CHAPTER 13
STORMWATER POLLUTION PREVENTION PLAN

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Synopsis

Pollution prevention can take many forms at a construction site of an industrial/commercial facility. Some practices may be self-evident, while others may be subtle changes in employee routines and habits. However, there are some practices that require decisive planning, implementation and follow-up, inspection, and maintenance. This chapter is intended to provide guidance for preparing a Stormwater Pollution Prevention Plan (SPPP) in the form of the existing grading permit application process. This gives the contractor or employees awareness of the possible source of pollution on the work-site and suggests measures that prevent that pollution from entering the environment. It will guide designers, reviewers, inspectors, construction site operators, and contractors to Volume 4 Stormwater Best Management Practices (BMP) for a selection of acceptable measures that can be incorporated into an effective SPPP. It is intended to be a discussion parallel to Volume 4-Section 1 with broader implications to contractor management practices and industrial/commercial management practices.

This chapter predominately provides guidance for construction site SPPP preparation, but also provides a brief synopsis of industrial /commercial site SPPPs. Industrial and commercial sites should also consult the Code of Federal Register (CFR) for additional requirements and guidance. In particular 40 CFR Part 112.7 – *Guidelines for the preparation and implementation of a Spill Prevention Control and Countermeasure (SPCC) Plan* and 40 CFR part 112 – *Oil Pollution Prevention* should be reviewed.

13.1 Introduction to SPPP

In essence, a SPPP is a flexible plan by which site-specific pollution sources are identified and structural or non-structural measures are designed, implemented, maintained, and possibly redesigned to minimize negative impacts on the surrounding environment. This is a step beyond pre-2000 releases of the Stormwater Management Manual. While a SPPP predominately focuses on stormwater quality, it also gives consideration for air and groundwater quality.

For Metropolitan Nashville and Davidson County, the existing grading permit process administered by Metro Water Services will be the mechanism for preparation, review and approval of a SPPP. Many portions of what is traditionally known as a SPPP are already required by the grading permit process. However, the SPPP development described in this chapter does require that much of the data be considered in a different way and to a further extent in order to adequately address stormwater pollution prevention as required by Volume 1-Section 2.2.

Since the SPPP will be developed as part of the grading permit process, it does not have to be prepared as a separate document. However, the differences in how a SPPP should be distributed for a construction project and an industrial/commercial facility should be noted. To ensure that the SPPP provisions are understood and properly implemented on a construction site, it is best if they are intermingled with the construction plans and specifications to be used by the contractor. This will ensure that the SPPP is a project long process and will also ensure that the design engineer is considering the SPPP throughout the site design process and not as an afterthought. If the SPPP is developed for operation and/or maintenance (O&M) of an industrial /commercial facility, then it should be intermingled with new-employee and periodic training on related O&M procedure documentation.

13.2 SPPP Phases

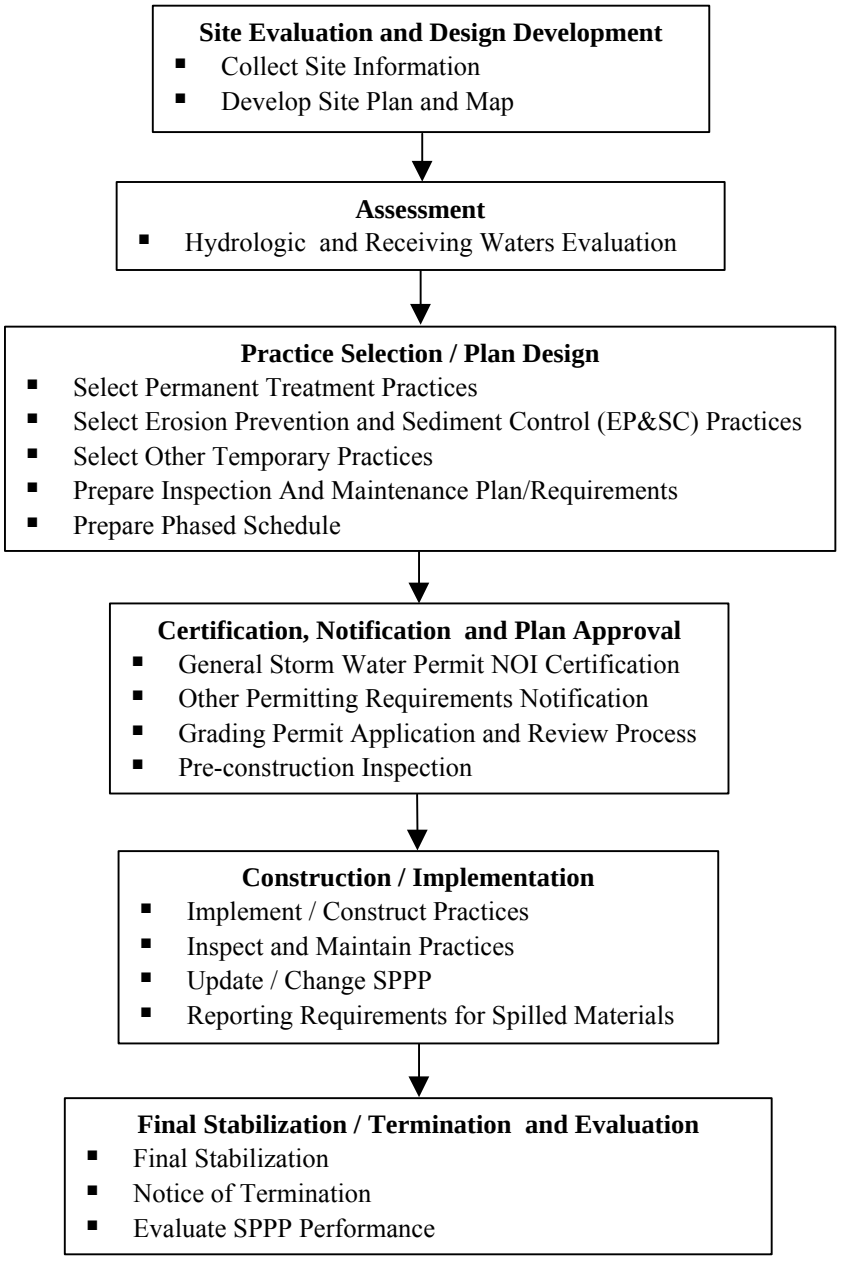
The basic phases of SPPP preparation are the same for both a construction site and an industrial/commercial facility. They are illustrated in the Figure 13-1.

The SPPP for construction sites should focus predominately on temporary pollution prevention practices and address long-term or permanent pollution prevention measures that are implemented during the construction phase. The SPPP for industrial / commercial sites should focus on permanent or long-term practices developed for pollution prevention.

The SPPP phases are basically the same for construction and industrial / commercial development, except for some differences in how the two are implemented. If the difference is not noted in the following sections, then it can be assumed that the same basic procedure applies.

It is important to note that the process parallels the “traditional” site development design process described in Volume 1-Chapter 4. The SPPP preparation should be integrated into the construction design process and not left as an afterthought to site design. SPPPs that are prepared as an afterthought may cause the site to be redesigned, be more expensive to implement, increase long-term maintenance responsibilities, and reduce aesthetic characteristics.

Figure 13-1
SPPP Phases



13.3 Construction Site SPPP

13.3.1 Site Evaluation and Design

13.3.1.1 Collect Site Information

Site information principally consists of the existing conditions survey (topography, existing site improvements, etc.), soils, receiving waters identification, and rainfall data. The data collection task should identify pollutants that are already on-site whether in the form of soils, groundwater, surface water or other means. The list / survey of on-site pollutants and other existing conditions will serve as the basis for all other SPPP preparation activities. Other site data collection activities are described in detail in Volume 2-Chapter 11.

For indoor construction activities such as renovations at a commercial or industrial facility, this task is generally not as intensive. However, there are several tasks that should be completed. The Superfund Amendments and Reauthorization (SARA) Title III Section 312 and 313 reports may be a quick tool in completing several of the tasks. The following tasks should be considered.

1. Complete a materials inventory that includes all hazardous or non-hazardous materials stored or handled that have a bearing on the potential for stormwater pollution. The Material Safety data sheets of all on-site stored or handled materials should be reviewed.

2. Complete a spills inventory that includes spills over the previous five years. This will be a useful tool in determining areas or personnel that may have a bearing on the SPPP.

3. Begin an activities list. If the list changes in any way, it may be time to reevaluate the SPPP.

4. Conduct a facility tour to confirm or locate activities and stormwater management practices. At a minimum, the following questions should be answered:
   a. Are catch basins full of sediment and not being cleared regularly?
   b. Are there signs of spills, pools, stains, or other traces of fuels and chemicals that have been spilled?
   c. Do you find leaking equipment, pipes, containers or lines?
   d. Do storage containers show signs of leakage?
   e. Are containers and exposed piping labeled?
   f. Are cleanup tools and materials readily available (drip pans, absorbents, rags, etc.)?
   g. Are there spill containment or other structural secondary containment measures in place where oils, greases, toxic or hazardous materials are stored or used?
   h. Where does stormwater from the site enter the drainage system (Metro infrastructure, creek, stream or river)? Are these outfalls protected with any type of stormwater quantity or quality BMP?

i. Does the facility show signs of poor housekeeping such as accumulated debris in open areas that is not being swept, uncovered materials, etc.?

5. Identify non-stormwater discharges (or outfalls) to the stormwater (drainage) system. This may include process water, cleaning or rinse waters or even sanitary sewer lines. If any of these waters are entering the stormwater system then contact the MWS Stormwater NPDES Office at (615) 880-2420.

13.3.1.2 Develop Site Plan and Map

The site plan and map are a narrative and visual description of the SPPP. They are interdependent document designed to provide details that can only be provided in one form or the other. Key pollution prevention principals that should be considered for construction sites include the following.

1. Install perimeter sediment control practices before any other land disturbance activities.
2. Disturb the smallest vegetated area possible.
3. Phase or schedule land disturbance activities.
4. Stabilize denuded areas quickly or before rain events with erosion prevention practices.
5. Keep cut and fill volume to a minimum by designing structures to the site rather than the site to fit the structures.
6. Limit impacts to steep slopes, waterways, sinkholes, and wetlands.
7. Consolidate or centralize contractor management activities such as material storage, concrete truck washing, vehicle maintenance and fueling, etc.

In addition to reducing the potential for pollution to leave the construction site, incorporating the above pollution prevention principals can also: reduce construction costs for grading and landscaping, reduce the amount of sediment and stormwater management controls, and improve the aesthetics of the completed project.

For SPPP consideration, the maps need to show pre and post construction slopes, drainage patterns, disturbed areas and disturbance restrictions such as a regulated buffer (Volume 1-Section 5.9), steep slopes, sinkholes or wetlands. Pre and post construction slopes are generally shown on a single plan sheet with different line types and symbols. Similar plan sheets should be prepared indicating the flow directions and drainage catchments for pre, post, and intermediate construction phases. The intermediate flow paths and drainage catchments will impact the design requirements for erosion prevention or sediment control measures. The same plan sheets can be used to delineate phased disturbance areas and stabilization techniques. All of the plans should indicate sensitive areas and buffers that shall not to be disturbed by any type of construction activity. Similarly, the plans should indicate areas where vehicles should be directed, such as entrances, interim stabilized roads, etc.

The narrative portion of the SPPP should be presented in notes on the construction plans. They should be specific enough to match details presented on the construction plans. In particular, it is preferred that separate sheets be used to describe the phased implementation of various management practices and other construction activities (such as clearing and grubbing, excavation and stockpiling, rough grading, final or finished grading, demolition, etc). The SPPP shall be stamped by a registered professional engineer in Tennessee.

For industrial or commercial operations (non-construction) a more simple map or site rendering may be appropriate. It should still indicate drainage areas or general flow paths and sensitive areas. It should also indicate areas where hazardous or other materials are stored or used.

13.3.2 Assessment

This task focuses primarily on the hydrologic evaluations that are described in Volume 2-Chapter 2. These activities are also required to develop stormwater quantity controls and involve calculating site drainage areas, runoff characteristics, and determining if any special provisions may be necessary to prevent negative impacts to receiving waters. Drainage areas should be calculated manually or electronically from accurate survey data. The runoff characteristics can be calculated in terms of the rational method runoff coefficient or the NRCS curve number as discussed in Volume 2-Section 2.3. The sensitivity of the receiving waters may guide the designer to implement more intensive internal and/or perimeter controls for sediment or other water quality issues. A good guide to determining the sensitivity of a receiving water is to determine if and why it appears on the Tennessee Department of Environment and Conservation (TDEC) 303(d) list of threatened or impaired waterways. The list may be acquired from TDEC at http://www.state.tn.us/environment/wpc/index.html.

For an industrial/commercial site, the results of the inventories and site tours described in Section 13.3.1.1 should be used to guide an assessment for how intensive stormwater pollution prevention practices need to be implemented. Special emphasis should be given to BMPs at outfalls and the receiving water sensitivity.

13.3.3 Practice Selection / Plan Design

Volume 4-Section 1 discusses the process for selecting BMPs in terms of defining objectives and categories in conjunction with the "BMP Treatment Train". The March 2000 release of Volume 4 has an extensive set of BMP fact sheets sectioned as follows.

Section	Description
2	Contractor Management Practices – CP
3	Temporary Construction Site Management Practices – TCP
4	Industrial / Commercial Management Practices – ICP
5	Permanent Erosion Prevention and Sediment Control practices – PESC
6	Permanent Treatment Practices – PTP

Section 1 should be reviewed to help guide in the preliminary BMP selection process and Sections 2 through 6 should be reviewed to guide the final selection, design, construction / implementation, inspection and maintenance requirements, and other related discussion topics.

13.3.3.1 Select Permanent Treatment Practices

Volume 4-Sections 1.5 and 1.6.5 provides additional detail about selecting permanent treatment practices that address stormwater quantity (flood control) and quality. They refer to Volume 4-Section 6 (Permanent Treatment Practices – PTP) and should be reviewed to guide the selection of permanent practices.

It is preferred to integrate permanent stormwater management practices into the temporary measures. This often takes the form of an over-excavated detention pond and modified outlet structure so that it functions as a sediment trap or pond that holds the large sediment loads expected during construction. Other measures include, but are not limited to, protecting / reinforcing selected (not all) catch basins to trap sediment or using areas that will not be disturbed such as buffers and filter strips. Integrating permanent stormwater management features and site conditions into the temporary measures is generally most cost-effective, easier to construct, inspect, and maintain.

In Metropolitan Nashville and Davidson County, all construction sites of a size requiring a grading permit must have perimeter (outfall) EP&SC practices installed and inspected by Metro personnel before additional construction is permitted. This means that if a detention pond is going to serve as the control before discharging water from the site, then it must be constructed and operational before any other clearing and grubbing, grading or excavation can proceed. This is true whether the detention pond is designed to meet stormwater quantity and quality requirements or only stormwater quality requirements. In cases where a permanent pond will not be installed, some type of sediment trap/basin should be installed.

While integrating temporary and permanent treatment practices is generally not a concern for non-construction activities at industrial and commercial sites, it is important that employees are aware of their function and sensitivities (how their function can be impaired or overwhelmed).

More detailed guidance on selection and design of permanent treatment practices is provided in Volume 4-Sections 1 and 6 (Permanent Treatment Practices – PTP).

13.3.3.2 Select Erosion Prevention and Sediment Control (EP&SC) Practices

Volume 4-Section 1.6.4 provides additional detail about selecting EP&SC practices that minimize disturbed area, stabilize disturbed areas, protect the upstream and downstream site perimeter, create internal swales and ditches, minimize internal erosion and protect stormwater inlets and outlets. They refer to Sections 3 (Temporary Construction Site Management Practices

– TCP) and 5 (Permanent Erosion Prevention and Sediment Control practices – PESC). These Sections in Volume 4 should be reviewed to guide the selection of EP&SC practices.

This activity is generally not applicable to SPPPs for non-construction activities at industrial and commercial sites. However, inspection and maintenance of permanent EP&SC measures should be considered.

13.3.3.3 Select Other Temporary Practices

As discussed in Volume 4-Section 1.4, there are many other potential pollution problems on a construction site besides erosion and sedimentation. These include nutrients, oxygen demanding substances, metals, pesticides, oil, grease, fuels, toxic chemicals, and miscellaneous wastes. These pollutants can originate from a variety of activities including paving operations, painting, sandblasting, demolition, materials storage, equipment fueling and maintenance, and other daily activities necessary for project construction or site (industrial or commercial) management. Volume 4-Sections 2 (Contractor Management Practices – CP) and 4 (Industrial / Commercial Management Practices – ICP) contains a series of management practices that are intended to minimize the impact of non-sediment pollutants. These sections of Volume 4 include a variety of activities, often referred to as "good housekeeping practices," that seem to be common-sense and self-evident activities, but are often overlooked or taken for granted on sites, to the point where the pollutant sources are not recognized or identified. For industrial/commercial sites, employee training about the SPPP provisions is critical for ensuring that the plan is effectively implemented and maintained.

13.3.3.4 Prepare Inspection and Maintenance Plan / Requirements

Inspection and maintenance procedures for a SPPP are often not well thought out and not effectively carried out. Often the procedures are overlooked because responsible personnel have not been identified. These procedures need to be developed in realistic terms and with expectations so they can be thoroughly explained to appropriate personnel. Ideally a pollution prevention team lead by a team coordinator and composed of a sufficient number of personnel to cover all aspects of the site operation should be established. The team should be used as a mechanism to discuss and train all personnel in detail on the SPPP. The team members should perform routine inspections and inform the team coordinator of any changes in operations that may affect the SPPP.

For a construction site the pollution prevention team this should include the site foreman, vehicle maintenance and fueling personnel, heavy equipment operators (grading and buffer issues), etc; and for an industrial/commercial site the plant supervisor, hazardous material handlers, management, etc. SPPP review and discussion should be a part of new employee training/certification programs.

For a construction site, the inspection and maintenance responsibilities should be presented along with other construction plans, specifications, and notes. It should explain the frequency that inspections should be performed, how they should be documented, and typical maintenance activities. Generally, inspections should be performed and documented weekly or after a rain event greater than 0.25 inches. There are more specific inspection recommendations for BMPs presented in Volume 4.

Permanent facilities that are to be turned over to Metro or to another owner or organization should have detailed inspection and maintenance requirements and expectations documented. These requirements and expectations should be submitted as part of the grading plan approval process for review by MWS Stormwater Development Review. At a minimum, a Stormwater Detention Agreement should be prepared and accepted as presented in Volume 1-Appendix C. Similar agreements or explanation of responsibilities should be prepared for property owners.

For an industrial / commercial site, the inspection and maintenance responsibilities should be presented in operation and maintenance documentation. They should be discussed to an appropriate level in new employee training and in thorough detail to personnel that are responsible for inspecting and maintaining the facilities. This information should be periodically reviewed to ensure the requirements are "fresh" in the minds of the employees.

13.3.3.5 Prepare Phased Schedule

As discussed in Section 13.3.1.2 above, phased construction can provide a significant benefit in implementing an SPPP. This schedule does not need to be date specific, but should indicate what BMPs should be constructed or modified while other aspects of the construction are being executed. This may be as simple as noting that temporary seeding, mulch and geotextiles be applied/installed within one week of rough grading. Similarly, other task schedules can be noted on the construction plans. There should be an overall schedule presented that indicates the overall phases of construction that major BMPs will be implemented/constructed. At a minimum, this should show that the perimeter outfall controls will be in-place before any grading is performed.

A documented schedule is also necessary for industrial/commercial sites, but is applied differently than for construction. There should be a schedule of inspection and maintenance activities as described in the previous section. This can be prominently posted, but should at least be identified in some manner, as in employee training.

13.3.4 Checklist , Certification / Notification

13.3.4.1 General Storm Water Permit NOI Certification

As required by Volume 1-Section 4.2.2 each application for a grading permit shall be accompanied by a certification that a Notice of Intent (NOI) has been submitted to the Tennessee Department of Environment and Conservation (TDEC) for a "General Storm Water Permit" or a certification that it is not required. The review of the plans will proceed if the certification indicates that the applicant will submit the permit number at a later date. If the site requires a Tennessee General Storm Water Permit, the permit number must be submitted to MWS before a grading permit is issued. This certification is presented in Volume 1-Appendix A.

13.3.4.2 Other Permitting Requirements Notification

An application checklist is provided in Volume 1-Appendix A to assist the applicant in preparing a complete application package and thereby help with a timely review. The applicant shall attach a signed copy of the checklist with the application to certify that a complete package is being submitted. Some requirements of the checklist will not be applicable to all projects, depending on the permit being requested. These should be checked as not applicable. Omission of any required items shall render the plans incomplete, and they shall be returned to the applicant, or their engineer, for additional information.

The checklist in Volume 1-Appendix A includes a notice that the applicant be aware of certain land disturbance activities that will impact "Waters of the State", "Wetlands", and/or "Sinkholes", which may be required to meet certain State and Federal regulations. It is the responsibility of the applicant to seek out and obtain any applicable State and Federal permits prior to the initiation of any land disturbance activities.

13.3.4.3 Grading Permit Application and Review Process

Volume 1-Section 3.3 through 3.6 discusses the grading and building permit requirements, exemptions, and variances. Volume 1-Chapter 4 discusses the grading permit procedures and should be reviewed before preparing plans for submittal.

Completion of the "Plan Submittal Information Form" is especially important for timely plan review by MWS. Each plan being submitted to MWS is to be accompanied by a completed "Plan Submittal Information Form". This form is available in Volume 1-Appendix A or on the Stormwater Program's website at http://www.nashville.gov/stormwater. The application for a grading permit will not be accepted unless this form has been completed. Each application for a grading permit or a building permit referred to the MWS shall contain site preparation plans certified by a registered engineer, landscape architect, or land surveyor, as appropriate. Plans are to include grading, drainage, and EP&SC plans with appropriate plan and profile sheets

for proposed streets or roads, and details of the stormwater quantity and quality management systems (or SPPP provisions).

13.3.4.4 Pre-construction Inspection

According to Volume 1-Section 2.2.7 Metro is required to inspect temporary or permanent EP&SC measures for a site before additional construction may proceed. In essence, Metro inspectors will check downstream perimeter sedimentation controls and/or upstream erosion prevention measures to ensure that they are properly located and operating to a level that can keep sediment from leaving the site while under construction. This does not mean that no other EP&SC measures will be needed, but that the BMPs presented on the grading permit application plans will work sufficiently with the perimeter controls. This also gives Metro the authority to prevent work from progressing if a permanent facility does not adequately address stormwater quantity (flood) management.

Metro reserves the right to require the grading plans be modified given any observations or evaluations that suggest stormwater quantity or quality management is not sufficiently addressed. This may be caused by differences between the actual site conditions and the plans or other data evaluated by Metro.

13.3.5 Construction / Implementation

13.3.5.1 Implementation / Construction Practices

After the plans have been accepted by MWS Stormwater Development Review, other appropriate agencies, and the pre-construction inspection has been completed to the satisfaction of the MWS, construction may proceed. To ensure that BMPs are adequately implemented / constructed, it is important that the work crews which install the measures are experienced, adequately trained personnel or are overseen by experienced, adequately trained personnel. Improperly implementing / constructing some BMPs can result in little or no positive effect and may actually intensify the pollution impact they are intended to minimize.

For an industrial / commercial site, practices are implemented by integrating them into daily, weekly and monthly routines. It is important that all key staff are aware of the plan and that it is accessible to all employees. A copy of the plan should be kept in a conspicuous location where all employees may review it, whether for normal activities or for emergency and spill response.

13.3.5.2 Inspection and Maintenance Practices

According to Volume 1-Section 2.2.15 Metro may require that an “erosion prevention and sediment control professional”, or other similar person designated by TDEC or Metro be on-site. This is to ensure that these types of practices are adequately maintained and that it is clear who shall be held accountable for the BMP performance.

As indicated in Section 13.3.3.4, inspections should be performed and documented weekly, after a rain event greater than 0.25 inches, or at frequencies indicated for specific BMPs identified in Volume 4. Permanent BMPs generally require less frequent inspection and maintenance. However, they should be inspected at rates presented in Volume 4. For a construction site, weekly inspections and maintenance should be done even if the plans or specifications do not indicate the procedures as recommended in Section 13.3.3.4. Maintenance issues identified by inspections should be resolved within a week or less, depending on the severity of the potential pollutant impact. BMPs that are found to be insufficient should be augmented or replaced with other BMPs that can more effectively manage the pollutant of concern.

As an example, a construction site detention pond is being overwhelmed with sediment to the point that it can not contain the sediment and may cause flooding problems. It likely needs to be cleaned out (excavated) to an effective depth and mulch or geotextiles applied to the slope tributary to the pond and/or check dams installed in the small channels leading into the pond.

For an industrial/commercial site inspection and maintenance procedures, BMPs should be documented in a readily accessible document, as explained in the previous section. There needs to be some sort of follow-up checking on personnel activities and structural BMPs should be routinely inspected. Some mechanically intensive BMPs such as stormwater treatment systems may need thorough periodic inspection by a technician trained in the operation and maintenance of that specific system.

13.3.5.3 Update / Change SPPP

Inevitably, there are site or operating conditions that are not anticipated. This requires flexibility in implementing the SPPP and overall grading permit. The ultimate goals are to limit the release of sediment from the construction site and to prevent other pollutants from being released into the surrounding environment. Metro reserves the right to enforce the implementation of additional controls even if all the measures presented in a grading permit (and SPPP) are implemented effectively. This means that even if a contractor has constructed and implemented all the BMPs shown or described in the construction plans, additional BMPs must be implemented if sediment or a pollutant is leaving the site in levels that could negatively impact the surround environment, in the opinion of Metro staff.

A similar rationale should be applied to industrial/commercial sites. If a BMP is not effectively preventing stormwater pollution, then it should be modified or replaced by more intensive practices.

As the SPPP is changed, appropriate personnel and the MWS should be notified. MWS reserves the right to require additional changes if the plan is deemed to be inadequate for the conditions, as determined by MWS.

13.3.5.4 Reporting Requirements for Spilled Materials

Spill prevention and control are discussed in more detail in Volume 4-Section CP-06. The following are general guidelines for reporting a significant spill.

1. Notify the Engineer immediately and follow up with a written report.

2. Notify the local emergency response agency at (615) 862-8530. In addition to calling 911, the contractor will notify the proper county officials. It is the contractor's responsibility to have all emergency phone numbers at the construction site.

3. For spills of state reportable quantities or into a waterbody or adjoining shoreline, the contractor shall notify the TDEC general hotline – environmental assistance at 1-888-891-8332 (TDEC).

4. For spills of federal reportable quantities or into a waterbody or adjoining shoreline, the contractor shall notify the National Response Center at (800) 424-8802.

5. Notification should first be made by telephone and followed up with a written report.

6. The services of a spills contractor or a haz-mat team shall be obtained immediately. Construction personnel should not attempt to clean up the spill until the appropriate and qualified staff have arrived at the job site. The level where this is necessary should be defined in the SPPP and understood by all personnel.

7. Other agencies which may need to be consulted include, but are not limited to, the Fire Department, the Department of Public Works, Metro Water Services, the Metro Police Department, OSHA, etc.

A similar response procedure as presented above should be included in the SPPP and include pertinent phone numbers for staff members and emergency personnel and agencies.

13.3.6 Final Stabilization / Termination

13.3.6.1 Final Stabilization

For a construction site, the permanent BMPs should be cleaned and stabilized to the conditions indicated in the construction plans. This may require detention pond re-excavation, final grading and geosynthetic stabilization, system flushing (Volume 4-Section CP-20), catch basin cleaning, water quality inlet/device cleaning, filter system media replacement, etc. All of these and other related activities will be required by Metro before a Use and Occupancy Permit is issued or a bond is released.

13.3.6.2 Notice of Termination

For construction sites, Metro manages construction site termination through the Use and Occupancy Permit or the bond release. They are contingent upon proper construction, stabilization and operation of all stormwater quantity and quality management practices and other construction. If permits or notification were required by other agencies, then it is the responsibility of the developer, or their representative, to terminate the project with regards to that other agency.

13.3.6.3 Evaluate SPPP Performance

When a construction project is completed, the developer, engineer, and contractor should evaluate the practices that were effective for the specific site conditions. Noting how management practices may be more effectively implemented will reduce the costs of implementing adequate stormwater pollution prevention measures on the next construction project.

For an industrial/commercial site, if a pollutant source has been eliminated, then it is acceptable to stop certain non-structural practices or not to utilize a specific structural management practice. If that is the case, the SPPP should be reevaluated and modified to account for the change.

13.4 References

The following documents were either quoted or used as reference guides in preparing this section. They may be useful as additional guidance for preparing and implementing effective SPPPs.

California Storm Water Best Management Practice Handbooks, Construction and Industrial Handbooks, CDM et.al. for the California SWQTF, 1993.

Caltrans Storm Water Quality Handbooks, CDM et.al. for the California Department of Transportation, 1997.

Storm Water Management for Construction Activities and Developing Pollution Prevention Plans and Best Management Practices, United States Environmental Protection Agency. 482N. Washington DC. September 1992.