Appendix B Stormwater Pollution Prevention Plan Outline

<u>Annotated Outline of SWPPP Components to meet General Permit Requirements</u>

This appendix presents a recommended structure for a traditional construction site <u>Stormwater Pollution Prevention Plan</u> (SWPPP) with annotated content. The structure and content is based on a combination of specific <u>General Permit</u> requirements and other suggested content to meet the overall General Permit requirements to design a SWPPP to control construction site pollutants and their sources (Section XIV.A.1) and that the SWPPP must include information needed to demonstrate compliance with all requirements of the General Permit (Section I.M.77). The level of detail and content of a site-specific <u>SWPPP</u> should be tailored to the specific project based on the judgment of the <u>Qualified SWPPP Developer</u> (QSD). Specific General Permit SWPPP requirements (i.e., items that are specifically required by the General Permit to be included in the site's SWPPP document) are italicized in the below text with reference sections cited (e.g., "Section I.D").

The suggested SWPPP outline is followed by the outline annotated with suggested content for each section.

This annotated SWPPP Outline complements the SWPPP Template (Appendix G). The outline provides more specificity about SWPPP elements that are required by the General Permit while the template provides more implementation details, accounting for common interpretations, and a greater level of guidance and for elements of SMARTS not specified in the General Permit.

B.1 Suggested SWPPP Outline

SWPPP Certification By Qualified SWPPP Developer

SECTION 1 SWPPP Requirements

- 1.1 Introduction
- 1.2 Permit Registration Documents
- 1.3 SWPPP Availability and Implementation
- 1.4 SWPPP Amendments
- 1.5 Retention of Records
- 1.6 Required Non-Compliance Reporting
- 1.7 Annual Report
- 1.8 Changes to Permit Coverage
- 1.9 Notice of Termination

SECTION 2 Project Information

- 2.1 Project and Site Description
- 2.2 Stormwater Run-On From Offsite Areas
- 2.3 Findings of the Construction Site Sediment and Receiving Water Risk Determination

- 2.4 Construction Schedule
- 2.5 Potential Construction Site Pollutant Sources
- 2.6 Identification of Non-Stormwater Discharges

SECTION 3 Best Management Practices

- 3.1 Schedule for BMP Implementation
- 3.2 Erosion Control and Sediment Control
- 3.3. Non-Stormwater and Material Management
- 3.4 Post-Construction Stormwater Management Measures

SECTION 4 BMP Inspection, Maintenance, and Rain Event Action Plans

- 4.1 BMP Inspection and Maintenance
- 4.2 Rain Event Action Plans

SECTION 5 Training

SECTION 6 Responsible Parties and Operators

- 6.1 Responsible Parties
- 6.2 Contractor List

SECTION 7 Construction Site Monitoring Program

- 7.1 Purpose
- 7.2 Applicability of Permit Requirements
- 7.3 Monitoring Locations
- 7.4 Safety
- 7.5 Visual Monitoring (Inspections)
- 7.6 Water Quality Sampling and Analysis
- 7.7 Watershed Monitoring Option
- 7.8 Quality Assurance and Quality Control
- 7.9 Reporting Requirements and Records Retention

B.2 Annotated SWPPP Outline

SWPPP Certification by Qualified SWPPP Developer (QSD)

Include in SWPPP a certification statement signed by the QSD that identifies the name and telephone number of the QSD, the QSD's qualifying professional registration, and the date of SWPPP preparation as required by the General Permit (Section VII.B).

Note, the Professional Engineers Act (<u>Bus. & Prof. Code section 6700</u>, et seq.) requires that all engineering work must be performed by a California licensed engineer (Section I.F45).

SECTION 1 SWPPP Requirements

1.1 Introduction

Identify the project location, owner and developer if applicable. Reference site or vicinity maps for location. State that the SWPPP has been prepared to comply with the

California's General Permit for *Storm Water Discharges Associated with Construction* and *Land Disturbance Activities* (General Permit), include the State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ for the General Permit and include a copy of the General Permit in SWPPP Appendix A (*Section IV.G.1 requires that a copy of the General Permit be kept on site*; including a copy with the SWPPP is recommended). State the major objectives of the SWPPP as identified in the General Permit (Section XIV.A):

"The discharger shall ensure that the SWPPPs for all <u>traditional project</u> sites are developed and amended or revised by a <u>QSD</u>. The SWPPP shall be designed to address the following objectives:

- 1. All <u>pollutants</u> and their sources, including sources of <u>sediment</u> associated with construction, construction site erosion and all other activities associated with <u>construction activity</u> are controlled;
- 2. Where not otherwise required to be under a Regional Water Quality Control Board (RWQCB) permit, all <u>non-stormwater discharges</u> are identified and either eliminated, controlled, or treated;
- Site <u>BMPs</u> are effective and result in the reduction or elimination of pollutants in <u>stormwater</u> discharges and authorized non-stormwater discharges from construction activity to the Best Available Technology/Best Control Technology (BAT/BCT) standard;
- 4. Calculations and design details as well as BMP controls for site run-on are complete and correct, and
- 5. Stabilization BMPs installed to reduce or eliminate pollutants after construction are completed."

Consider stating the following additional SWPPP objectives:

- Identify post-construction BMPs, which are those measures to be installed during construction that are intended to reduce or eliminate pollutants after construction is completed (post-construction BMPs are required for all sites by Section XIII.B). Note that post-construction BMPs should be developed early in the project planning/design process and reports or drawings related to permanent BMP design should be referenced as needed.
- Identify and provide methods to implement BMP inspection, visual monitoring, <u>Rain Event Action Plan</u> (REAP) and Construction Site Monitoring Program (CSMP) requirements to comply with the General Permit.

1.2 Permit Registration Documents

State when the Permit Registration Documents (PRDs) were submitted.

To obtain coverage under the Construction General Permit, project related <u>PRDs</u> must be submitted to the <u>SWRCB</u> via the Stormwater Multi Application and Report Tracking System (SMARTS) by the <u>Legally Responsible Person</u> (LRP) (General Permit Sections I.D.36, II.B, and Attachment B). Include the project Waste Discharge Identification (WDID) confirmation in SWPPP Appendix B (*General Permit Section II.B.5 requires that documentation of a valid WDID upon demand*; including a copy with the SWPPP is recommended).

Include copies of the filed PRDs in the SWPPP Appendix B. The following PRDs are required for all projects:

- 1. Notice of Intent (NOI);
- 2. Risk Assessment (Construction Site Sediment and Receiving Water Risk Determination);
- 3. Site Map;
- 4. Annual Fee; and
- 5. Signed Certification Statement.

This SWPPP is also required to be filed electronically and has been submitted to the SWRCB as a PRD.

NOTE: Additional PRDs may be required depending on the construction type and location, including:

- Post-construction water balance calculation;
- Active Treatment System (ATS) plan; and
- Discharges proposing an alternate (site specific) risk justification must submit a soil particle size analysis in accordance with General Permit requirements.

1.3 SWPPP Availability and Implementation

Include a statement regarding the SWPPP availability and implementation.

The General Permit (Section XIV.C) requires the SWPPP be available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Municipal inspector. When the original SWPPP is retained by a crewmember in a construction vehicle and is not currently at the construction site, current copies of the BMPs and map/drawing will be left with the field crew and the original SWPPP shall be made available via a request by radio/telephone. The SWPPP shall be implemented concurrently with the start of ground disturbing activities.

1.4 SWPPP Amendments

The General Permit requires that SWPPP be amended or revised by a QSD (Section XIV.A) and that the SWPPP include a listing of the date of initial preparation and the date of each amendment. Amendments must be signed by a QSD (Section VII.B.6). It is recommended that all amendments be dated, directly attached to the SWPPP, and logged in SWPPP Appendix C).

1.5 Retention of Records

Include a statement regarding the records retention and availability.

The General Permit (*Sections I.J.69 and IV.G*) requires that all dischargers maintain a paper or electronic copy of all required records for three years from the date generated or date submitted, whichever is last. These records must be available at the construction site until construction is completed. The discharger shall furnish the <u>RWQCB</u>, SWRCB, or US Environmental Protection Agency (EPA), within a reasonable time, any requested information to determine compliance with this General Permit. State in the SWPPP where documents will be kept and how this requirement will be met. RWQCB's may require records to be retained for longer periods.

1.6 Required Non-Compliance Reporting

Include a statement or language regarding required non-compliance reporting.

The General Permit identifies several areas of non-compliance reporting. It is the responsibility of the permittee to properly document reportable discharges or other violations of the General Permit. Exceedances and violations should be reporting using the <u>SMARTS</u> system and include the following:

- <u>Numeric Action Level</u> (NAL) exceedances (<u>NAL</u> Exceedance Report upon request of the RWQCB);
- Self-reporting of any other discharge violations or to comply with RWQCB enforcement actions; and
- Discharges which contain a hazardous substance in excess of reportable quantities
 established in 40 CFR §§ 117.3 and 302.4, unless a separate NPDES Permit has been
 issued to regulate those discharges.

In the event of the exceedance of a NAL, document the subsequent site evaluation in the SWPPP (Section V.C.4). It is recommended that documentation of all reportable exceedances be included in the SWPPP. Include the results of an NAL exceedance site evaluation along with other non-compliance events in SWPPP Appendix D.

1.7 Annual Report

Include a statement or language regarding annual report requirements with the goal of making site personnel aware of required data collection and reporting elements.

The General Permit requires that all permittees prepare, certify, and electronically submit an Annual Report no later than September 1 of each year. Reporting requirements are identified in Section XVI of the General Permit and include (but are not limited to) providing a summary of:

- 1) Sampling and analysis results including laboratory reports, analytical methods and reporting limits and chain of custody forms (Risk Levels 2 and 3);
- 2) Corrective actions and compliance activities, including those not implemented;
- 3) Violations of the General Permit;
- 4) Date, time, place, and name(s) of the inspector(s) for all sampling, inspections, and field measurement activities;
- 5) Visual observation and sample collection exception records; and
- 6) Training documentation of all personnel responsible for General Permit compliance activities.

1.8 Changes to Permit Coverage

Include a statement acknowledging requirements related to changes in permit coverage.

The General Permit (Section II.C) allows a permittee to reduce or increase the total acreage covered under the General Permit when a portion of the project is complete and/or conditions for termination of coverage have been met; when ownership of a portion of the project is sold to a different entity; or when new acreage is added to the project.

To change the acreage covered, the permittee must electronically file modifications to PRDs (revised <u>NOI</u>, site map, SWPPP revisions as appropriate, and certification that new

landowners have been notified of applicable requirements to obtain permit coverage (including name, address, phone number, and e-mail address of new landowner) in accordance with requirements of the General Permit within 30 days of a reduction or increase in total disturbed area. Include any updates to PRDs submitted via SMARTS in SWPPP Appendix E. *Document any related SWPPP revisions/amendments (Section II.C.2)* in SWPPP Appendix C.

1.9 Notice of Termination

Include language that identifies the requirements to terminate coverage under the General Permit.

To terminate coverage under the General Permit, a <u>Notice of Termination</u> (NOT) must be submitted electronically via SMARTS. A "final site map" and photos are required to be submitted with the <u>NOT</u>. Filing a NOT certifies that all General Permit requirements have been met. The NOT is submitted when the construction project is complete and within 90 days of meeting all General Permit requirements for termination and final stabilization (Section II.D) including:

- The site will not pose any additional sediment discharge risk than it did prior to construction activity.
- All construction related equipment, materials and any temporary BMPs no longer needed are removed from the site.
- Post-construction stormwater management measures are installed and a long-term maintenance plan that is designed for a minimum of five years has been developed.

The NOT must demonstrate through photos, <u>Revised Universal Soil Loss Equation</u> (RUSLE) results, or results of testing and analysis that the project meets all of the requirements of Section II.D.1 of the General Permit by one of the following methods:

- 70% final cover method (no computational proof required); or
- RUSLE/RUSLE2 method (computational proof required); or
- Custom method (discharger demonstrates that site complies with final stabilization).

SECTION 2 Project Information

2.1 Project and Site Description

Include project and site description information. General guidelines are provided below.

The SWPPP should include a description of the project site and construction activities, existing site conditions and relevant prior land use. The level of detail and amount of information provided in this section should be tailored to the size and complexity of the project. The site description should include the project location, total disturbed area and references to applicable SWPPP drawings or construction plans that fulfill the General Permit site map requirements (General Permit Attachment B.J.2).

In addition, information regarding existing site conditions and prior land use should include site topography and general drainage patterns, project elevation, receiving water information (including receiving water quality and any applicable designations – Total Maximum Daily Loads (TMDLs), 303(d) listings, or other designations as an environmentally sensitive area [ESA]). For multiple watershed projects, receiving water and drainage information should be described separately for each watershed.

The site description should also include general information on soils and geologic conditions, including the approximate thickness of each material if known and reference applicable soils reports as well as information on the depth to groundwater. If groundwater is anticipated to be encountered during construction and dewatering required, describe/list applicable local or RWQCB permits for dewatering. Describe general rainfall patterns and the anticipated rainy season for the project area.

Note that dischargers located in a drainage area where a <u>TMDL</u> has been adopted or approved by the RWQCB or <u>EPA</u> may be required by a separate RWQCB action to implement additional BMPs, conduct additional monitoring activities, and/or comply with an applicable waste load allocation and implementation schedule. Such dischargers may also be required to obtain an individual RWQCB permit specific to the area.

2.2 Stormwater Run-On From Offsite Areas

The General Permit requires (Section XIV.A.4) that the SWPPP address calculations and design details as well as BMP controls for site run-on. This section of SWPPP should identify and provide estimates of any anticipated locations of project run-on. BMPs to control run-on should be described in the BMP section and shown on the SWPPP site map.

2.3 Findings of the Construction Site Sediment and Receiving Water Risk Determination

The SWPPP should summarize the assumptions and input parameters and findings of the sediment and receiving water risk assessment, including the resulting site risk level from the Site Risk determination (See Section 2.2.2 of this handbook).

The SWPPP should state the option used to determine the sediment risk, either GIS map or the site specific option. The SWPPP should include a table of the RUSLE R-, K-, and LS-factors determined, the overall predicted sediment loss from the project, and state the sediment risk (i.e., high, medium or low). The SWPPP should include key assumptions and methods made in determining the site's RUSLE factors of Rainfall/Runoff (R), Soil Erodibility (K) and Length and Steepness of Slope (LS). For example, assumptions may include the estimated duration of construction (R-factor), soil horizon (K-factor), and estimated slope length and steepness (LS-factor).

The SWPPP should indicate the receiving water risk (low or high) for the site. If the project has a high receiving water risk, the section should indicate the reason.

Include the output of the overall calculated site risk level based on the Risk Determination Worksheet (Appendix 1 of the General Permit) in the SWPPP.

Once a risk determination has been made, include a summary of permit requirements specific to that risk level. Indicate appropriate NALs (250 NTU for turbidity and 6.5-8.5 for pH for Risk Levels 2 and 3) and Receiving Water Monitoring Triggers (500 NTU for turbidity and 6.0-9.0 for pH for Risk Level 3). Indicate which attachment of the General Permit the SWPPP has been prepared to comply with, i.e., Risk Level 1 – Attachment C; Risk Level 2 – Attachment D; or Risk Level 3 – Attachment E.

2.4 Construction Schedule

Identify and reference the project construction schedule and include the schedule as Appendix F of the SWPPP. Recommended minimum information includes the anticipated start and end dates of construction and well as phases of significant grading activities and work near drainages or receiving waters.

2.5 Potential Construction Site Pollutant Sources

Identify construction materials that will be used and activities to be performed that have the potential to contribute pollutants other than sediment to stormwater runoff. The General Permit requires (General Permit Attachments C, D, & E - Section B.5) that permittees conduct an assessment and create a list of potential pollutant sources and identify areas of the site where additional BMPs are necessary to reduce or prevent pollutants in discharges. This list can be included in this section or in an Appendix to the SWPPP (e.g., SWPPP Appendix G). These pollutants and potential pathways must be considered when developing BMPs in accordance with General Permit requirements.

2.6 Identification of Non-Stormwater Discharges

Identify non-stormwater discharges that apply to the site. The General Permit requires (Section XIV.A.2"SWPPP Requirements") that dischargers identify all non-stormwater discharges (where not otherwise required to be under a Regional Water Quality permit) and that discharges be eliminated, controlled, or treated.

SECTION 3 Best Management Practices

3.1 Schedule for BMP Implementation

Identify the schedule for deployment of BMPs. BMPs must be implemented, modified, and maintained to reflect the <u>phase of construction</u> and the weather conditions. In order to be effective, some BMPs must be installed before the site is disturbed (e.g., to provide protection during grading operations or to reduce or minimize pollution from historic areas of contamination during construction).

3.2 Erosion and Sediment Control

Identify in this section, a system of erosion and sediment control BMPs to meet the General Permit requirement of providing site BMPs that are effective and result in the reduction or elimination of sediment related pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity to the BAT/BCT standard (Section XIV.A.3). The General Permit additionally requires that SWPPPs be designed to address stabilization BMPs installed to reduce or eliminate pollutants after construction (Section XIV.A.5). In addition, if the site is planning to use an ATS for enhanced sediment removal must comply with all ATS requirements in the General Permit and the SWPPP should reference the ATS Plan. This document should be considered a companion document to the SWPPP or included as a SWPPP Appendix.

Identify BMPs for <u>erosion control</u>, <u>sediment control</u>, <u>tracking control</u>, and drainage control (and related BMPs) that meet the minimum requirements for each site risk level category in the General Permit and otherwise prevent pollution associated with construction activities.

Identify BMPs in the SWPPP, and reference BMP fact sheets included in the <u>CASQA</u> Construction Handbook or other sources as applicable, and *illustrate on the BMP site* map (General Permit Attachment B.J.2) and in BMP detail sheets on the plans. Include copies of fact sheets in SWPPP Appendix H.

See Section 3 of this handbook for a list of erosion control, sediment control, <u>wind</u> <u>erosion control</u> and tracking control BMPs for consideration in a site-specific suite of BMPs.

3.3 Non-Stormwater and Materials Management

Identify in this section, non-stormwater BMPs to effectively reduce pollutants associated with material storage, material use, waste management, and reduce/properly manage "non-stormwater" that is used or generated on site. The General Permit requires (Section XIV.A.2) that SWPPPs be designed to address the following objective: to identify all non-stormwater discharges (where not otherwise required to be under a Regional Water Quality permit) and that discharges be eliminated, controlled, or treated.

Identify non-stormwater BMPs that meet the minimum requirements for each site risk level and otherwise prevent pollution associated with construction activities.

Identify BMPs in the SWPPP, and reference BMP fact sheets included in the CASQA BMP Handbook – Construction, and *illustrate on the BMP site map (General Permit Attachment B.J.2)* and in BMP detail sheets on the plans as needed. Include copies of fact sheets in SWPPP Appendix H.

See Section 4 of the handbook for a list of non-stormwater and material management BMPs related to material use, specific construction activities, non-stormwater management, and waste management.

3.4 Post-Construction Stormwater Management Measures

Briefly summarize in this section any applicable post-construction BMPs that will be included in the project to meet local MS4 permit or General Permit requirements. Reference applicable project documents (e.g., water quality related reports or post-construction plans) required by the local agencies to obtain building or grading permits, etc. If the SWPPP is used as a contracting document/specification for a general contractor or Qualified SWPPP Practitioner (QSP), clearly identify whether or not responsibilities related to post-construction BMPs (construction, inspection, and long-term maintenance) are part of the scope of work.

For all sites, identify site design, <u>source controls</u>, and <u>treatment controls</u> that will be included in the permanent project as well as funding mechanism for long-term BMP maintenance as applicable. The General Permit requires that all discharges implement BMPs to reduce pollutants in stormwater discharges that are reasonably foreseeable after all construction phases have been completed at the site (Section XIII.B).

Section XIII.A of the General Permit requires post-construction runoff reduction. Identify whether or not the project is located in an area subject to a Phase I or Phase II Municipal Separate Storm Sewer System (MS4) permit approved Stormwater Management Plan (SWMP). If so, indicate that the project qualifies for a MS4 exemption to the runoff reduction requirements. If not, identify how the project will meet post construction runoff reduction requirements of the General Permit (Section XIII.A). Options include: 1) implementing non-structural measures and runoff reduction credits using the water balance calculator (provided with the General Permit); and 2) structural controls with RWQCB approval.

SECTION 4 BMP Inspection, Maintenance, and Rain Event Action Plans

4.1 BMP Inspection and Maintenance

Include a statement about BMP inspection and maintenance requirements, including the location of blank and completed inspection checklists/forms. Provide a blank inspection form in the SWPPP (in SWPPP Appendix I) that will be used to record results of the inspection and assessment. Completed inspection forms should be included in SWPPP Appendix I or in an accompanying file/binder that is referenced in the SWPPP and readily accessible on site).

The General Permit requires (Attachments C, D, E; Section G.5) that completed inspection checklists be maintained with the on-site SWPPP. In general the information required to be recorded for BMP/facility inspections includes: the date of the inspection, weather information, site information, observations, descriptions of the inspected BMPs and any deficiencies, and the corrective actions that were taken such as BMPs that were fixed or additional BMPs that were implemented, and the inspectors name, title, and signature.

The required frequency of BMP inspections depends on the type of BMP that is implemented. The General Permit (Attachments C, D, E; Section G.2) requires routine weekly inspections and daily inspections during rain events of all BMPs (for all Risk Categories); however, some BMPs (e.g. tracking controls; Attachments D & E, Section E.7) may require daily monitoring. BMPs must be maintained regularly based on permit-required inspections and observations during the course of normal construction activities.

The General Permit requires dischargers to begin implementing corrective actions within 72 hours for deficiencies identified during inspections (Attachments C, D, E; Section G.3). SWPPP amendments should be prepared by the QSD if warranted by the problem encountered and corrective action required.

4.2 Rain Event Action Plans

Include language regarding the requirement and procedure for preparing and implementing <u>REAPs</u> for each qualifying site and storm event. REAP requirements are stated in General Permit Attachments D and E; Section H and are generally summarized below.

REAPs developed by a <u>QSP</u>, are required for all Risk Level 2 and 3 dischargers for each construction phase. The SWPPP can include REAP templates but the QSP will need to customize them for each rain event. Include site-specific REAP templates for each applicable phase of the project in SWPPP Appendix J. Completed REAPs must be maintained on site. It is recommended that they be maintained with the SWPPP or in an accompanying binder/folder that is referenced in the SWPPP.

The QSP must develop the REAP 48-hours in advance of any precipitation event forecast to have a 50% or greater chance of producing precipitation in the project area. The REAP must be on site and be implemented 24 hours in advance of any the predicted precipitation event.

The REAP is designed to protect all exposed portions of project sites and to ensure that the discharger has adequate materials, staff, and time to implement erosion and sediment control measures that are intended to reduce the amount of sediment and other pollutants that could be generated during the rain event.

At minimum the REAP must include the following site and phase-specific information:

- 1. Site Address;
- 2. Calculated Risk Level (2 or 3);
- 3. Site Stormwater Manager Information including the name, company, and 24-hour emergency telephone number;
- 4. Erosion and Sediment Control Provider information including the name, company, and 24-hour emergency telephone number;
- 5. Stormwater Sampling Agent information including the name, company, and 24-hour emergency telephone number;
- 6. Activities associated with each construction phase;
- 7. Trades active on the construction site during each construction phase;
- 8. Trade contractor information; and
- 9. Suggested actions for each project phase.

An example template REAP is provided in Appendix C of this handbook.

SECTION 5 Training

Include a statement about training requirements and documentation.

The General Permit requires (Section VII) that all elements of the SWPPP be developed by a QSD and implemented by a QSP. The QSP may delegate tasks to trained employees provided adequate supervision and oversight is provided.

Personnel at the site shall receive training appropriate for individual roles and responsibilities on the project. Appropriate personnel shall receive training on SWPPP implementation, BMP inspection and maintenance, and record keeping. Document all training activities (formal and informal) and retained a record of training activities in SWPPP Appendix K. Training documentation must also be submitted in the Annual Report.

SECTION 6 Responsible Parties and Operators

6.1 Responsible Parties

The General Permit requires (Section VII.B.4) that the name of any "Approved Signatory" be listed in the SWPPP, and a copy of the written agreement or other mechanism that provides this authority from the LRP be provided in the SWPPP.

A list of authorized representatives should be provided in this section or in an appendix to the SWPPP (e.g., SWPPP Appendix L) along with project site personnel who will be responsible for SWPPP activities, including the QSD and QSP. This list should include the names of the individuals granted authority to sign permit-related document.

Include copies of the written authorizations for duly authorized representatives in the appendix. The appendix or list should include the name and contact information for the individual, their role on the project, date of training, and date of recorded entry as well as a copy of training certificates or other verification of training.

6.2 Contractor List

The General Permit requires (Section VII.B.5) that the SWPPP include a list of names of all contractors, subcontractors, and individuals who will be directed by the QSP.

Include this list in this section or in an appendix to the SWPPP (e.g., SWPPP Appendix M). The list is required to include telephone numbers and work addresses and the specific areas of responsibility of each subcontractor and emergency contact numbers.

SECTION 7 Construction Site Monitoring Program

7.1 Purpose

The General Permit (Attachments C, D, E; Section I.1.a) requires that a written site specific Construction Site Monitoring Program (CSMP) be developed by each discharger prior to the commencement of construction activities, and be revised as necessary to reflect project revisions and that the CSMP be included with the SWPPP.

The <u>CSMP</u> should be developed to meet the specific requirements and objectives identified in the General Permit for each risk level. A suggested format is provided below (Sections 7.2 through 7.9 of this annotated outline). Include the CSMP as SWPPP Appendix N. The CSMP shall include monitoring procedures and instructions, location maps, forms, and checklists, a description of the project site's watershed, including drainage patterns and all site discharge locations. Additionally, the CSMP should describe NALs and Receiving Water Monitoring Triggers for the site. See Appendix D of this handbook for additional guidance on developing a CSMP.

7.2 Applicability of Permit Requirements

General Permit monitoring requirements for stormwater and non-stormwater visual observations; stormwater and non-stormwater sample collection; and receiving water monitoring shall be described in the CSMP. Requirements vary based on the project risk level. The CSMP shall identify the applicable monitoring requirements; and, inspection, observation, and sample collection frequency based on the project's risk level.

The applicability section of the CSMP should also identify the <u>qualifying storm event</u> for stormwater related observations and sample collection as well as permit-specified sampling/observation exemptions.

7.3 Monitoring Locations

Maps and descriptions should be provided for each of the project's observation and/or sample collection locations; including identification of locations specific to particular project phases or watershed as applicable. Instructions or criteria for access shall be included.

Risk Level 3 sites should identify receiving water monitoring locations should this monitoring be required.

7.4 Safety

A description of site hazards and safety information related to conducting visual observations or sample collection, particularly in inclement weather, shall be included in the CSMP.

7.5 Visual Monitoring (Inspections)

Identify requirements, frequencies, and provide inspection checklists for non-stormwater and stormwater observations.

Section 3.1 of Appendix D (of this handbook) provides details of the visual monitoring requirements.

7.6 Water Quality Sampling and Analysis

The level of detail and the amount of information provided in this section will depend upon the risk level determined for the site as part of the PRDs. See Section 3.2 of Appendix D of this handbook for more details on sampling and analysis.

All Sites are required to monitor runoff for non-visible pollutants in the event of a BMP failure, breach, or spill. An area unaffected by the failure, breach, or spill must also be sampled to serve as the basis of comparison.

Risk Level 2 and 3 sites are required to collect:

- Samples of runoff and contained rainwater (when it is released) from qualifying storm events and analyze samples for pH and turbidity.
- Samples of non-stormwater (authorized and unauthorized) to characterize the discharge.

Risk Level 3 sites may additionally be required to collect:

 Samples in the receiving water for pH, turbidity, and <u>SSC</u> if Receiving Water Monitoring Triggers are exceeded in runoff samples.

Sites using ATS are required to collect samples related to operation of the ATS. However, this sampling should be detailed in the ATS Plan and only referenced in the CSMP.

Risk Level 3 sites that meet the thresholds identified in General Permit Appendix 3 are required to conduct <u>bioassessment</u> monitoring

The CSMP should include specific details about sample collection frequency; sample constituents; sample collection methodologies (including clean sample collection techniques); and use of pH and turbidity field meters and field quality assurance/quality control.

Sample procedures for laboratory analysis should also be described (in the event of non-visible pollutant monitoring or other required laboratory sample analysis, e.g. SSC). These procedures should include which laboratory will be performing the sample analysis and how samples will be delivered to the laboratory, laboratory analytical methods and reporting limits, sample container requirements and required sample volume; field and laboratory quality assurance/quality control, and chain of custody procedures.

7.7 Watershed Monitoring Option

Sites that participate in a qualified regional watershed-based monitoring program should describe their participation and the elements of the General Permit monitoring requirements that have been suspended by the RWQCB in lieu of the watershed monitoring. Include a copy of the RWQCB approval of the watershed monitoring program.

7.8 Quality Assurance and Quality Control

Include any details of the Quality Assurance and Quality Control plan that have not be described in Section 7.6

7.9 Reporting Requirements and Records Retention

The CSMP shall clearly identify information required to be recorded during observations and sample collection through the use of checklists and field forms. The CSMP should

include directions on report storage and retention requirements. See Appendix D Section 6.0, and Section 8.0, of this handbook.

Additionally, reporting requirements for standard reporting and permit exceptions (e.g., NAL exceedance via the SMARTS system) should be clearly identified for the site's risk level.

List of Appendices

Appendices should support the information required by the CGP and necessary supplementation information. Note that the order of Appendices in this outline differ from the SWPPP template in Appendix G, due to the differences in the level of detail of the two documents.

APPENDIX A	CONSTRUCTION GENERAL PERMIT
APPENDIX B	SUBMITTED PERMIT REGISTRATION DOCUMENTS: NOI, Risk Assessment (Construction Site Sediment and Receiving Water Risk Determination); Site Map (including vicinity map); Signed Certification Statement.
APPENDIX C	SWPPP AMENDMENT LOG
APPENDIX D	NAL EXCEEDANCE SITE EVALUATIONS
APPENDIX E	SUBMITTED CHANGES TO PRDS (DUE TO CHANGE IN OWNERSHIP OR ACREAGE)
APPENDIX F	CONSTRUCTION SCHEDULE
APPENDIX G	CONSTRUCTION ACTIVITIES, MATERIALS USED AND ASSOCIATED POLLUTANTS
APPENDIX H	CASQA BMP HANDBOOK FACT SHEETS
APPENDIX I	CONSTRUCTION SITE INSPECTION REPORT FORM
APPENDIX J	SITE SPECIFIC RAIN EVENT ACTION PLAN (FORMS AND COMPLETED PLANS)
APPENDIX K	TRAINING REPORTING FORM
APPENDIX L	RESPONSIBLE PARTIES
APPENDIX M	CONTRACTORS AND SUBCONTRACTORS
APPENDIX N	CONSTRUCTION SITE MONITORING PROGRAM