas Wash at Lake Mead-From Telephone Line Road to the confluence with Lake Mead	Phosphorus (Total)	Yes
	River, West Fork from Muller Lane to the East Fork, and Carson River from the confluence of the East and West Forks to Genoa Lane  Carson River at Cradlebaugh Bridge-From Genoa Lane to US Highway 395 at Cradlebaugh Bridge, except for the length of the river within the exterior borders of the Washoe Indian Reservation  Carson River at the Mexican Ditch Gage-From Cradlebaugh Bridge to Mexican Ditch Gage  Carson River near New Empire-From Mexican Ditch Gage to New Empire  Carson River at Dayton Bridge-From New Empire to Dayton Bridge  Carson River at Lahontan Reservoir-From Dayton Bridge to Lahontan Reservoir (segment NV08-CR-12_00 combined with this segment in 2018 NAC revisions)  Brockliss Slough, including East and West Branches-its entire length Walker River, East Fork at the West Fork of the Walker River-From Bridge B-1475 to its confluence with the West Fork Walker River  Walker River at the Walker River Indian Reservation-From the confluence of the East Fork and West Fork Walker River Indian Reservation Walker Lake-Entire Lake	River, West Fork from Muller Lane to the East Fork, and Carson River from the confluence of the East and West Forks to Genoa Lane  Carson River at Cradlebaugh Bridge-From Genoa Lane to US Highway 395 at Cradlebaugh Bridge, except for the length of the river within the exterior borders of the Washoe Indian Reservation  Carson River at the Mexican Ditch Gage-From Cradlebaugh Bridge to Mexican Ditch Gage  Carson River near New Empire-From Mexican Ditch Gage to New Empire  Carson River at Dayton Bridge-From New Empire to Dayton Bridge  Carson River at Lahontan Reservoir-From Dayton Bridge to Lahontan Reservoir (segment NV08-CR-12_00 combined with this segment in 2018 NAC revisions)  Carson River, East Fork at the West Fork of the Walker River, Form Bridge B-1475  Walker River, East Fork at the West Fork of the Walker River-From Bridge B-1475 to its confluence with the West Fork Walker River at the Walker River Indian Reservation—From the confluence of the East Fork and West Fork Walker River Indian Reservation  Walker Lake-Entire Lake  Phosphorus (Total)  Total Suspended Solids  Turbidity  Total Suspended Solids  Total Sus

Appendix F

Lake Tahoe TMDL Interlocal Agreement

## INTERLOCAL AGREEMENT

TO IMPLEMENT THE

## LAKE TAHOE TOTAL MAXIMUM DAILY LOAD

## Water Years 2022-2026

**WHEREAS,** Lake Tahoe is one of the rare large alpine deepwater lakes in the world with unique transparency, color and clarity, and is designated a Water of Extraordinary Aesthetic or Ecologic Value by the State of Nevada;

**WHEREAS**, degradation of Lake Tahoe's water quality threatens its ecological functions and its value as an outdoor recreational resource, international tourism attraction, and economic asset;

**WHEREAS**, stormwater runoff from urban land uses is the largest source of pollutant loads that impairs Lake Tahoe water quality and the management and control of storm water runoff provides the principal opportunity to control these pollutants;

**WHEREAS**, to restore Lake Tahoe's water quality and clarity to acceptable levels, the United States Environmental Protection Agency (USEPA) approved the Lake Tahoe Total Maximum Daily Load (TMDL) in August 2011. Pursuant to NRS 445A.580, the Lake Tahoe TMDL is a component of the planning process established for restoring impaired water bodies in Nevada, which the Parties believe may be more effectively achieved through the cooperative implementation of water quality improvement actions as opposed to a regulatory permit;

WHEREAS, the Parties are public agencies as defined in NRS 277.100(1)(a);

**WHEREAS,** NRS 277.110(2) provides that any two or more public agencies may enter into agreements with one another for joint or cooperative action under the provisions of NRS 277.080 to 277.170, inclusive;

**WHEREAS**, the Parties agree to work together in good faith using a collaborative approach to implement the Lake Tahoe TMDL on a feasible schedule;

**NOW, THEREFORE,** the Parties hereby execute and abide by the terms and conditions contained within this Interlocal Agreement (Agreement).

#### I. PARTIES & ROLES

- A. The *Parties* to this Agreement are the Nevada Department of Transportation (NDOT) and the Nevada Division of Environmental Protection (NDEP). Herein, these entities shall be collectively referred to as the *Parties*. Any singular entity may be referred to as *Party*. The term *Urban Implementing Partners* refers collectively to the TMDL-implementing entities: Washoe County, Douglas County and the Nevada Department of Transportation (NDOT).
- B. NDOT will serve as the lead entity for all undertakings related to the planning, execution, financing and coordination of implementation, tracking and reporting of urban load reduction actions within its jurisdiction. NDOT will communicate, coordinate and cooperate with public and private entities, including other Urban Implementing Partners, in cases where joint management actions are desirable or beneficial. It may be necessary to establish formal agreements with applicable participatory public and private entities to achieve the Purpose (Section III) of this Agreement. At NDOT's request, NDEP will actively participate in the coordination and establishment of such agreements.
- C. NDEP will oversee implementation of the Lake Tahoe TMDL within the State of Nevada via this Agreement while it remains in effect. NDEP will continuously improve and adaptively manage in a transparent and inclusive manner, programs, policies and protocols necessary to track, report, evaluate and demonstrate incremental progress towards achieving the goals established by the TMDL.

#### II. BACKGROUND

- A. The Federal Clean Water Act requires states to adopt standards to protect beneficial uses designated for waterbodies and to monitor and assess these waters for impairment. Assessment of Lake Tahoe monitoring data prompted its initial listing on Nevada's 2002 List of Impaired Waterbodies for non-attainment of the clarity standard and impairment of the Water of Extraordinary Aesthetic or Ecologic Value beneficial use designation.
- B. Non-attainment of water quality standards requires the development of restoration plans called Total Maximum Daily Loads under the federal Clean Water Act. The Nevada Division of Environmental Protection (NDEP) collaborated with the California Lahontan Regional Water Quality Control Board (Lahontan Water Board) for more than a decade to develop the Lake Tahoe TMDL to address Lake Tahoe's degraded clarity. The USEPA approved NDEP's TMDL on August 16, 2011.
- C. The overarching goal of the TMDL is to return Lake Tahoe to its historic annual average deepwater clarity of 97.4 feet (Numeric Target). The TMDL also established an interim goal termed the "Clarity Challenge" that, when achieved, is anticipated will indicate reversal of the historic declining clarity trend. It is expected that achieving the 15-year pollutant load reduction milestone in 2026,

will result in an annual average clarity of 78 feet as measured over the period from 2026-2031.

- D. The TMDL identified fine sediment particles (FSP), total phosphorus (TP) and total nitrogen (TN) as the pollutants of concern for deepwater clarity. Each controls the distance that light is able to penetrate into the water column. However, the light scattering effect of FSP less than sixteen micrometers in diameter (<16 µm) was determined to exhibit a greater influence on clarity.
- E. The TMDL analysis indicated that achieving the TMDL goal is possible with substantial pollutant load reductions from the urban stormwater source category. Stormwater runoff from urban land uses is the largest loading source of FSP and phosphorus to the Lake and also the greatest opportunity to reduce loadings of these pollutants. Broader application of conventional urban stormwater treatment will be beneficial; however, implementation of innovative and advanced pollutant controls are likely necessary to meet TMDL goals. Examples include: alternatives to roadway abrasives applications, advanced roadway sweeping practices and equipment, and enhanced stormwater treatment using biological or chemical processes.
- F. The TMDL establishes five-year pollutant load reduction milestones for the urban stormwater source category as indicated in Table 1, assuming that global climate change, catastrophic events, economic factors, and/or other unavoidable constraints do not adversely affect progress.

Table 1. Urban stormwater pollutant load reduction milestone schedule established by the Lake Tahoe TMDL. MS = milestone; Year = water year in which milestone ends (September 30 of indicated year); FSP = Fine Sediment Particles; TP = Total Phosphorous; TN = Total Nitrogen. Percent reductions are from jurisdiction baseline values shown in Table 2. Shading represents the timeframe under this agreement.

	Five-year Pollutant Load Reduction Milestone Schedule												
MS	5 yr	10 yr	15 yr	20 yr	25 yr	30 yr	35 yr	40 yr	45 yr	50 yr	55 yr	60 yr	65 yr
Year	2016	2021	2026	2031	2036	2041	2046	2051	2056	2061	2066	2071	2076
FSP	10%	21%	34%	38%	41%	45%	48%	52%	55%	59%	62%	66%	71%
TP	7%	14%	21%	23%	26%	28%	31%	33%	36%	38%	41%	44%	46%
TN	8%	14%	19%	22%	25%	28%	31%	34%	37%	40%	43%	46%	50%

Table 2. WY 2021 refined baseline pollutant loads provided in WY 2020 Stormwater Program Annual Report.

Pollutant	FSP	TP	TN
NDOT baseline load (#/yr)	203,591	564	1,699

G. The Lake Clarity Crediting Program (LCCP) was developed jointly by NDEP and the Lahontan Water Board to define standardized protocols for the comprehensive and consistent quantification, tracking and reporting of load reduction actions taken by local governments and state transportation agencies. The program incentivizes Urban Implementing Partners to implement priority

controls to meet load reduction targets and provides accountability for the expenditures of public funds on such actions.

#### III. PURPOSE

The purpose of this Agreement is to formally establish a commitment by each signatory Party to make a collective effort to restore and protect Lake Tahoe's clarity. This Agreement outlines goals, commitments and actions which the Parties agree to pursue in good faith. In identifying the actions and responsibilities of each Party, this Agreement provides the framework for the successful implementation of the Lake Tahoe TMDL, and the attainment of the goals set forth therein, on a feasible schedule. Inherent in the use of this agreement-based approach is the acknowledgement that implementation success is, in part, dependent upon the establishment of a process that cultivates collaboration and cooperation between NDOT and NDEP.

#### IV. COMMITMENTS & ACTIONS

The Parties hereby commit to implement the following actions, and abide by the following conditions:

#### A. Pollutant Controls

- NDOT will prepare and maintain a Stormwater Load Reduction Plan (SLRP) that
  specifies the priority list of pollutant control actions and projects NDOT has
  registered and anticipates registering through the LCCP (Section IV.B) to meet
  the credit milestones and targets contained in Table 3. The Parties acknowledge
  that planning beyond the term of the agreement is needed to ensure future load
  reduction targets will be met. The SLRP shall be maintained as a five-year
  schedule that is updated and reported as a component of the Stormwater
  Program Annual Report (Section IV.D).
- 2. NDOT will implement, operate, inspect, and maintain the pollutant controls identified in the SLRP according to the schedule indicated. NDOT will oversee and coordinate financing for all aspects of pollutant control implementation including planning and design, construction, and activities related to LCCP participation. NDOT, as an implementing entity, will pursue self-funded and external funding sources to implement the SLRP. NDOT acknowledges and accepts the responsibility to fund operations and maintenance of the pollutant controls implemented.

#### B. Lake Clarity Crediting Program (LCCP)

 NDOT will participate in the LCCP. NDOT will register and verify pollutant controls in accordance with the protocols specified in the current LCCP Handbook version. Improvements to LCCP protocols or tools will not require adjustments to load reduction estimates or credit schedules of registrations in effect at the time such programmatic changes are made.

- 2. NDEP will administer the LCCP in accordance with the LCCP Handbook. NDOT implementation progress will be measured, tracked and assessed in accordance with the protocols contained in the LCCP Handbook. Credits will be awarded to NDOT for the continued implementation and registration of ongoing, effective pollutant controls that reduce pollutant loads to Lake Tahoe.
- 3. NDOT will strive to achieve the five-year credit milestones (milestones) and intermediate annual credit targets (targets) established in Table 3. Attainment of the five-year credit milestones will demonstrate accomplishment of the FSP load reduction milestones established by the TMDL and should result in commensurate nutrient load reductions shown in Table 3.
  - a. Annual credit targets established for intermediate years are guidelines used for the purpose of demonstrating incremental progress toward attaining five-year milestones and will not be used to determine compliance with this agreement on an annual basis.
  - b. NDOT may propose an alternate schedule of intermediate credit targets that are better aligned with planned implementation activities and include updates to the intervening goals in the Stormwater Program Annual Report.

Table 3. Five-year credit milestones (bold) and intermediate annual credit targets and corresponding fine sediment particle and nutrient load reductions. The 2021 credit milestone has been carried over from the 2016-2021 Interlocal Agreement. Credit targets and milestones 2022 through 2026 are based on updated FSP baseline load estimate shown in Table 2.

Five-year Milestones & Annual Intermediary Targets							
Water Year	2021	2022	2023	2024	2025	2026	
Credits	215	244	264	295	315	345	
FSP	21%	24%	26%	29%	31%	34%	
TP	14%	15%	17%	18%	20%	21%	
TN	14%	15%	16%	17%	18%	19%	

- 4. NDOT will assess the condition of registered pollutant controls in accordance with the LCCP Handbook. NDOT, or a qualified third party conducting the condition assessment observations on its behalf, will coordinate with NDEP for their participation during field assessments. During joint assessments, NDOT, and/or the third-party representative thereof, and NDEP will attempt to agree on the measurements to be recorded. The Parties retain the option to record different results if agreement on observations cannot be reached.
- 5. NDEP, jointly with Lahontan Water Board, will manage the LCCP adaptively through the TMDL Management System, a transparent and inclusive program improvement process. Any modifications or alterations to LCCP tools and/or protocols will be accomplished in accordance with the procedures described in the TMDL Management System Handbook.

#### C. Stormwater Monitoring

- 1. NDOT will implement, either individually or collaboratively, a stormwater monitoring program. At the time of execution of this agreement, Nevada and California Urban Implementing Partners are involved in a collaborative effort to carry out the Implementers Monitoring Program (IMP). Continued implementation of the approved IMP over the term of this agreement (Section V) shall fulfill NDOT's commitment.
- 2. NDOT or its authorized representative will develop and submit an annual electronic report to NDEP for approval that presents, summarizes, and interprets the results of the data collected during the previous water year (October 1 September 30). The monitoring report is due on March 30 each year.
- 3. Within 30 days of receipt, NDEP will provide written notification of acceptance or refusal of the monitoring report. If refused, NDEP will provide a list of items to be resolved for the monitoring report to gain acceptance. NDOT or its authorized representative will address comments within 30 days and resubmit the monitoring report for NDEP acceptance. NDEP will work with NDOT and/or its authorized representative to resolve any remaining unsatisfactorily addressed comments within a timeframe agreed upon by the Parties.
- 4. NDOT or its authorized representative may submit proposed adjustments to the approved IMP. NDEP will consider and, within 30 days of receipt, provide written notification of acceptance or refusal of the proposal. NDEP will work with NDOT toward a mutually agreeable resolution of the issue prompting the proposed adjustment.
- 5. The Parties acknowledge the scale of the stormwater monitoring program is contingent upon available funding and budget allocations as determined by the governing boards of the respective Nevada and California Urban Implementing Partners. Should funding allocations become insufficient to implement the approved monitoring plan, an evaluation will be performed to identify where efficiencies may be gained and how the monitoring plan may be scaled to better align with the available level of funding while retaining a minimum level of scientific creditability.

#### D. Stormwater Program Annual Report

1. Each year by March 15, NDOT will submit to NDEP for acceptance an annual report summarizing NDOT's stormwater program progress, activities and accomplishments during the previous water year (October 1-September 30). The report shall also document upcoming and planned actions and projects NDOT anticipates registering (a) to meet the annual credit targets and five-year credit milestones identified in Table 3; and (b) over a five-year planning horizon to meet the anticipated annual credit targets and milestone for the 2027-2031 period (Table 4).

Table 4. Anticipated credit obligations for the 2027-2031 period to be used for the five-year planning horizon in the fiscal analysis.

2027-2031 Anticipated Annual Targets & Five-Year Milestone							
Water Year	2027	2028	2029	2030	2031		
Credits	345	356	366	376	386		
FSP load reduction	34%	35%	36%	37%	38%		

- 2. The report will include the following information:
  - a. Accomplishments Summary the report shall summarize annual progress towards meeting Table 3 credit milestones, including registered catchments and associated credit declarations. If progress is insufficient to meet any credit milestone, an explanation of causes or conditions for the shortfall shall be provided, as well as any modifications to the approach that will ensure the next five-year milestone is met.
  - b. Stormwater Load Reduction Plan (SLRP) the report will specify the priority list of pollutant controls NDOT anticipates registering through LCCP over a five-year planning horizon to meet the Table 4 anticipated credit targets. Specific content shall include, but is not necessarily limited to the following information:
    - A description, geographic location information and timeline of the pollutant controls to be implemented;
    - ii. The estimated load reduction/credit potential associated with implementation of the pollutant controls;
    - iii. Any proposal to update the intermediate credit target schedule that better aligns with planned implementation activities.
  - c. Fiscal Analysis the report will provide an estimate of the costs to administer NDOT's Tahoe stormwater program and address how pollutant controls are proposed to be implemented, operated, and maintained.
    - Budget an estimate of the total and annualized expenditures necessary to operate and maintain implemented and registered pollutant controls, as well as to design, construct, implement, operate, register, assess, and maintain pollutant controls contained in the fiveyear SLRP.
    - ii. Finance Plan identifies and describes anticipated and/or targeted funding sources and/or finance mechanisms to cover the costs associated with the budget estimate. The plan shall identify where financing is inadequate to cover the estimated budget, as well as a discussion of any financing mechanisms that may be explored to allay an identified finance gap.

- d. Baseline discrepancies the report will provide a tabular summary of registered catchments that tracks and reports the differences in fine sediment particle loading results between the catchment-specific baseline loading estimate performed for the jurisdictional baseline load analysis and baseline scenario conducted for the purposes of registration. This information will be used to update the schedule of annual credit targets and five-year milestones contained in the 2027-2031 Interlocal Agreement.
- 3. Within 30 days of receipt, NDEP will provide written notification of acceptance or refusal of the Stormwater Program Annual Report. If refused, NDEP will provide a list of items to be resolved for the report to gain acceptance. NDOT will address comments and resubmit the report within 30 days. NDEP will work with NDOT to resolve any remaining unsatisfactorily addressed comments within a timeframe agreed upon by the Parties.

#### V. TERM & UPDATE

The term of this Agreement shall terminate on September 30, 2026. As the anticipated timeframe to achieve the TMDL numeric target is the year 2076, if the Parties fail to approve and execute a renewal of this Agreement, with or without any amendments prior to the termination date, then the Parties agree to use best efforts to comply with the terms and conditions of this Agreement until a subsequent agreement is approved and executed by the Parties. If the Parties fail to approve and execute a subsequent agreement, with or without any amendments prior to the expiration date, then the Parties agree to adhere to the terms and conditions of this Agreement until a subsequent agreement is approved and executed by the Parties. If after 6 months of the termination date the agreement has not been renewed, NDEP may pursue a more regulatory approach.

#### VI. MODIFICATION

At any point during this term, the Agreement may be modified with the consent in writing of both signatory Parties. Modifications to the Agreement will not result in a change to or extension of the initial term (Section V).

#### VII. EVALUATION & CONTINGENCY

1. NDEP will evaluate the performance of NDOT and make a determination of whether the commitments set forth in this Agreement are in good faith being met, or whether there exist other causes preventing performance. Factors that will be considered in the evaluation of performance and/or the need to act on a contingency include but are not limited to: attainment of five-year credit milestones; the degree to which a milestone is not met; NDOT's good faith attempt to perform any commitments; changes or modifications to the LCCP Handbook and/or process that significantly affect NDOT's planning or implementation ability; economic/budget constraints, feasibility or availability of funding sources, or other impediments; and past performance.

- 2. If NDEP determines NDOT has failed to perform its commitments under this Agreement and such failed performance has not been caused by the regulatory action of NDEP itself or by the actions or inactions of another party, NDEP will consider and evaluate the need to implement a more regulatory approach.
- 3. If lack of available funding or insufficient budget allocations are identified as a primary factor limiting NDOT's performance or causing the failure of performance and the attainment of credit targets or any other commitment under this Agreement, NDEP may consider extending the implementation timeframe through modification to the load reduction milestone schedule.
- 4. NDEP will annually evaluate the effectiveness of this Agreement. If the Agreement is determined to be ineffective at achieving its intended purpose, NDEP will consult with NDOT to determine the reasons for its ineffectiveness and develop recommendations for subsequent revisions to this Agreement.

#### VIII. TERMINATION

If any Party fails without adequate cause, excuse or justification to abide by any material term of this Agreement, the non-violating Party may give the violating Party a 30-day written notice to cure such failure. Failure to cure shall constitute a breach of this Agreement. If NDOT is the breaching party, NDEP may then give notice of termination of this Agreement and pursue a more regulatory approach.

#### IX. DISPUTE RESOLUTION

- 1. The Parties agree to work together in good faith to address and resolve any issues or dispute.
- 2. The LCCP Handbook contains the communication protocols to resolve disputes that may arise between NDEP and NDOT.
- 3. If an issue arises that is not related to the processes described in the LCCP Handbook, it will be handled by progressive elevation within each respective Party's management structure.
- 4. The NDEP Administrator is the final decision making authority for any dispute that is elevated to that level.

#### X. SEVERABILITY

If any provision of this Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision, if such remainder conforms to the requirements of applicable law and the fundamental purpose of the Agreement, and to that end the provisions of this Agreement are declared to be severable.

#### XI. RESERVATION OF RIGHTS

- 1. Nothing in this Agreement is intended to restrict the authority of any Party to act as provided by statute or regulation.
- 2. This Agreement is not intended to, and does not create any right, benefit or trust responsibility by any party against the Parties to this Agreement, their respective agencies, officers, or any person.
- 3. This Agreement is an internal agreement between the Parties and does not confer any right or benefit on any third person or party, private or public.

#### XII. LIMITATIONS

Nothing in this Agreement shall be construed to require actions by the Parties which are inconsistent with local, State, or Federal laws and regulations or any court order.

#### XIII. EXECUTION IN COUNTERPARTS

The Parties may execute this Agreement in counterparts, each of which is deemed an original and all of which constitute only one agreement.

#### XIV. ALL WRITINGS CONTAINED HEREIN

This Agreement contains all the terms and conditions agreed upon by the Parties. No other understandings, oral or otherwise, regarding the subject matter of the Agreement shall be deemed to exist or to bind the Parties hereto.

#### XV. SIGNATORIES

Each undersigned representative to this Agreement certifies that he or she is fully authorized by the Party whom he or she represents to enter into the terms and conditions of this Agreement and to execute and legally bind such Party to this document.

#### **NEVADA DEPARTMENT OF TRANSPORTATION REPRESENTATIVE**

X Kristina L. Swallow, P.E., Director Name (Printed)





#### NEVADA DIVISION OF ENVIRONMENTAL PROTECTION REPRESENTATIVE

X Greg Lovato, Administrator, NDEP
Name (Printed)

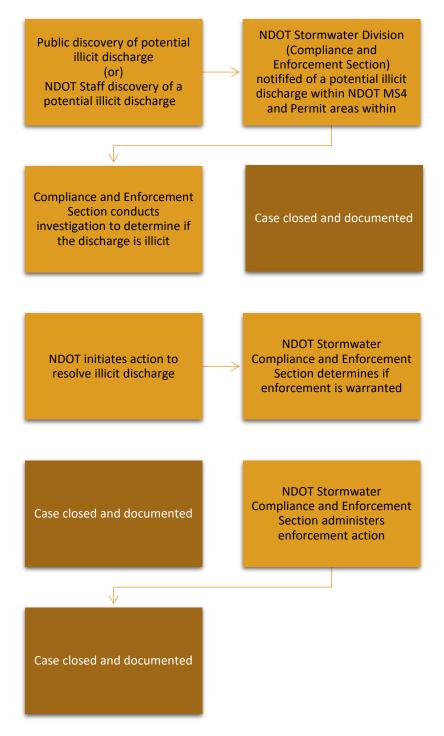


	DocuSigned by:		
X	Grag Lovato		X <sup>11/16/2021</sup>
	— 62A6693AC6294F3	Signature	Date

Appendix G

IDDE Response Flowchart

Figure G.1. Flowchart illustrating the process implemented by the NDOT when responding to potential illicit discharge incidents.



Appendix H
Sanitary Sewer Discharge Authorizations

## STOREY COUNTY PUBLIC WORKS

## Richard Bacus

Public Works Director

P.O. Box 435 • Virginia City, Nevada 89440

September 7, 2004

Daryl N. James
Nevada Department of Transportation
Environmental Services Division
1263 South Stewart Street
Carson City, Nevada 89712

RE: Storm Water Discharge into the Virginia City Wastewater Treatment Facility.

Dear Mr. James:

Storey County Public Works acknowledges that the Nevada Division of Environmental protection has issued a statewide National Pollutant Discharge Elimination System Permit to NDOT, for Discharges from NDOT Municipal Separate Storm Sewer System (MS4) (Permit No. NV0023329). To comply with Section 3.3 of the Statewide Permit NDOT is required to identify discharges from NDOT's MS4s into facilities treating domestic sewage not owned by NDOT. If any exist, NDOT is to secure written authorization from the respective utility company receiving the discharge. The following is an excerpt from your permit.

Permit No. NV0023329 Section 3.3

3.3 Discharges to Sanitary Sewer System

[3.3.1 For discharges into facilities treating domestic sewage, used in storage, treatment, recycling, and reclamation, of municipal or domestic sewage, that are not owned or operated by NDOT, the following shall be provided.

[3.3.1.1 Written and signed confirmation from each facility authorizing the discharge of pollutants into the facility system; and,

[3.3.1.2  $\Lambda$  report of all authorizations is submitted to NDEP, no later than one (1) year after the effective date of this permit.

This letter expresses the written and signed confirmation from the Storey County Public Works to authorize the discharge of storm water runoff from NDOT's drop inlets along SR 341 into the Virginia City Wastewater Treatment Facility.

Storey County Public Works

Tichard Sacrete

Richard Bacus, Director

Storey County Commission

Greg Hess, Commissioner



April 23, 2009

Steve M. Cooke, P.E.
Nevada Department of Transportation
Environmental Services Chief
1263 S. Stewart Street
Carson City NV 89701

RE: Discharge to IVGID Sewer from the NDOT Incline Maintenance Yard Decant Facility

Dear Mr. Cooke,

The Nevada Department of Transportation (NDOT) has constructed a decant facility at the NDOT Maintenance Yard on Mt Rose Highway. The purpose of the decant facility is to dewater materials collected from maintenance activities such cleaning out drainage structures, performing vacuum excavation, etc. and then disposing of the decant water to the Incline Village General Improvement District (IVGID) sewer. The decant facility has been built for the mutual benefit of NDOT, IVGID and Washoe County whom all perform similar maintenance operations and must meet the stringent discharge requirements in the Lake Tahoe Basin.

This letters serves as approval for the NDOT Decant Facility to discharge the decant water to the IVGID sewer located at the NDOT Maintenance Yard. Plans for construction of the facility had previously been prepared by NDOT and have been reviewed and accepted by IVGID. Thank you for providing this joint use facility to serve all of the agencies needs in Incline Village and Crystal Bay.

Sincerely,

Joseph J. Pemroy

Director of Public Works

c. T Buxton Reading

## CLARK COUNTY BOARD OF COMMISSIONERS AGENDA ITEM

Petitioner:

Denis Cederburg, Director of Public Works

Recommendation:

That the Board of County Commissioners approve and authorize the Chairman to sign Interlocal Agreement No. P051-17-179 between Clark County and the Nevada Department of Transportation ("NDOT") creating a partnership between the County and NDOT for storm sewer system material disposal. (For possible action)

#### **FISCAL IMPACT:**

Fund #: 2020.000

Fund Center: 1260210000

Description: Storm Sewer Disposal

Fund Name: Road Fund

Funded Pgm/Grant: N/A Amount: \$2,500.00

Added Comments: N/A

#### BACKGROUND:

Clark County and the Nevada Department of Transportation desire to form a partnership for storm sewer system material disposal whereby the County would allow NDOT to use the County's West Sweeper Separator Facility located on Cameron Street and Oquendo Road for purposes of disposal of storm sewer material waste from NDOT's storm water sewer system.

In exchange for use of the County's facility, NDOT will be responsible for half of the annual estimated cost (\$2,500.00) associated with the pre-treatment measures of the facility. The annual estimated cost is \$5,000.00 and the County will also be responsible for half of this cost (\$2,500.00). Additionally, NDOT will provide, on a monthly basis, for the transport of storm sewer waste material from the facility to disposal sites, and assist with maintenance of the facility. The attached Interlocal Agreement No. P051-17-179 identifies the responsibilities of both the County and NDOT and formalizes the partnership as it relates to storm sewer system material disposal.

The District Attorney's Office has reviewed and approved the interlocal agreement as to form.

APPROVED AS RECOMMENDED

Respectfully submitted,

DENIS CEDERBURG
Director of Public Works
DC:AS/LR/GMS/3-7-17

Attachment (Initial Interlocal Agreement P051-17-179)

Cleared for Agenda

Agenda Item#

43



ATER A

ND01

2017

Reno, NV 89502 775.861.4100 www.tmwrf.com

April 27, 2017

James Murphy
Nevada Department of Transportation
District II Headquarters
310 Galletti Way
Sparks NV 89431

RE: Stormwater Vactor Truck Discharge to the Sanitary Sewer

Mr. Murphy

This letter is to acknowledge my conversation with your staff regarding the discharge of Vactor truck waste to the Truckee Meadows Water Reclamation Facility from your existing facility on Galletti Way, Sparks Nevada. You are approved to discharge up to 50,000 gallons per day to the sanitary sewer. All vactor truck waste must pass through your existing sand/oil separator prior to reaching the collection system.

If you have any questions regarding this letter you may contact me by electronic mail at mdrinkwater@cityofsparks.us or by telephone at 775-861-4100.

Sincerely,

Michael A. Drinkwater, P.E.

Treatment Plant Manger

C: Andrew Hummel, P.E., Utility Manager
Toby Ebens, Environmental Control Supervisor



### **CARSON CITY NEVADA**

# Consolidated Municipality and State Capital PUBLIC WORKS

June 27, 2017

James Murphy
Nevada Department of Transportation
Stormwater Division
1263 S. Stewart Street
Carson City, NV 89712

RE: Approval Letter Allowing Dumping of Vactor Truck Waste from Storm Vaults into Sanitary Sewer.

Dear Mr. Murphy:

I am sending you this letter to approve the discharging of your Vactor Truck waste into the Carson City Sanitary Sewer System. You are approved to discharge 75,000 gallons per day of the combined waste streams from your truck wash and the vactor truck waste. Please make sure vactor truck operators use discretion when dumping Stormwater vault waste into this sand oil interceptor. All waste streams entering the Carson City Sanitary Sewer System will need to meet all Federal, State, and local discharge limits. If you have any concerns, comments, or questions please feel free to contact me at any time.

Sincerely,

Mark Irwin

Senior Environmental Control Officer

Carson City Public Works

CC: Kelly Hale

Environmental Control Foreman

Engineering, Transportation, Capital Projects



Robert H. Erickson Councilman

James D. Richardson
Councilman

Kelly Frost Councilwoman

August 7, 2017

James Murphy
Nevada Department of Transportation
Stormwater Division
1263 South Stewart Street
Carson City, NV 89712

RE: Approval Letter Allowing Dumping of Vacuum Truck Waste from Storm Vaults into Sanitary Sewer at 888 Harrigan Road, Fallon

Dear Mr. Murphy:

I am sending you this letter to approve the discharging of NDOT vacuum truck waste into the City of Fallon sanitary sewer system at the NDOT Maintenance Station facility located at 888 Harrigan Road in Fallon. You are approved to discharge a maximum of 5,000 gallons per month of vacuum truck waste. Please make sure vacuum truck operators use the truck wash station, on site, when dumping stormwater vault waste into the sand and grease interceptors. All waste streams entering the City of Fallon sanitary sewer system will need to meet all Federal, State and local discharge limits. If you have any concerns, comments, or questions please feel free to contact me at any time.

Sincerely,

Michael Miller, P.E.

City Engineer/Public Works Director

CC: Ryan Swirczek, Deputy Public Works Director Robert Erquiaga, Administrative and Legal Director Address File Appendix I

Measurable Goals Summary

Table I.1. Summary of SWMP Measurable Goals.

Program Element	Measurable Goal	Frequency	Begin	End	Annual Milestone
Logal Authority	Review the Standard Specifications for Road and Bridge Construction and perform updates as appropriate.	Annual	August of 2018	Continuous	At least once per Reporting Period
Legal Authority	Review the Terms and Conditions Relating to Right-of-Way Occupancy Permits and perform updates as appropriate.	Annual	August of 2018	Continuous	At least once per Reporting Period
Stormwater Education	Provide discipline-specific stormwater trainings to NDOT personnel in each District.	Annual	August of 2018	Continuous	Achieve at least 80% compliance of stormwater training requirements each Reporting Period
	Maintain the Stormwater Program website and update accordingly.	Annual	August of 2018	Continuous	At least once per Reporting Period
Public Participation/Involvement	Maintain Stormwater Program social medial platforms.	Annual	August of 2018	Continuous	At least once per Reporting Period
	Participate in public outreach events.	Annual	August of 2018	Continuous	At least three events each Reporting Period
Maps and Outfalls	Refine major outfall mapping data.		August of 2018	Continuous	At least once per Reporting Period
Discharges to Water Quality Impaired Waters	Develop a plan for identifying and evaluating stormwater discharges from the MS4 into future State 303(d) and TMDL listed WOUS.	Dependent Upon NDEP Publishing Date	P Dependent Upon NDEP Publishing Date	Continuous	Within six (6) months of publishing by NDEP during applicable Reporting Periods
	Perform oversight and QA construction site stormwater inspections.	Per the Plan	August of 2018	Continuous	At all applicable construction sites each Reporting Period
	Perform SWPPP reviews on all NDOT construction projects covered under the CGP.	Annual	August of 2018	Continuous	At all applicable construction sites each Reporting Period
Construction Site BMPs	Review the Construction Site Best Management Practices (BMPs) Manual and perform updates as appropriate.	Annual	August of 2018	Continuous	At least once per Reporting Period
	Publish the <i>Stormwater Guidance Manual for Construction Projects</i> and disseminate to all three (3) Districts.	Once	January of 2020	June of 2020	N/A
	Review the <i>Stormwater Guidance Manual for Construction Projects</i> and perform updates as appropriate.	Annual	August of 2020	Continuous	At least once per Reporting Period
New Development and Redevelopment	Review Headquarters generated designs for new development and redevelopment projects and incorporate post-construction BMPs as appropriate.	Annual	August of 2018	Continuous	As designs are generated during each Reporting Period
	Review the <i>Planning and Design Guide</i> and perform updates as appropriate.	Annual	August of 2018	Continuous	At least once per Reporting Period

Table I.1. (Cont'd)

Program Element	Measurable Goal	Frequency	Begin	End	Annual Milestone
	Perform routine monitoring on identified major outfalls.	Annual	August of 2018	Continuous	20% of the identified major outfalls each Reporting Period
	Perform follow-up routine monitoring on the major outfalls that had a confirmed illicit discharge the previous year.	As Needed	August of 2018	As Needed	100% of the major outfalls
Illicit Discharge Detection and Elimination	Document and respond to (as appropriate) illicit discharge incidents reported to the Stormwater Division.	As Needed	August of 2018	Continuous	100% of the reported illicit discharges each Reporting Period
	Review the Field Guide for the Detection and Elimination of Illicit Discharges and perform updates as appropriate.	Annual	August of 2018	Continuous	At least once per Reporting Period
	Review the <i>Illicit Discharge Field Investigations Procedures Manual</i> and perform updates as appropriate.	Annual	August of 2018	Continuous	At least once per Reporting Period
Industrial Facility Monitoring and	Perform routine monitoring of identified industrial facilities (i.e. non- material source sites) statewide that directly discharge stormwater runoff into the NDOT's MS4.	Annual	August of 2018	Continuous	20% of identified industrial facilities each Reporting Period
Control	Review and update as necessary the list of identified industrial facilities subject to routine monitoring, including a list of those facilities that are contributing a known substantial pollutant loading to the NDOT's MS4.	Annual	August of 2018	Continuous	At least once per Reporting Period
	Identify Permit covered sites with locations mapped in a GIS platform.	N/A	August of 2018	August of 2019	N/A
	Update material source site mapping data as needed.	Annual	August of 2018	Continuous	At least once per Reporting Period
	Review the <i>Material Source Site Stormwater Management Guide</i> and update accordingly.	Annual	August of 2020	Continuous	At least once per Reporting Period
	Identify material source sites not previously assessed that are subject to Permit coverage following the remand of the Navigable Waters Protection Rule.	N/A	March of 2022	August of 2022	N/A
Non-Metallic Mining and Dressing Facility		N/A	Mine Development Phase: Prior to commencement of earth disturbing activites Active Mining Phase: August of 2022	Mine Development Phase: Continuous Active Mining Phase: November of 2022	N/A
			Inactive Mining Phase: August of 2022	Inactive Mining Phase: February of 2023	
Maintenance Facility	Review the FPPP(s) and update accordingly.	Annual	August of 2018	Continuous	At least once per Reporting Period
	Review the Maintenance Facility Stormwater Best Management Practices (BMPs) Manual and update accordingly.	Annual	August of 2018	Continuous	At least once per Reporting Period
	Inspect, record condition, and/or maintain the storm sewer system.	Annual	August of 2018	Continuous	10% of the storm sewer system statewide
Public Street Maintenance	Develop and release enhanced GIS mobile field technology supporting storm sewer asset maintenance.	Once	March of 2021	March of 2021	N/A
	Maintain the GIS mobile field technology supporting storm sewer asset maintenance.	Annual	July of 2021	Continuous	At least once per Reporting Period
Pesticide and Fertilizer	Ensure Maintenance personnel are properly trained for herbicide and fertilizer application.	Annual	August of 2018	Continuous	Perfomed in conjunction with other appropriate Maintenance-specific stormwater training(s) during each Reporting Period.
Discharges to Sanitary Sewer Systems	Coordinate with the Districts to ensure written authorizations are obtained from the appropriate municipal authority prior to discharging stormwater into the sanitary sewer system.	As Needed	August of 2018	Continuous	At least once per Reporting Period