

**APPENDIX C**

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**STORM WATER POLLUTION PREVENTION PLAN**

# TABLE OF CONTENTS

## STORM WATER POLLUTION PREVENTION PLAN

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CHAPTER 1.0	3
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### GENERAL PROJECT INFORMATION

1.1 Overview	3
1.2 Linear Project Characteristics	4
1.3 Project Responsibilities	5
1.4 Total Area Estimate	5
1.5 Site Map and Drainage	6
1.6 Receiving Waters	6
1.7 Wetlands	6

CHAPTER 2.0	7
-------------	---

### POTENTIAL SOURCES OF POLLUTANTS

2.1 Description of Installation Activities	7
2.2 Potentially Harzardous Materials Associated with Installation Activities	7
2.3 Non-Harzardous Materials Associated with Installation Activities	8

CHAPTER 3.0	9
-------------	---

### BMPs FOR STORM WATER POLLUTION PREVENTION

3.1 General BMPs	9
3.2 Specific BMPs For Potentially Hazardous Materials	9
3.3 Overall Spill Response Coordination	12
3.4 Spill Containment Procedures	14
3.5 Notifications	17

CHAPTER 4.0	19
-------------	----

### EROSION AND SEDIMENT CONTROL MEASURES

4.1 General Specifications	19
4.2 Specific BMPs For Erosion and Sediment Control	20
4.3 BMPs for post Installation / Soil Stabilization	26

CHAPTER 5.0	28
<b>INSPECTION, MAINTENANCE, AND RECORD KEEPING</b>	
5.1 Inspection and Maintenance .....	28
5.2 Inspection Frequency .....	29
5.3 Documentation of Inspections .....	29
5.4 Record Keeping and Internal Reporting Procedures .....	30
CHAPTER 6.0	31
<b>CHANGES AND AMENDMENTS TO THE SWPPP</b>	
CHAPTER 7.0	32
<b>TRAINING</b>	
CHAPTER 8.0	33
<b>CERTIFICATION</b>	
ATTACHMENT I- III	34
<b>PROJECT SEGMENT DESCRIPTION</b>	
<b>MASTER LIST OF JURISDICTIONAL FEATURES</b>	
<b>CALIFORNIA CONSTRUCTION HANDBOOK BMPS</b>	
ATTACHMENT IV	35
<b>MONITORING AND REPORTING FORMS</b>	
ATTACHMENT V	51
<b>NOTICE OF INTENT</b>	

# CHAPTER 1.0

## GENERAL PROJECT INFORMATION

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### 1.1 OVERVIEW

Metromedia Fiber Network Services, Inc. (also referred to as Metromedia), a communications and information services company, has applied to the California Public Utilities Commission (CPUC) for a modification to its existing Certificate of Public Convenience and Necessity (CPCN), granted on July 24, 1998, authorizing it to install fiber optic cable networks to provide telecommunications services in California. This Storm Water Pollution Prevention Plan (SWPPP) covers Metromedia's construction and installation of fiber optic conduit for linear route segments in the San Francisco Bay Area. Included in this SWPPP is a Spill Prevention Control & Countermeasure Plan (SPCC) to control and contain potential spills of harmful construction-related pollutants.

Metromedia's project would involve the underground installation of approximately 113 miles of conduit for fiber optic cable in the San Francisco Bay Area. Metromedia will construct virtually all of the project along several linear routes in the metropolitan area within existing previously disturbed rights-of-way, i.e., rights-of-way of railroads and public roadways. A small portion of the construction, including portions of the fiber optic conduit and points of presence (POP) facilities, would be installed outside disturbed rights-of-way. Metromedia's proposed fiber optic cable system would consist of underground and aboveground facilities. Metromedia would construct conduit and utility access vaults underground in which fiber optic cable would be installed. Aboveground, points of presence (POPs) facilities will be constructed to hold routing and other fiber optic network equipment.

The planned route is indicated and discussed in Attachment I.<sup>1</sup> This SWPPP describes the intended methods for placement of the fiber optic cable and ancillary facilities, and explains the plans to protect water quality. Additionally, it establishes emergency response procedures, lines of communication and responsibilities in case of a spill and/or release of materials particularly harmful to water quality. The plan also describes procedures and materials used during containment and/or clean up, should a release occur.

This Storm Water Pollution Prevention Plan will be applicable for all project activities within the San Francisco Bay Area. The construction activities include clearing of right-of-way (ROW), erosion control, potholing utilities, trenching and rock-sawing subsurface material, directional boring, and final restoration of the ROW. The restoration phase activities will consist of erosion control practices, removal and off-site disposal of debris and wastes generated from construction activities, restoration of all areas of disturbance and re-vegetation.

The goal of the SWPPP is to protect overall water quality during the installation of the conduit. Installation activities could potentially affect water quality by the use, storage, and handling of construction materials, as well as soil erosion and sedimentation. With the implementation of

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<sup>1</sup> All references to Attachments I through III refer to maps, figures, and tables that will be part of the permit handbook and are not included within this appendix. All maps and figures are derivatives of figures shown in the main body of this environmental assessment.

construction-related best management practices (BMPs) outlined in this plan, the potential for the transport of construction-related materials, erosion and sedimentation to receiving waters will be minimized.

The overall purpose of the SWPPP is to:

- 1) To identify pollutant sources that may affect the quality of discharges of storm water associated with construction activity (storm water discharges) from the construction site, and
- 2) To identify, construct, implement, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site, and
- 3) To develop a maintenance schedule for BMPs installed during construction designed to reduce or eliminate pollutants after construction is completed (post-construction BMPs).

The overall purpose of the SPCC section is to:

- 1) Minimize the potential for a spill of oil or other construction-related materials;
- 2) Protect areas that are considered environmentally sensitive (streams, wetlands, etc.).
- 3) Ensure a safe and organized response should a spill occur;
- 4) Contain any spillage to the smallest area possible; and
- 5) Ensure all appropriate notifications are completed.

Metromedia and its contractors will comply with all environmental and safety laws and regulations and provide training and equipment designed to prevent pollution during construction of the long haul fiber optic project.

## **1.2 LINEAR PROJECT CHARACTERISTICS**

The proposed project is the installation of buried fiber-optic conduit within the San Francisco Bay Area. Detailed data specific to each segment (e.g., segment specific project description, list of water crossings, topographic maps) is contained within the Construction Operations Line Book. The project is linear in nature in that the conduit will be installed within a narrow corridor. Although installation of the fiber-optic conduit will be placed within a 1-2 foot trenched, or bored area, a construction corridor of approximately 20 to 40 feet in width is assumed for placement and use by construction vehicles and equipment. The majority of the project will be installed within previously disturbed corridors such as railroad ROWs and roadways. Construction-related disturbance associated with the project will be temporary in nature.

This SWPPP has been prepared to match the linear nature of Metromedia's project. Site-specific provisions normally required by the State Water Resources Control Board (SWRCB) for the SWPPP are omitted recognizing that the SWRCB guidelines for SWPPP's are not designed for linear projects. Rather, Metromedia prepared this SWPPP based on experience with other linear facility construction projects including pipelines and electrical transmission lines and review of industry and government guidance documents. It is Metromedia's intent that the proposed construction meet SWRCB requirements for storm water management and protection as appropriate under the National Pollutant

Discharge Elimination System program according to the *California Storm Water Best Management Practice Handbook*.

### **1.3 PROJECT RESPONSIBILITIES**

The term Owner refers to Metromedia. The term Contractor refers to the Bechtel Company or other assigned entity responsible for the installation of the fiber optic cable. The Site Superintendent is the individual responsible for the direction of work on the job site. The Site Superintendent is directly responsible for the implementation of the Storm Water Pollution Prevention Plan (SWPPP). At the discretion of the Site Superintendent, a SWPPP or Site Supervisor (or Environmental Resource Coordinator) may be designated. The SWPPP shall be kept on site during construction activity and made available upon request of a representative of the Regional Water Quality Control Board and/or local agency.

The Site Superintendent will assume overall responsibility for the implementation of the SWPPP. Since the Site Superintendent will not maintain a constant presence in the field, the Site Supervisor will assist in implementation of the plan. The Site Supervisor will periodically inspect the construction site for situations that could attribute to a potential degradation of local water resources. If a spill or other water quality impact should occur, the Site Supervisor will be responsible for coordinating the response and clean-up personnel to ensure proper clean up and disposal of the released material.

In order to be effective in a spill response, the Site Superintendent and Site Supervisor must be familiar with several aspects of the installation activities, including:

- Location and characteristics of all construction substances and wastes being handled
- Implementation of best management practices (BMPs) necessary to avoid potential spills or releases
- Proximity of construction to sensitive areas (i.e. stream banks, wetlands, or other environmentally sensitive areas)
- Location and condition of spill control materials

The Site Superintendent and Site Supervisor must be trained in the implementation of the SWPPP and have the authority to commit resources (personnel and money) necessary to implement this plan. The Site Superintendent and Site Supervisor will also assure that a copy of this plan is available (onsite) to all construction crews.

### **1.4 TOTAL AREA ESTIMATE**

The maximum width of the cleared area on the ROW is expected to be 20 to 40 feet. It is estimated that trenching and installation of the fiber optic conduit will progress at various speeds according to the site terrain. Please refer to Table 1 below for potential daily linear progress. Following the placement of the conduit, the disturbed area will be restored and allowed to return to pre-existing conditions. Refer to Attachment I for the total distance of this route and the to be disturbed corridor.

**TABLE 1  
TYPICAL PROGRESS RATES BY  
CONSTRUCTION METHOD AND SITE CONDITION**

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<b>Crew &amp; Site Condition</b>	<b>Typical Daily Progress</b>
Metropolitan Street Trenching	85 ft.
Industrial Street Trenching	200 ft.
Residential Street Trenching	200 ft.
Dirt Trenching	2600 ft.
Directional Drilling	300 ft.

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*Source:* Bechtel Telecommunications

## **1.5 SITE MAP AND DRAINAGE**

The site map (see Attachment I) presents the intended route of the project. The runoff coefficient will likely widely range from 0.10 to 0.90, depending on the land cover, soil conditions, slope of land, and rainfall intensity. Since much of the construction will occur in railroad right-of-ways, the runoff coefficient will likely range from 0.20 to 0.35 range in these areas. Please refer to Attachment II for a list of drainages and wetlands to be crossed by the project route.

This project covers an extensive length with varying terrain. Therefore, erosion control measures will be based on site specific geomorphology. The site maps do not show the location of structural erosion controls, or the specific areas where stabilization practices will occur. The actual placement of these controls will be determined in the field during construction.

## **1.6 RECEIVING WATERS**

Attachment II (Drainages Table) presents the names and locations of drainages and receiving water bodies crossed by the project.

## **1.7 WETLANDS**

Wetlands are identified in Attachment II. Any activities in wetland areas will be covered under an Army Corps of Engineers Nationwide Permit 12 and 401 Water Quality Certification Waiver. Activities in wetlands will be undertaken using the methods defined in this plan and will be designed to minimize impacts to wetlands. Wetlands and waters of the United States have been delineated in accordance with methods currently accepted by the U.S. Army Corps of Engineers. Avoidance of the identified features was a primary constraint governing project design. Attachment II presents the names and locations of drainages and receiving water bodies crossed by the project.

## **CHAPTER 2.0**

### **POTENTIAL SOURCES OF POLLUTANTS**

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#### **2.1 DESCRIPTION OF INSTALLATION ACTIVITIES**

The construction corridor will be cleared by a bulldozer along a pre-marked line. The clearing will consist of removal of small trees and brush, large rocks, and any vegetation that obstructs the path of fiber placement. Depending on the location, a backhoe or a vacuum truck will perform the potholing (exposing of existing utilities). Trenching will be accomplished either by backhoe or rocksaw. Trenching would typically involve a rubber-tired backhoe or an excavator. The trench width would be approximately 12 inches greater than the conduit diameter, but may vary depending on the underground facilities that may be encountered. Trenches would be four to five feet deep. The construction zone would be approximately 20 to 40 feet wide where no sensitive environmental resources are present.

The decision to trench and the choice of method will be site-specific. In areas of increased rock, a rocksaw may be used to cut a trench to the proposed depth. Directional boring will take place at road crossings, many river and stream channels, rail crossings, most wetlands, and utilities. Final restoration will be completed using a bulldozer to grade the ROW to its pre-construction elevations. Temporary erosion control methods will be site specific, and may include silt fencing, hay bale barriers, and erosion control matting. Restoration will also include removal of any waste or debris generated by the Contractor and possible revegetation where applicable.

#### **2.2 POTENTIALLY HAZARDOUS MATERIALS ASSOCIATED WITH INSTALLATION ACTIVITIES**

Potentially hazardous materials, which may be present on-site during conduit installation, are those generally associated with the operation and maintenance of vehicles and equipment. Though these potentially hazardous materials may be present on-site, the amount of material will be limited due to the mobile nature of the installation activities. Conduit installation will proceed at a pace of several hundred feet a day, therefore, precluding long-term use, storage, or occupation of materials at any one location.

Some of the hazardous materials available for use during conduit installation may include:

- Diesel fuel
- Gasoline
- Motor oil
- Break fluid
- Hydraulic fluid
- Antifreeze
- Lubricants oils



## **2.3 NON-HAZARDOUS MATERIALS ASSOCIATED WITH INSTALLATION ACTIVITIES**

Non-hazardous materials which may be present on-site during conduit installation are those generally associated with the disturbance of soil, drilling operations and concrete laying activities. These non-hazardous materials may include:

- Exposed soil and subsequent sediment
- Concrete and asphalt and associated washout
- Drilling fluids

Exposed soil and sediment may be generated by the activities associated with this construction project. Soils are considered non-hazardous because they have no adverse effects on human health when not contaminated by anthropogenic materials. However, if sediment is introduced into the environment in large quantities, they may have adverse effects on water quality, vegetation, fish and wildlife. For these reasons, Section 4.0, Erosion and Sediment Control Measures, has been dedicated to this subject.

Concrete and asphalt would be used for repaving of roadways and other paved surfaces. Discharge of these materials or wash water into local waterbodies could degrade water quality. Additionally, the waste generated during cutting and removal of concrete or asphalt from existing paved surface could lead to the dispersion of such wastes into local waterbodies.

Drilling fluids, such as bentonite clay slurry, are associated with directional boring proposed for sensitive areas such as streams, wetlands, and high traffic roadways. The release of drilling fluids into local waterbodies could be detrimental to water quality due to the fine particle size of the clay contained with the fluid. Release of the fluid could occur through a seep in the borehole, from the bore and exit pits, or from the fluid containment and recycling system.

## **CHAPTER 3.0**

### **BMPS FOR STORM WATER POLLUTION PREVENTION**

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#### **3.1 GENERAL BMPS**

In order to avoid or minimize impacts to waters of the United States, the following measures will be implemented to address general best management practices (BMPs) during conduit installation.

General BMPs include the following:

- Bore under sensitive resources
- Implement erosion control measures during construction.
- Remove cover vegetation as close to the time of construction as practicable.
- Confine construction equipment and associated activities to the construction corridor.
- Implement stream-crossing methods that protect water quality.
- Reestablish streambank contours following construction and install permanent erosion control as needed.
- No refueling of construction related equipment should take place within 100-feet of any aquatic environment.
- Maintain hazardous materials spill kits at all times.
- Limited trenching width to reduce exposed soil.
- Comply with state and federal permits.
- Perform proper sediment control.
- Protect stream resources during construction.
- Implement the spill prevention and response plan when necessary.
- Monitor construction activities near specified drainage and riparian areas.
- Restore the site concurrently with conduit installation.
- Remove all cable installation debris, construction spoils, remaining installation materials and miscellaneous litter for proper off-site disposal.
- Post-construction monitoring and supplemental revegetation where needed.

#### **3.2 SPECIFIC BMPS FOR POTENTIALLY HAZARDOUS MATERIALS**

To further minimize storm water pollution, the following sections will address specific BMPs targeted at preventing potentially hazardous materials from entering receiving waters during conduit installation. Please refer to Attachment III for the specific Construction Handbook BMPs, which were used as guidelines when developing the following practices, and will be implemented as warranted throughout the project.

***MATERIAL DELIVERY & STORAGE PRACTICES (CA10, CA21)***

*General Materials*

- Designate specific delivery / storage area
  - place near construction entrances when possible
  - place on paved areas when available
  - away from drainage courses
- Materials are delivered and stored in an organized manner
- No debris, soil, silt, bark, rubbish, cement or cement washing, oil or petroleum products, or any other construction materials are allowed to be placed where it may be washed by rainfall into waters of the State (per California Department of Fish & Game - CDF&G)
- No solid waste (construction debris, green waste, trash) should be deposited within 150 feet of the high water mark of any stream (CDF&G)
- When installation is complete, any excess material or debris should be removed from the work area

*Hazardous Materials & Wastes*

- Minimize amount of hazardous materials and wastes delivered or stored onsite
- Designate specific delivery and storage area for hazardous materials & wastes
  - at least 100 ft from water bodies, wetlands, biological or cultural sensitive areas
  - at least 150 feet from wells
- Ensure hazardous materials and wastes are stored appropriately:
  - do not store directly on ground - place on pallet or in secondary containment structure
  - secondary containment can include: earth dike with impervious liner, trough, kids wading pool, metal/plastic tray
  - in wet weather, store materials under cover
- Materials should be stored in original containers and labeled to OSHA specifications
- Drips, leaks & spills need to be contained and cleaned up quickly
- MSDS sheets are to be available (for hazardous materials)
- Hazardous wastes are transported, recycled or disposed according to appropriate federal, state and local requirements by generator
- Ensure HazMat spill kit is available on-site for use in case of spill/release

***SPILLS, LEAKS OR RELEASES***

- Follow response procedures as described for spill types listed below
- Report any fuel/chemical spill or oily soil to Site Superintendent or Site Supervisor
- Site Superintendent must report spill/leak to the onsite Environmental Resource Coordinator immediately
- Ensure spill equipment & absorbents are available for use

***VEHICLE & EQUIPMENT STORAGE***

- Confine vehicles & equipment to the construction corridor
- Designate, and make known to all project personnel, specific area for staging of inactive vehicles and equipment
- Periodically inspect for leaking vehicles and equipment

***VEHICLE & EQUIPMENT MAINTENANCE (CA32)***

- Vehicles & equipment should be well maintained
- If inspection reveals vehicle or equipment with a leak, vehicle or equipment should be refused entry
- Use off-site repair shops as much as possible

- If maintenance occurs on-site:
  - no maintenance within 100 feet of sensitive areas
  - catch basin, fuel/oil pans, or containment should be used to capture spills/leaks
  - captured fluids must be disposed of properly
- Clean vehicle parts without using solvents – solvents must be disposed of as hazardous waste
- Place a drop pan underneath vehicles and equipment when performing maintenance such as removing parts, unscrewing filters, or unclipping hoses. All used fluids must be transferred to proper waste or recycling drums
- Do not use running water from a hose to clean work areas because the contaminated water could enter the storm drainage system and ultimately, surface water bodies

### ***VEHICLE & EQUIPMENT WASHING (CA30)***

- Vehicles are to be kept clean to prevent buildup of oil, grease and solids
- Washing to remove oil, grease and solids should not occur on-site
- If washing to remove soil and noxious pests, it is recommended:
  - to designate bermed area at least 100 feet from sensitive areas
  - use as little water as possible and to recycle all wastewater
  - apply erosion or sedimentation controls as needed
- Discharge to any water body will not be permitted

### ***VEHICLE & EQUIPMENT FUELING (CA31)***

- Use off-site fueling stations as much as possible
- Designate specific fueling area; not within 100 feet of sensitive area
- Discourage topping-off or overfilling tanks
- Use drain pan, drop cloth, absorbent pads, or other secondary containment underneath nozzle to catch spills/leaks while fueling

### ***FUEL STORAGE (CA31)***

- No fuel storage within 100 ft of sensitive areas (waterbodies, wetlands, biological, cultural areas) or within 150 feet of wells
- Location of fuel storage area is clearly identified
- If fueling trucks are utilized:
  - trucks must be staged within designated fueling area
  - mobile fueling is avoided except with large scale equipment
- If above ground storage tank is on-site:
  - ensure the tank has adequate secondary containment able to contain 110% of entire tank volume in case of failure
  - ensure measures are being taken to contain any residual drainage from fuel hoses
  - inspect integrity of fuel tank, dispenser connections, (i.e. hose piping) and containment area
  - repair / replace / fortify fuel storage area as needed

### ***TOILETS / SANITARY WASTES (CA24)***

- Portable toilets are located in convenient and level area; at least 100 feet from sensitive areas
- Sanitary wastes from portable toilets is collected by licensed contractor
- Follow OSHA standards requiring certain number of toilets per workers onsite

### **3.3 OVERALL SPILL RESPONSE COORDINATION**

The initial response to an emergency will be to protect human health and safety, and then the environment. Identification, containment, treatment and disposal assessment will be the secondary response.

Because of the potential fire hazard associated with gasoline or diesel fuels used during construction, possible sources of ignition should be eliminated to prevent such an occurrence. Therefore, vehicular traffic and work in the immediate area will cease until the spill is contained. If the spilled materials are flammable, as in the case of gasoline, fire equipment (i.e. fire extinguishers) should be made ready.

An area of isolation (i.e. “hot zone”) needs to be established around a spill. The size of this area will generally depend on the size of the spill and the materials involved. In small land releases the area may be a few feet in all directions around the spill, while in large water releases the area may extent several hundreds of feet from the point of release. The purpose of the isolation area is to control access to the potentially hazardous area. Therefore, only those persons involved in the oversight or implementation of the spill response should be allowed within the isolation area. The Site Supervisor or Environmental Resource Coordinator will be responsible for determining the size of the isolation area.

#### ***PERSONNEL INVOLVED IN SPILL RESPONSE***

In the event of a spill or release, there are three basic levels of personnel involved:

- 1) Initial Responder
- 2) SPCC Team member
- 3) Response and Clean-up Personnel

#### **3.3.2 Initial Responder**

An Initial Responder can be anyone who recognizes that a spill, release or leak has occurred and takes action to assist in the response. In simple cases, such as a small diesel spill, their assistance could include the removal/recovery of the spilled fuel by use of materials contained in the spill response kit. However in more complicated situations, the Initial Responder’s role is one of making others aware of the situation and, if safe to do so, take steps to control the source or prevent further spread of the release.

The following general guidelines should be used when an Initial Responder recognizes a spill or release:

- 1) Evaluate situation – SAFETY FIRST!
- 2) Verbally warn all personnel in close proximity of the release
- 3) If necessary, isolate the area and deny entry to the spill area
- 4) If safe to do so, take steps control the source or prevent further spread of the release

Steps to control the source may include:

- closing a valve or nozzle
- shutting fuel pump off

- placing spilled container in upright position
  - placing drain pan, drop cloth, absorbent pads, or other secondary containment to capture release or spill
  - diverting flow of release or spill from reaching sensitive area by digging a ditch, constructing a dike, applying adsorbent pads, etc.
  - placing oil-absorbent booms across downstream waterway
- 5) Contact the Site Supervisor Environmental Resource Coordinator to provide the following information:
- The material spilled or released
  - The location of the release or spillage of hazardous materials
  - Actions already taken to control the source and prevent further spread
  - The location in which the spill is heading
  - The rate at which the spill is released
  - Any threat to waterways
  - Any injuries involved

This information will help the Site Superintendent, Site Supervisor, or Environmental Resource Coordinator assess the magnitude and potential seriousness of the spill or release. For a small spill, the Site Supervisor or Environmental Resource Coordinator will coordinate local cleanup with the resources available at the time of the release. If the accident is beyond the capabilities of the onsite equipment and material to handle, the Site Superintendent, Site Supervisor, or Environmental Resource Coordinator will contact necessary local emergency assistance, as well as Metromedia representatives for additional response resources.

### ***ENVIRONMENTAL RESOURCE COORDINATOR***

As indicated, the Site Superintendent, with assistance from the Site Supervisor or Environmental Resource Coordinator, will assume overall responsibility for the implementation of this SWPPP. The Environmental Resource Coordinator is responsible for coordinating all emergency response measures in the event of a release. Once notified of a spill or release, the Site Supervisor or Environmental Resource Coordinator will take appropriate action to handle the situation.

Once notified of a spill or release, the following general guidelines should be used to assist the Site Supervisor or Environmental Resource Coordinator in responding to the incident:

1. Gather as much information about the spill or release as possible
2. Initiate evacuation of the hazard area
3. Delineate (verbally or otherwise) an isolation area (i.e. hot zone), deny entry
4. Obtain medical attention for any injured persons (call 911), as needed
5. If steps to control the source and prevent further spread are inadequate or have not been taken, coordinate steps to do so – ONLY IF SAFE !
6. Dispatch local agency spill responders to the site (by calling 911) , if needed to assist in the containment, control or recovery of a significant spill
7. Contact the Site Superintendent or Site Supervisor, who can:

- Coordinate outside response and clean-up support
- Make appropriate notifications to state and/or federal agencies (as applicable – see Section 7.0)

### ***RESPONSE / CLEANUP PERSONNEL***

The Site Administrator or Environmental Resource Coordinator will designate Response/Cleanup Personnel to assist in the spill response. The responsibilities of various Response/Cleanup personnel will vary depending on their particular role. Some Responder/Cleanup Personnel may be assigned to control access to the isolation area, while others may be taking more aggressive action to stop, control and cleanup the release.

The following general guidelines should be used to assist Response/Cleanup Personnel in responding to the incident:

1. Assist Environmental Resource Coordinator in establishing an isolation area
2. Make sure all unnecessary persons are removed and remain outside the isolation area
3. Coordinate with Environmental Resource Coordinator to control the source of spill or release and prevent further spread of the release
4. Coordinate with Environmental Resource Coordinator to contain, divert and cleanup the spill
5. Properly dispose of all containment and cleanup materials, recovered waste, and contaminated soils

Any soils contaminated by fuels, lubricating oils, or other hazardous materials will be cleaned up, removed from the right-of-way, and temporarily stored at a designated storage area. The Environmental Resource Coordinator will ensure this waste is properly labeled and hauled from the site to an approved treatment facility.

All materials used to cleanup the spill will be containerized appropriately (based on material) and properly labeled prior to removal from the spill site. All vegetation contaminated by the spilled material will be similarly collected, bagged, and disposed at an approved disposal facility.

## **3.4 SPILL CONTAINMENT PROCEDURES**

Outside of personal safety, the goal of a spill response is to contain the spill to the smallest area possible and prevent the release from reaching a sensitive area. A sensitive area may include stream banks, wetlands, or drainage channels. Ideally, a spill should be controlled in its earliest stage and close to the source. This will permit the effective containment and recovery of the release with minimal damage to the environment.

Beyond the response guidelines provided in the previous sections, this section will address some targeted spill containment guidelines the Site Administrator or Environmental Resource Coordinator and Response/Cleanup Personnel can apply to small and large releases, on both land and water.

### ***SMALL SPILL CONTAINMENT***

#### **Small Land Spill or Release**

1. Control source of release (i.e. pick up container, close valve, etc.)
2. Block the flow of the spilled material and contain the spill to the smallest area possible

3. If applicable, use:
  - Shovel to dig small containment ditch
  - Apply absorbent media (pillow, pad, berm, etc.) to soak up release

### **Small Water Spill or Release**

1. Control source of release (i.e. pick up container, close valve, etc.)
2. Prevent spilled material flow from source area to water (see above)
3. If possible, get ahead of the spilled material (generally recognized by oily sheen)
4. Contain spilled material:
  - If water is deep enough, apply floating boom to capture, soak up or divert spilled material for recovery
  - If water is shallow, apply straw barriers across the width of a narrow waterway. Then use absorbent pillows or other device to recover contained material
  - It may be necessary to provide more than one barrier downstream. Install as many barriers as are needed to contain the flow of the spill material
  - Barriers can also be used to divert spilled material to a land area where absorbent media (pillow, pad, berm, etc.) can be used recover released material

### ***LARGE SPILL CONTAINMENT***

#### **Large Land Spill or Release**

1. Control source of release (i.e. shut down fueling operations, fortify breached
2. containment area, etc.)
3. Block the flow of the spilled material and contain the spill to the smallest area possible
4. If applicable, use:
  - Backhoe, shovel or other construction equipment to dig containment ditch or dike
  - If available, use vacuum truck or pump to remove spilled material
  - If pump is used, ensure pumped liquid is being transferred to appropriate container (i.e. drum or appropriately lined containment area)
  - If applicable, apply absorbent media (pillow, pad, boom, etc.) to soak up release

#### **Large Water Spill or Release**

1. Control source of release (i.e. shut down fueling operations, fortify breached containment areas, etc.)
2. Prevent spilled material flow from source area to water (see above)
3. Get ahead of the spilled material (generally recognized by oily sheen)
4. Set up containment barriers / berms (floating absorbent booms in deep water; straw barriers in shallow water)
  - It may be necessary to provide more than one barrier downstream. Install as many barriers as are needed to contain the flow of the spill material
5. Barriers can also be used to divert spilled material and create side channels with collection ponds
  - Spilled material within the collection ponds can then be recovered with the use of vacuum trucks or pumps and/or treated with absorbent media (pillow, pad, berm, etc.) to recover released material
  - If pump is used, ensure pumped liquid is being transferred to appropriate container (i.e. drum or appropriately lined basin)
  - If applicable, apply absorbent media (pillow, pad, berm, etc.) to soak up release



## **CONTAINMENT DEVICES**

The following containment devices may be applied to assist in the collection of spilled material:

- Dikes or Ditch - A dike or ditch can be a simple, yet effective, way to contain a spill or release as close to the source as possible. The purpose of the dike or ditch is to capture the spilled material, isolate the affected area and provide a targeted recovery area. The dike or ditch can be dug with a shovel, in the case of small spills, or with construction equipment, in the case of larger releases.
- Earth Fill Dams - An earth fill dam, in one form or another, is commonly used for spill containment. Dams of this type may range from simple, naturally constructed fills, which stop or divert flow to more elaborate controlled-flow structures. Some earthen dams are designed to allow water to flow under the dam (i.e. through a pipe) while trapping the floating spilled material (i.e. fuel) on the surface of the water for recovery.
- Floating or Diverting Booms - When a spill occurs in water, floating booms can be placed downstream to contain spilled materials, which may be floating on the surface of the water. In the case of faster moving water, diverting booms may better serve in diverting the product to a side channel so skimming devices may be used for recovery. A location along a low bank or gravel bar in the streambed should be selected for an operational site. It is important to remember it may be necessary to provide more than one boom setup. Install as many boom locations as are needed to contain the flow of the spill material.
- Straw barriers - Experience with straw barriers has demonstrated effectiveness not only as an absorbent medium, but also as an underflow type containment dam capable of backing up oil film several inches in thickness. An oil layer up to four inches thick can be held for several hours before significant leakage is detected. Second and third stage barriers should be placed immediately downstream if breaching occurs.
- Sand Bagging - Sand bagging may offer the another means of controlling a spill in congested areas or on paved surfaces where dirt moving, and trenching is not practicable. This type of containment dam can be rapidly constructed and requires no specialized equipment.

## **AVAILABILITY OF ON-SITE CONTAINMENT/CLEANUP EQUIPMENT**

Containment/cleanup equipment will be kept on hand and maintained at all times during construction. The location of containment/cleanup equipment and fire extinguishers will be made clear to anyone who may be involved in responding to a spill or release.

Prior to any construction activity, containment / cleanup equipment to handle a spill of fuel or other hazardous materials will be stored in the project area. As a minimum guideline, a supply of the following spill control materials should be available for use during a spill or release:

- Universal absorbent pads
- Universal absorbent particulate pillows
- Straw bales
- Fuel trucks should be supplied with absorbent pads
- Absorbent skimmer boom material – if installation activity is adjacent to waterway

Containment / cleanup equipment will be periodically inspected by the Site Supervisor or Environmental Resource Coordinator for operability and accessibility. The Site Supervisor or Environmental Resource Coordinator may designate a single employee to be responsible for maintenance of this equipment.

### **3.5 NOTIFICATIONS**

In the event of a spill or release, the **Site Supervisor or Environmental Resource Coordinator will contact the Site Superintendent who will then ensure that the appropriate state and, if applicable, federal agencies are notified.**

Notifications must be made to the following agencies if hazardous materials are spilled or released in these situations:

1. Any spill equal to or greater than 42 gallons onto land
  - Contact California Office of Emergency Services

Specific contact numbers and reporting requirements for the various agencies are provided in below.

#### ***STATE NOTIFICATION REQUIREMENTS***

##### **California Office of Emergency Services**

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2800 Meadowview Road  
Sacramento, CA 95832  
(800) 852-7550 – in state - 24 hour  
(916) 262-1621 – otherwise – 24 hour

Report spills greater than 42 gallons onto land or any amount entering or threatening to enter waters of the state. Verbal notification shall be followed by a written report and include the following information:

- Date, time and location of spill
- Name and telephone number of person reporting
- Type and quantity
- Description of what happened
- Injuries, if any
- Measures taken or plans to abate, contain, and cleanup the spill
- Local agencies on scene or notified
- Source of spill (written report only)
- Cause of spill (written report only)
- Corrective measure taken (written report only)

##### **Office of Spill Prevention & Response (OSPR) / CA Department of Fish & Game (CDF&G)**

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(888) 334-2258

OSPR / CDF&G has stated in various streambed alteration agreements that they shall be notified if any spill occurs in or near streams or wetland which could potentially impact aquatic life.

## ***Appendix C — Storm Water Pollution Prevention Plan***

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If you have called the California OES, there is no specific requirement to notify OSPR as well. However, if you do not call California OES but have potentially impacted a stream or wetland – CDF&G should be notified. If notification is made, be prepared to provide the following basic information:

- Name and telephone number of person reporting
- Location of the spill
- Type and quantity
- Estimated size of spill
- Date and time of spill
- How was it spilled?
- What type of activity was occurring around spill area?

### **California Occupational Safety & Health Administration (Cal OSHA)**

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Phone nearest district office

Report any release which results in serious injury or harmful exposures to workers.

### **California Highway Patrol**

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911 – 24 hour

Report any spills into the environment that originated on the highway, as soon as possible. Follow up with written report within 30 days (see Attachment IV).

### **California State Lands Commission**

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100 Howe Avenue  
Sacramento, CA 95825-8202  
(916) 574-1900

Report any spill that threatens land managed by the State Lands Commission.

Verbal and written spill reports to include same information as California OES, with the inclusion of the size of the spill in the written report. Submit written report to address above (see Attachment IV).

## ***FEDERAL NOTIFICATION REQUIREMENTS***

### **National Spill Response Center**

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(800) 424-8802

## CHAPTER 4.0

### EROSION AND SEDIMENT CONTROL MEASURES

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#### 4.1 GENERAL SPECIFICATIONS

The risk of soil erosion and sedimentation associated with conduit installation will be minimized by:

- The short duration and limited area involved
- Rerouting the conduit installation route to avoid disturbance of sensitive areas
- The use of appropriate construction methods and equipment, such as directional boring when crossing any stream or wetland
- Timing restrictions and specific scheduling of activities to avoid disturbance of sensitive areas

Below are additional, non-structural BMPs to be implemented as part of erosion and sedimentation control measures.

#### ***GENERAL CONTROL MEASURES***

- Wetland boundaries are marked, flagged, barricaded and/or avoided when stated in permits
- Erosion/sediment controls are installed prior to ground disturbance, as necessary
- Minimize extent of area disturbed
- Complete backfill and grading of open trenches and stabilize as soon as possible
- Inspect, report and maintain structural BMPs (see Section 4.2)
- Installation equipment used to loosen rock or hard pan soil, remove vegetation, topsoil and grade will be restricted to a line of travel directly ahead of the trenching alignment

#### ***SCHEDULING & STORM PREPAREDNESS (ESC1)***

- Installation activities shall be timed with an awareness of precipitation forecasts and likely increases in stream flow, reasonable erosion control measures shall be implemented prior to all storm events
- Installation activities should cease and all reasonable erosion control measures inspected and/or implemented prior to storm events
- Practice BMP controls year round; intensifying after October 15th
- Erosion control measures are to be inspected after 0.5 inches of precipitation
- Take immediate action, as necessary, to fortify, repair or replace as needed

#### ***PRESERVATION OF EXISTING VEGETATION (ESC2)***

- Make effort to preserve as much vegetation as possible in the construction corridor
- Clearly designate areas where vegetation should be preserved, include adequate buffer strips extending from sensitive area – refer to specific permits as necessary
- Special attention in areas where preservation is required by permits, such as within outermost dripline of riparian areas for all river, stream, wetland and creek crossings
- Bore under or otherwise avoid sensitive areas, unless allowed by permit
- If necessary, removal of vegetation should occur as close to time of construction as possible

- Avoid vegetation disturbance on steep slopes, wooded & sensitive areas
- All brush and vegetation should be chipped and used for mulch or stockpiled for removal

## **4.2 SPECIFIC BMPS FOR EROSION AND SEDIMENT CONTROL**

Temporary installation of structural erosion control devices will be an integral part of construction. The erosion and sedimentation controls may be vegetative, structural, or managerial practices to stabilize disturbed soil and protect water resources. These control devices will be installed concurrently with construction earthwork and will be applied based on site-specific geomorphology, drainage patterns and weather conditions.

Please refer to Attachment III for the specific Construction Handbook BMPs used as *guidelines* when developing the following control measures and will be implemented as warranted throughout the project.

### ***CONSTRUCTION ROAD STABILIZATION (ESC23, ESC24)***

- Stabilize entrance/exit points to reduce dust and tracking of mud onto roadways
- Apply aggregate, water, or chemical dust suppression as needed
- Ensure traffic is directed over stabilized roadways within the construction corridor
- Inspect roads, entrance/exits periodically, restabilize as needed

### ***DUST CONTROLS (ESC21)***

- If possible, place excavated soils away from windy areas
- Wet, mulch, cover or otherwise stabilize disturbed & excavated soils soon after exposure
- Stabilization can include: sod, seed and crimped mulch; sediment blankets of jute or curlex; or water

### ***SILT FENCE (ESC50)***

- Silt fence is a filter used to keep soil onsite and let water pass through
- Select fence fabric to trap sediment, prevent clogging while still allowing water to drip flow
- Best to control sheet flows at the base of a cleared slope or around spoil areas
- Do not place on steep slope or in higher flow drainage area; use at the base of slopes and perpendicular to anticipated sheet flow, and at the lower edge of active construction areas
- Construct fence along level contours and stabilize with poles and staked straw bales (certified weed-free); curve ends of fence into direction of oncoming flow
- Silt fence must be able to withstand shaking and remain taught upon inspection
- Installation guidelines include using posts, trenching, and backfilling, etc. (see ESC50 p. 5-64 for details)
- Silt fence should be used to surround storm and sewer drains or other stormwater discharge points
- Inspect regularly and after significant rainfall; remove built-up sediment when level reaches 1/3 the height of the fence
- The silt fences will be inspected and maintained until vegetative cover has stabilized the disturbed areas

### ***HAY OR STRAW BALE BARRIERS – (ESC51)***

- Hay or straw bale barriers will be used to reduce flow velocity and sediment transport in long drainage runs, around culverts, and in other areas where silt fencing alone is not sufficient
- Not as effective as silt fence for trapping sediment and are ineffective for sheet flow
- Intended to slow down runoff below small cleared areas

- Consists of anchored bales (certified weed-free), placed end to end on level contour in shallow dug out trench (about 2-3 inches deep) and staked in place
- Bales need to be placed so edges of straw pieces face ground or sky with baling twine showing sideways
- Inspect regularly; not intended for long term use due to rot and breakdown
- Rice straw bales may be used in upland areas but are not to be used in waterbody and wetland areas

***SAND BAG BARRIERS (ESC52)***

- Stacked bags create a barrier berm, ponding water and allowing sediment to settle out
- Can be used as temporary sediment trap in narrow areas in place of silt fence
- Install on level contour, stack below toe of slope; provide ample room for ponding
- Generally used where silt fences or straw barriers not strong enough against fast flowing water
- May be used to protect storm and sewer drains on hard surfaces where silt fence or bales cannot be anchored
- Installation guidelines provided in ESC52 p. 5-72

***DIKES (ESC30) – SLOPE BREAKS OR WATER BARS***

- Not intended to be a dam; does not directly control erosion
- Best used to direct or divert storm water runoff to a desired location (i.e. sedimentation, retention basin or dense vegetated areas)
- Construct dikes along a 2% to 5% downhill drainage slope with the following spacing:

<u>ROW Slope</u>	<u>Minimum Spacing</u>
0-5%	Not Required
5-15%	150 feet
15-30%	100 feet
30-100%	50 feet

- Temporary dikes may be constructed of materials such as soil, silt fence, staked hay/straw bales (certified weed-free), or sand bags
- Dikes need to be compacted & stabilized to avoid additional erosion/sedimentation
- Inspect and maintain dikes, slope breaks or water bars as needed, particularly after storms

***TEMPORARY DRAINS & SWALES (ESC31)***

- Best used to divert runoff away from disturbed areas or into sediment traps
- Drain/swale should conform with existing drainage patterns and volume
- Stabilize drain/swale to prevent additional erosion/sedimentation
- Slope drains installed to remove runoff accumulating on uphill slope may require special design (See ESC32)
- Protect against excess erosion/sediment at outlet of drains/swales when necessary
  - See ESC40: Outlet Protection and/or ESC41: Check Dams for details

***SEDIMENT TRAP OR RETENTION BASIN (ESC55)***

- A sediment trap is a grade stabilization structure that takes water from one elevation to another without causing erosion or temporary storage of bore lubricants
- Small, excavated or bermed area where runoff is detained for settling sediment bore lubricants and infiltration
- Inspect and remove excess sediment as needed, particularly after storms

- Locate sediment traps or retention basins in natural depressions or in drainage ways for grade stabilization – this does not apply for bore sites
- Keep slope at 3:1 ratio or to horizontal

***SLOPE STABILIZATION - MULCH, GEOTEXTILES, MATS (ESC11, ESC20)***

- Used to stabilize temporarily exposed slopes, spoil piles that persist in the construction corridor (left exposed for extended time or during post-construction)
- Chosen stabilization method (mulch, geotextiles, mat, wood fiber or woodchips) should be secured or anchored at the time of application
- Anchored mulch can be applied to restoration area unsuitable for seeding
- Straw or hay used for mulch should be weed-free
- Contractor may stabilize method with jute netting or curlex (staked with wooden pegs) crimping with tackifier or tracking with dozed perpendicular to slope

***CONCRETE WASTE (CA23)***

- Avoid mixing excess amounts of fresh concrete
- Avoid washing sweepings into street or otherwise; collect for disposal or return for reuse
- Perform washout of concrete trucks off-site
- If washout performed on-site:
  - construct adequately sized temporary pit or bermed area to prevent run-off
  - contact Environmental Resource Coordinator for any concrete work
  - locate at least 50 feet from sensitive areas
  - ensure concrete waste is properly managed and disposed
  - washout is considered to be solid waste and is to be removed from ROW
  - if necessary, allow to set, break up and dispose properly

***DRILLING FLUIDS SEEP AND DISCHARGE PROTECTION***

Directional boring activities have potential to seep or discharge drilling fluids, which can effect streams or wetlands. Drilling fluid seepage is most likely to occur near the entry point where the drill head is shallow, however, seepage can occur anywhere along directional bore. Discharge of drilling fluids can occur from the bore and exit pits and the containment and recycling slurry system.

All directional boring activities which could potentially affect a stream or wetland must be previously approved by CDF&G.

The following protective measures # 1-4 should be applied, individually or in combination – based on sound field observations, to prevent drilling fluids from effecting streams or wetlands:

1. A dike/berm should be constructed around the bore pit to entrap all boring fluids
  - The dike should extend around the boring equipment as necessary to contain all drilling fluids leaving equipment and the bore
  - The bore pit should be sized to fully contain the return flow of drilling fluids
  - A receiving pit should be excavated on the far side of the bore to collect any cutting fluid that may exit the bore
  - Drilling fluid flow controls will be available to quickly seal any leakage that may occur; ensure spill containment materials are on-site
  - A similar dike/berm should be constructed at the exit point

2. A hay or straw barrier (certified weed free) and/or silt fence should be installed between the bore pit dike/berm and flowing stream or wetland
  - This protection is meant to prevent seepage occurring outside the primary dike/berm from reaching the stream or wetland, as needed
  - A similar barrier or silt fence should be constructed at the exit point
3. An 800 gallon vacuum truck should be on-site to periodically remove drilling fluids from boring pit and around equipment
4. A 3,000 gallon vacuum truck should be available on call in case of a spill or seep occurs

Drilling operations are required to have adequate set back (buffer strip) from the edge of the sensitive area.

Should rain be forecasted, additional protection measures may be suggested at the discretion of the Site Supervisor or Environmental Resource Coordinator.

Excess supplies of containment materials (i.e. weed-free straw bales, silt fence, shovels) should be available for use as needed.

**If seepage of drilling fluids occurs:**

- Directional boring should stop immediately
- Pull back bore stem to relieve pressure on the seep
- Existing berms, barriers, or silt fence should be strengthened to contain drilling fluids
- 800 gallon vacuum truck should begin recovering drilling fluid immediately
- Actions need to be taken to divert drilling fluid from entering a stream or wetland
- 3,000 gallon vacuum truck should be called to site if necessary to accommodate amount or location of the spill or seepage
- Report to Site Superintendent and Site Supervisor or Environmental Resource Coordinator so they can ensure adequate measures are being taken
- Site Superintendent and Environmental Resource Coordinator have the authority to stop boring operations in the event of spills or any unforeseen event which may cause damage to the environment
- If drilling fluids effected wetland or streams, the Site Superintendent or Site Supervisor should notify CDF&G and consult on proper cleanup

**Upon completion of the directional bore:**

- Bore pits at entry and exit should be filled and returned to natural grade
- Drilling fluids should be removed from area; no drilling fluid wastes should be disposed onsite
- All protective measures (straw bale, silt fence, etc.) should be removed unless otherwise recommended by Site Superintendent or Environmental Resource Coordinator

***STORM DRAIN INLET PROTECTION (ESC54)***

- Various methods used to detain sediment-laden water & allow settling prior to discharge
- Can use silt fence, gravel filter, sand bags or sediment trap
- See ESC54 p. 5-81 for installation guidelines

***STREAM CROSSING (ESC22)***

- Be advised that regulatory permits may have more stringent constraints which apply to stream crossing
- Crossings should be limited to one crossing per piece of equipment



- Keep stream crossings to minimum, if permitted at all
- Wherever practicable, construction vehicle and equipment should be rerouted to use existing crossings/roadways or previously disturbed areas
- If installation activities require equipment to cross a flowing stream, the crossing should be conducted without substantially increasing stream turbidity (CDF&G)
- Repeated crossings (i.e. more than one time per piece of equipment) require the installation of a bridge, culvert or rock-fill crossing as specified below (CDF&G)
- If stream channel is altered during installation activities, the low flow channel and gradient should be returned as close as possible to its natural state prior to disturbance (CDF&G)
- As vehicles and equipment pass through existing erosion and sedimentation control measures (straw barrier, silt fence, etc.), care must be taken to reposition control measure after passage

**Temporary Access Road:**

- Cross drainage bottoms at nearly right angles and level with streambed gradient whenever possible
- Do not block or divert flowing watercourses
- Temporary bridges or culverts may be used when reasonable and practicable, subject to permits and right-of-way landowners

**Forded Crossings:**

- Constructed without excavating stream bank or bed, if possible
- If grading is necessary, accomplish by excavating a ramp through the bank(s) to allow equipment access
- Ramps should be graded so that soil is pushed away from the drainage, and the banks contoured to blend the ramps as naturally as possible to the adjacent, undisturbed reaches of the streambank
- Salvaged topsoil and graded spoil will be placed a minimum of 25 feet from stream banks and protected using a silt fence or straw bale barrier
- In shallow streams, an oil-absorbent boom with hay/straw bales (in place of a turbidity curtain) will be placed across the channel downstream of the crossing
- If necessary, methods (timber mats) will be employed to facilitate movement of equipment across the bed of the channel.
- Upon completion of construction in that zone / during site restoration, any mats will be removed, topography and vegetation will be reestablished

**Culvert Crossings:**

- Temporary culverts will be sized appropriately based on site-specific conditions
- Culverts will be installed with a minimum cover of 1-foot for culverts 18 to 36 inches in diameter, or a cover of one-third the culvert diameter for culverts over 36 inches
- Cover and fill material will consist of clean rock or gravel fill or other appropriate medium
- Culverts should be placed slightly below normal stream grade to avoid culvert outfall barriers. Where needed, the inlet and outlet will be armored.
- Temporary diversion structures should be used during culvert installation as necessary
- If the stream is flowing, an oil-absorbent boom will be placed across the channel downstream of the crossing
- Upon completion of installation, all culvert materials will be removed, with topography and vegetation reestablished

**Bridged crossings:**

- Where needed, bridges shall be constructed of sufficient strength and width to permit safe passage of construction equipment

- Maintain the temporary bridges such that drainage is not inhibited and damage is not created on adjacent properties
- In some cases, minor preparation of the tops of banks will be necessary to properly seat the bridge
- Silt fence should be installed below the top of banks if there is sufficient clearance
- The bridge approach will consist of clean rock fill, granular material, swamp mats, or other suitable material to avoid excessive cutting of banks
- Bridges will be placed completely across the watercourse and will span the high water channel and as much wetland vegetation as practicable.
- If the stream is flowing, an oil-absorbent boom will be placed across the channel downstream of the crossing
- Upon completion of construction in that zone / during site restoration, all bridge materials will be removed, with topography and vegetation reestablished

### **WETLAND TRENCHING AND TRANSIT CROSSINGS**

Be advised that regulatory permits may have more stringent constraints, which apply to trenching and transit in wetlands.

#### **When working within wetlands permitted to be trenched:**

- Silt fencing should be placed on both sides of the pads and timber mats causeway
- If wetlands are *without* standing water, plowing and trenching work should be completed on 4-foot by 8-foot plywood pads set apart with sufficient space for the plow or backhoe to construct
- If wetlands are *with* standing water, plowing and trenching work should be completed on timber mats set apart with sufficient space for the plow or backhoe to construct

#### **When transiting wetlands not permitted to be trenched:**

- Silt fencing should be placed on both sides of the pads and timber mats causeway
- All equipment transiting wetlands *without* standing water will use 4-feet by 8-feet plywood pads
- All equipment transiting wetlands *with* standing water will use timber mats
- Plywood pads (no standing water) or timber mats (standing water) should be put in place by a backhoe *prior* to transiting by clearing dozer
- If necessary, pads and mats should remain in place when equipment is required to return for maintenance, respooling or move around

Upon completion of installation within wetlands, all mat and pads will be removed.

### **OPEN-TRENCH CONSTRUCTION WITHIN WETLAND**

- All trenching activities which could potentially affect a stream or wetland must be previously approved by CDF&G
- The length of open-trench construction adjacent to wetlands should be minimized
- Silt fences should be installed on either side of the wetland work path to contain trench spoil piles and prevent siltation of adjacent wetland areas
- The topsoil layer of wetland soils should be separated from the underlying subsoil during excavation and be replaced in the original layering after cable installation
- Drainage patterns (channels) across the wetland will be reestablished as close to the original locations and contours as possible

- Documentation (written and date photodocumentation) of pre- and post-construction conditions should be maintained

### ***CABLE INSTALLATION***

- Manhole and handhole pits (approximately 6-foot wide by 5-foot deep for the largest size) may be dug at selected locations to aid in conduit/conduit installation
- When constructing manholes and handholes adjacent to waterbodies, BMPs to contain sedimentation are required
- Gravel is to be spread over the bottom foot of the handhole pit
- A round handhole (prefabricated) and a locator system box with a ground rod is to be placed in the pit and backfilled
- Temporary assist holes (2 or 3) may be dug at intervals between handholes to a depth and size necessary to access the conduit/conduit and aid in installation
- All assist holes and handhole backfill will be stabilized upon completion

## **4.3 BMPS FOR POST-CONSTRUCTION / SOIL STABILIZATION**

Post-construction and soil stabilization involves appropriate grading of disturbed areas and re-establishing groundcover. In urban areas where paved surfaces have been disturbed, stabilization will consist of repairing pavements and reconstructing curbs and gutters. In unpaved areas, restoration will include appropriate grading to restore original or improved contours, installing and maintaining erosion control devices at susceptible locations, as well as, seeding and mulching.

In order to minimize erosion or sedimentation during post construction, the following BMPs will be implemented to stabilize soil, which may have been disturbed during conduit installation.

Please refer to Attachment III for the specific Construction Handbook BMPs, which were used as guidelines when developing the following practices, and will be implemented as warranted throughout the project.

### ***POST CONSTRUCTION / RESTORATION***

- The construction corridor should be restored to conditions that are equal to or better than the original conditions and confirm completion with date camera photodocumentation
- Site restoration will be completed concurrently with conduit/conduit installation
- Rock or other erosion protection should be placed in areas where vegetation cannot reasonably be expected to become reestablished (CDF&G)
- All cable installation debris, construction spoils, remaining installation materials, and miscellaneous litter will be removed for proper off-site disposal
- Erosion/sediment controls inspected & maintained, until site is restored
- Remove of all temporary erosion control measures once stabilization complete
- Permanent erosion control measures be implemented following completion of construction on an as-needed basis

### ***SEEDING & PLANTING (ESC10)***

- When possible, revegetate disturbed slopes as work progresses by grading, tilling, fertilizing, seeding and mulching

- Seed mix (weed free) and fertilizer practice should be confirmed from regional/county (biological & cultural) soil conservation authority
- Annual species (rye) may be used until native species can revegetate site
- Crimped mulch may be applied to assist in stabilization when necessary
- Where appropriate, discarded soil will be left in a roughened condition to reduce erosion and promote revegetation
- Otherwise roughen or terracing slopes (tracking dozer perpendicular to contours) as needed before seeding/planting (See ESC42)

## **CHAPTER 5.0**

### **INSPECTION, MAINTENANCE, AND RECORD KEEPING**

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#### **5.1 INSPECTION AND MAINTENANCE**

The Site Superintendent, or designated SWPPP Administrator, shall ensure that the BMPs outlined in this SWPPP are being adequately implemented and maintained to prevent potential pollutants from effecting receiving waters during conduit installation. Inspections will be concentrated along the portion of the conduit undergoing installation at that time.

The Site Superintendent, or designated SWPPP Administrator, shall perform an inspection of the following areas, *as they apply* to that particular portion of the conduit installation:

#### ***GENERAL BEST MANAGEMENT PRACTICES***

(See Attachment IV – Inspection Report Form “A”)

- Material Delivery & Storage Practices
- Vehicle & Equipment
  - Storage
  - Maintenance
  - Washing
  - Fueling
- Toilets / Sanitary Waste Management
- Spill, Leak or Releases

#### ***EROSION & SEDIMENTATION CONTROL MEASURES***

(See Attachment IV – Inspection Report Form “B”)

- General Control Measures
- Scheduling and Storm Preparedness
- Preservation of Existing Vegetation
- Construction Road Stabilization
- Dust Control
- Concrete Wastes
- Structural BMPs
  - Silt Fences
  - Hay / Straw Bale Barriers
  - Sand Bags Barriers
  - Dikes, Slope Breaks or Water Bars
  - Temporary Drains & Swales
  - Sediment Trap or Retention Basin
  - Slope Stabilization
  - Storm Drain Protection
- Drilling Fluids / Frack-out Protection
- Stream Crossing
- Wetland Plowing and Transit Crossings
- Open-Trench Construction within Wetland
- Cable Installation

- Post Construction / Restoration
- Seeding & Planting

## **5.2 INSPECTION FREQUENCY**

The inspections shall have the following frequency:

### **Visual Inspections**

- Daily visual inspections shall be completed as part of overall installation site operations.
- Create photodocumentation (written and dated) of construction BMPs before and after installation

### **Written Inspections**

See Attachment IV – Inspection Report Form “A” and “B” to complete written inspections. Inspection Report Form “A” focuses on general BMPs to prevent potentially hazardous materials, such as oils and fuel, from effecting the environment. Inspection Report Form “B” targets proper implementation of erosion and sedimentation controls. Both forms are to be used when completing written inspections under the following circumstances:

- Along active installation routes at least every 14 calendar days, during the rainy season (October through May)
- Before anticipated storm events expected to cause a significant amount of runoff
- Within 24 hours of the end of a storm event that produces ½ inch or greater, site conditions permitting

### **Monthly Written Inspections**

See Attachment IV – Inspection Report Form “A” and “B” to complete monthly written inspections. Both forms are to be used when completing monthly written inspections under the following circumstances:

- Where sites have been temporarily or finally stabilized
- Where runoff is unlikely due to site-specific conditions and dry season (June through September).

## **5.3 DOCUMENTATION OF INSPECTIONS**

Written inspections need to be documented using Attachment IV. Written inspection records shall have at a minimum, the following information:

- Name of the person conducting the inspection
- When and where the inspection was conducted
- The findings of the inspection
- Any corrective action taken
- When the corrective actions were implemented
- Written indication of photographs taken to verify BMP implementation

## **5.4 RECORD KEEPING AND INTERNAL REPORTING PROCEDURES**

The Owner shall retain the following records for at least three years from the date of the Notice of Termination (NOT) submission:

- General Permit
- SWPPP
- Written Inspection Records
- Training Records
- Contractor Certifications
- Notice of Intent (NOI)
- Notice of Termination (NOT)

A logbook, or other efficient means, will be kept by the Site Superintendent or Site Supervisor to provide effective and efficient record keeping.

As required by the SWPPP General Permit, the log will include:

- Records of spills, leaks, or overflows including time and date, weather conditions, etc.
- Implementation of the SWPPP
- Training events
- Events involving materials handling and storage
- Contacts with regulatory agencies
- Installation of storm water management controls (See Attachment IV – Inspection Report Form “A” and “B”)
- Maintenance and repair of storm water management controls
- Preventative maintenance activities
- Inspection activities
- Photographs taken

## **CHAPTER 6.0**

### **CHANGES AND AMENDMENTS TO THE SWPPP**

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The SWPPP will be amended and updated as appropriate during the term of the project. The SWPPP will be amended, at a minimum, whenever:

- There is a change in design, construction, operation, or maintenance of the construction project itself or of BMPs that could significantly affect the quality of the storm water discharges.
- Inspections indicate deficiencies in the selection of BMPs outlined in the SWPPP, particularly regarding hazardous materials and erosion and sedimentation control measures.



## **CHAPTER 7.0**

### **TRAINING**

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The Site Superintendent will be responsible for training the Site Supervisor and any other persons responsible for inspecting, maintaining, or installing pollution control measures. The training will at a minimum include:

- Discussion on the proper selection of pollution control measures
- Discussion on proper installation and maintenance techniques
- Review of the SWPPP and established BMPs

Site Superintendent will be responsible for the documentation of training using the existing Training Roster (see Attachment IV). As with other related SWPPP documentation, records of the training will be maintained for three years after the Notice of Termination.

Prior to the start of construction, SWPPP training will be required of all contractor employees and subcontractors that could possibly:

- Report a spill;
- Be responsible for spill containment or cleanup; or
- Be involved with equipment maintenance or the transportation and handling of fuel

The purpose of this plan is to inform contractors of the hazardous materials, spill prevention, emergency response and responsibilities associated with construction of a fiber optic conduit.

The SWPPP training program will incorporate the following:

- 1) Review of the provisions of the SWPPP;
- 2) Maintenance and monitoring requirements for possible sources of spills;
- 3) Inspection procedures for spill prevention and containment equipment and materials;
- 4) Contractor/employee responsibility in the event of a spill;
- 5) Spill reporting procedures, sequence and personnel;
- 6) Phone numbers and verifications of correctness; and
- 7) Operation of spill prevention and control equipment and the location of spill control materials.

## **CHAPTER 8.0**

### **CERTIFICATION**

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

Signed

\_\_\_\_\_  
Permittee

\_\_\_\_\_  
Date

\_\_\_\_\_  
Permittee's Name (printed)

\_\_\_\_\_  
Title

## **ATTACHMENT I-III**

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- I. PROJECT SEGMENT DESCRIPTIONS
  
- II. MASTER LIST OF JURISDICTIONAL FEATURES
  
- III. CALIFORNIA CONSTRUCTION HANDBOOK BMPS

**Note: These attachments are to be submitted as part of the Permit handbook and are not included in this environmental assessment. This information will be variations of the figures and tables presented in the main body of this environmental assessment.**

**ATTACHMENT IV**  
**MONITORING AND REPORTING FORMS**

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**Appendix C – Storm Water Pollution Prevention Plan**

Inspector \_\_\_\_\_

Date \_\_\_\_\_

Title \_\_\_\_\_

<b>REASON FOR WRITTEN INSPECTION:</b>	✓
<b>Every 14 days</b> (at least) along active installation route during the rainy season (Oct. – May)	
<b>Before anticipated storm</b> event expected to cause significant runoff	
<ul style="list-style-type: none"> <li>▪ When is the storm anticipated to arrive?</li> </ul>	
<b>After storm event</b> (within 24 hrs) which produced ½ inches or greater of rain	
<ul style="list-style-type: none"> <li>▪ When did the storm occur?</li> </ul>	
<b>Monthly inspection</b> where site has been temporarily or finally stabilized	
<b>Monthly inspection</b> where runoff is unlikely due to site conditions and season (June – Sept.)	

<b>BMP# 1. MATERIAL DELIVERY &amp; STORAGE PRACTICES:</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Specific delivery & storage area designated			
Materials are delivered and stored in organized manner			
Debris, soil, silt, rubbish, concrete, oil products, etc. is placed where rain <u>cannot</u> wash it in into sensitive areas (waterbodies, wetlands, archaeological sites)			
All excess material/debris and trash is removed from work area			
<b>Hazardous Materials &amp; Waste (HM&amp;W)</b>			
Specific delivery & storage areas are designated			
HM&W stored appropriately?			
<ul style="list-style-type: none"> <li>▪ 100 ft from sensitive area</li> </ul>			
<ul style="list-style-type: none"> <li>▪ 150 ft from well</li> </ul>			
<ul style="list-style-type: none"> <li>▪ within secondary containment</li> </ul>			
<ul style="list-style-type: none"> <li>▪ under cover to protect from rain and wind</li> </ul>			
<ul style="list-style-type: none"> <li>▪ labeled according to OSHA specifications</li> </ul>			
Hazardous waste transported, recycled & disposed properly			
Spill response kit on-site & available in case of spill/leak/release			

**\* List Deficiencies / Required Corrective Actions / General Comments**

**Appendix C — Storm Water Pollution Prevention Plan**

<b>BMP# 2. VEHICLE &amp; EQUIPMENT STORAGE, MAINTENANCE, &amp; WASHING</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Vehicles & equipment confined to right of way (ROW)			
Specific vehicle storage area designated			
Any leaking vehicles or equipment?			
Is maintenance occurring on-site? Are the following measures being taken?			
■ 100 ft from sensitive area			
■ 150 ft from well			
■ secondary containment used to capture spills/leaks			
■ proper disposal of captured fluids			
Is washing occurring on-site? Are the following measures being taken?			
■ 100 ft from sensitive area			
■ 150 ft from well			
■ Are erosion controls in place, as needed			
Is any discharge committed to ground or water body; if yes, explain below.			
Are cleaning solvents being used?			
Are drip pans used beneath activity to repair fluid transfer parts on vehicles?			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 3. VEHICLE &amp; EQUIPMENT FUELING / FUEL STORAGE</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Use of off-site fueling stations			
Are fueling trucks being utilized? Are the following measures being taken?			
■ 100 ft from sensitive area			
■ 150 ft from well			
■ designated fueling area			
■ use of drain pan, absorbents etc. to catch spill/leaks while fueling			
■ no evidence of topping off or overfilling			
■ mobile fueling avoided except for large equipment			
Are above-ground storage tanks used on-site? Are the following measures being taken?			
■ 100 ft from sensitive area			
■ 150 ft from well			
■ adequate secondary containment (impervious & able contain 110% of tank volume)			
Integrity of fueling truck / tanks, dispenser connections, and containment area is adequate			

<b>BMP# 3. VEHICLE &amp; EQUIPMENT FUELING / FUEL STORAGE (cont.)</b>			
* List Deficiencies / Required Corrective Actions / General Comments			

<b>BMP# 4. TOILETS / SANITARY WASTES</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Toilets located in convenient and level area; 100 ft from sensitive area			
Sanitary wastes collected by licensed contractor in a timely manner?			
* List Deficiencies / Required Corrective Actions / General Comments			

<b>BMP# 5. SPILLS, LEAKS OR RELEASES</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Apparent knowledge of SPCC Plan response procedures			
Spill response kit on-site & available in case of spill/leak/release			
* List Deficiencies / Required Corrective Actions / General Comments			

Inspector \_\_\_\_\_

Date \_\_\_\_\_

Title \_\_\_\_\_

<b>REASON FOR WRITTEN INSPECTION:</b>	✓
<b>Every 14 days</b> (at least) along active installation route during the rainy season (Oct. – May)	
<b>Before anticipated storm</b> event expected to cause significant runoff	
<ul style="list-style-type: none"> <li>▪ When is the storm anticipated to arrive?</li> </ul>	
<b>After storm event</b> (within 24 hrs) which produced ½ inches or greater of rain	
<ul style="list-style-type: none"> <li>▪ When did the storm occur?</li> </ul>	
<b>Monthly inspection</b> where site has been temporarily or finally stabilized	
<b>Monthly inspection</b> where runoff is unlikely due to site conditions and season (June – Sept.)	

<b>BMP# 1. GENERAL CONTROL MEASURES:</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Area disturbed has been kept to a minimum			
Erosion/sediment controls installed <u>prior</u> to ground disturbance			
Equipment used to loosen rock, remove vegetation, etc. is restricted to traveling directly ahead of trenching/plowing route			
Backfill, grading & stabilization of open trenches is completed as soon as possible			
Overall erosion & sedimentation control is being achieved on-site			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 2. SCHEDULING &amp; STORM PREPAREDNESS</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Site Superintendent is aware of forecasted precipitation and maintaining records			
In preparation of rain - adequate erosion control measures are being inspected and/or implemented			
After rain event – control measures are being inspected, fortified, repaired or replaced, as necessary			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			



**Appendix C — Storm Water Pollution Prevention Plan**

<b>BMP# 3. PRESERVATION OF EXISTING VEGETATION</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Vegetation is being preserved as much as possible along ROW			
Areas of vegetation intended for preservation are designated with adequate buffer			
Vegetation removal is occurring close to time of installation as possible			
Vegetation removal on steep slopes, wooded & sensitive areas is being avoided			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 4. CONSTRUCTION ROAD STABILIZATION</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Entrance & exits points are stabilized to reduce dust and tracking of mud off-site			
Which stabilization method is being used?			
▪ aggregate			
▪ water			
▪ chemical dust			
Traffic is being directed over stabilized road within ROW			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 5. DUST CONTROLS</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Excavated soils and other dust sources are positioned to minimize impact of wind			
Dust control is being accomplished? Which control is being used?			
▪ wetting			
▪ mulch			
▪ sod			
▪ seed & crimped mulch			
▪ sediment blanket of jute or curlex			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 6. CONCRETE WASTE</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Concrete mixing kept to minimum; no excess amounts			
If concrete washout performed on site ... are the following measures being taken?			
▪ adequately sized pit			
▪ 50 feet from sensitive area			
▪ waste properly disposed and removed from ROW			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 7. SILT FENCE</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Positioned perpendicular to anticipated sheet flow; <u>not</u> on slope or high flow area			
Properly installed with posts, entrenching and backfill to secure in place			
Fence fabric traps sediment, prevents clogging & allows water to pass through			
Excess sediment cleared to 1/3 –1/2 height of fence			
Is silt fence secured to withstand shaking?			
Were photographs taken? If yes, describe below.			
Describe use and location of silt fence:			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 8. HAY OR STRAW BALE BARRIERS</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Bales are certified weed-free, placed end-to-end on level contour, in shallow trench, staked in place with baling twine showing sideways			
Bales adequately trapping sediment; not used for sheet flow (use silt fence)			
Bales are in good condition; not breaking down or rotting due to long term use			
Are bales entrenched and anchored securely?			

**Appendix C — Storm Water Pollution Prevention Plan**

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<b>BMP# 8. HAY OR STRAW BALE BARRIERS (cont.)</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Were photographs taken? If yes, describe below.			
Describe use and location of bale barriers:			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 9. SAND BAG BARRIERS</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Stacked bags installed on level contour, creating ample room for ponding and trapping sediment			
Used in narrow areas or where silt fence or bale barriers are not strong enough against heavier flow			
Properly used to protect storm/sewer drains on hard surfaces where silt fence or bales barriers cannot be anchored			
Were photographs taken? If yes, describe below.			
Describe use and location of bale barriers:			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 10. TEMPORARY DRAINS &amp; SWALES</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Properly used to divert runoff away from disturbed areas or into sediment traps			
Drain/swale conforms to existing drainage patterns & volume			
Drain/swale walls & outlet stabilized to prevent additional erosion/sedimentation			
Were photographs taken? If yes, describe below.			

<b>BMP# 10. TEMPORARY DRAINS &amp; SWALES (cont.)</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Describe use and location of temporary drains or swales:			
* <b>List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 11. DIKES – SLOPE BREAKERS OR WATER BARS</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Properly used to divert water to desired location (i.e. off ROW or sedimentation basin)			
Dikes are compacted & stabilized to avoid additional erosion/sedimentation			
Dikes constructed along downhill slopes with proper spacing			
Were photographs taken? If yes, describe details below.			
Describe use and location of dikes:			
* <b>List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 12. SEDIMENT TRAP OR RETENTION BASIN</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Trap or basin adequately constructed to detain runoff; allowing sediment to settle and water to infiltrate ground			
Trap or basin located in natural depression or drainage way; slope at 3:1 ratio to horizontal			
Were photographs taken? If yes, describe below.			
Describe use and location of sediment trap or retention basin:			

**Appendix C – Storm Water Pollution Prevention Plan**

<b>BMP# 12. SEDIMENT TRAP OR RETENTION BASIN (cont.)</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 13. SLOPE STABILIZATION – MULCH, GEOTEXTILES, MATS</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Slopes are adequately stabilized to reduce erosion & sedimentation. Using what?			
▪ mulch			
▪ geotextile			
▪ mat			
▪ wood fiber			
▪ woodchips			
▪ straw/hay mulch			
Stabilization method adequately secured or anchored. How is it secured?			
▪ jute netting or curlex staked with wooden pegs			
▪ crimping with tackifier			
▪ tracking with dozer			
Were photographs taken? If yes, describe below.			
Describe use and location of stabilization method:			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 14. STORM DRAIN PROTECTION</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Proper use of control method to detain sediment and allow for settling prior to discharge. Which control method?			
▪ silt fence			
▪ bale barriers			
▪ sand bags			
▪ sediment trap			
▪ gravel filter			
Were photographs taken? If yes, describe below.			
<b>BMP# 14. STORM DRAIN PROTECTION</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>

<b>BMP# 14. STORM DRAIN PROTECTION (cont.)</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Describe use and location of storm drain protection:			
* <b>List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 15. DRILLING FLUID / FRACK-OUT PROTECTION</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Dike/berm properly constructed around bore and equipment (at entrance and exit) to adequately contain drilling fluids			
Additional bale barrier or silt fence installed between dike/berm and wetland or stream to prevent seepage from reaching water (unless EI judges need to be impracticable due to existing conditions at site – see SWPPP)			
Is bore pit sized to fully contain the flow of lubricants?			
Are spill-kit materials available on-site?			
Are additional protective measures in place due to forecasted rain?			
800 gallon vacuum truck on-site to remove/recover drilling fluids			
3,000 gallon vacuum truck on-call if necessary for spill for seepage			
Extra containment materials (bales, silt fence, shovels) available in case of spill			
Are bore pit entry & exit filled and returned to grade; protective measures removed and drilling wastes disposed of?			
Have restoration and clean-up of drilling area been completed?			
Were photographs taken? If yes, describe below.			
* <b>List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 16. STREAM CROSSING</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Stream crossing kept to minimum; traffic routed to existing crossings & roadways			
Stream crossing conducted without substantially increasing stream turbidity			
Repeated crossings conducted with bridge, culvert or rock-fill crossing; silt fence installed at top of bridge banks (if sufficient clearance available)			

**Appendix C – Storm Water Pollution Prevention Plan**

<b>BMP# 16. STREAM CROSSING (cont.)</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Vehicle & equipment passing through erosion control (silt fence, bales) reposition control after passage			
Salvaged topsoil and graded spoil placed at least 10 feet from stream bank and protected using silt fence or bale barrier			
In flowing, deep stream, an oil absorbent boom with turbidity curtain has been placed across channel downstream of crossing			
In shallow stream, an oil absorbent boom with hay/straw bales (in place of turbidity curtain) has been placed across channel downstream of crossing			
Were photographs taken? If yes, describe below.			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 17. WETLAND PLOWING AND TRANSIT CROSSINGS</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Is plow or trench work <u>permitted</u> within wetlands? If so, are the following measures being taken?			
<ul style="list-style-type: none"> <li>▪ Silt fencing placed on both sides of the pads and timber mats causeway</li> </ul>			
<ul style="list-style-type: none"> <li>▪ If wetlands are <i>without</i> standing water, is work being completed on 4x6-ft plywood pads set apart with sufficient space for plow or backhoe to construct?</li> </ul>			
<ul style="list-style-type: none"> <li>▪ If wetlands are <i>with</i> standing water, is work being completed on timber mats set apart with sufficient space for plow or backhoe to construct?</li> </ul>			
Is plow or trench work <u>not permitted</u> within wetlands? If not, are the following measures being taken?			
<ul style="list-style-type: none"> <li>▪ Silt fencing should be placed on both sides of the pads and timber mats causeway</li> </ul>			
<ul style="list-style-type: none"> <li>▪ All equipment transiting riparian areas <i>without</i> standing water are using 4-foot by 8-foot plywood pads</li> </ul>			
<ul style="list-style-type: none"> <li>▪ All equipment transiting riparian areas <i>with</i> standing water are using timber mats</li> </ul>			
<ul style="list-style-type: none"> <li>▪ Plywood pads or timber mats being placed by backhoe prior to transiting by clearing dozer</li> </ul>			
<ul style="list-style-type: none"> <li>▪ Are pads / mats remaining in place when equipment must return for maintenance, respooling or move around?</li> </ul>			
Upon completion of installation within wetlands, all mat and pads are removed			
Were photographs taken? If yes, describe below.			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 18. OPEN TRENCH CONSTRUCTION WITHIN WETLAND</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Silt fences installed on either side of wetland work path adequately contain trench spoil and prevent siltation of adjacent wetland			
Trench controls adequately minimize potential runoff to wetland			
Were photographs taken? If yes, describe below.			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 19. CABLE INSTALLATION</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Are handhole pits and assist pits being dug?			
<ul style="list-style-type: none"> <li>▪ Is gravel being spread over the bottom foot of the handhole pit</li> </ul>			
<ul style="list-style-type: none"> <li>▪ Is pit being properly backfilled?</li> </ul>			
<ul style="list-style-type: none"> <li>▪ Are handhole pits and assist holes being stabilized after backfill?</li> </ul>			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 20. POST CONSTRUCTION / RESTORATION</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Erosion/sediment controls maintained until site is restored			
Rock or other erosion protection placed in areas where vegetation cannot be expected to become reestablished			
Erosion/sediment controls removed once restoration complete			
Installation debris, construction spoils, remaining materials and litter removed & properly disposed of			
ROW restored to equal or better than original conditions (confirm with date camera photodocumentation)			
Were photographs taken? If yes, describe below.			



**Appendix C — Storm Water Pollution Prevention Plan**

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<b>BMP# 20. POST CONSTRUCTION / RESTORATION (cont.)</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

<b>BMP# 21. SEEDING &amp; PLANTING</b>	<b>YES</b>	<b>NO*</b>	<b>N/A</b>
Revegetation occurring as work progresses along ROW			
Crimped mulch applied to assist in stabilization (when necessary)			
Discarded soil roughened to reduce erosion & promote vegetation (as appropriate)			
Were photographs taken? If yes, describe below.			
<b>* List Deficiencies / Required Corrective Actions / General Comments</b>			

**SWPPP TRAINING**

Trainer(s) \_\_\_\_\_

Location(s) \_\_\_\_\_

<b>Training Topics Covered:</b>	<b>Yes</b>	<b>No</b>
Review and discussion of SWPPP		
Best Management Practices including pollution control measures		
Materials management		
Good housekeeping		
Spill response		
Proper selection of pollution control measures		
Proper maintenance techniques		
Review and discussion of SWPPP Inspection Form		

<b>NAME</b>	<b>EMPLOYER</b>	<b>DATE</b>

# **ATTACHMENT V**

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## **NOTICE OF INTENT**



State Water Resources Control Board  
**NOTICE OF INTENT**  
 TO COMPLY WITH THE TERMS OF THE  
 GENERAL PERMIT TO DISCHARGE STORM WATER  
 ASSOCIATED WITH CONSTRUCTION ACTIVITY (WQ ORDER No. 99-08-DWQ)



**I. NOI STATUS (SEE INSTRUCTIONS)**

MARK ONLY ONE ITEM    1. <input type="checkbox"/> New Construction    2. <input type="checkbox"/> Change of Information for WDID# <span style="border: 1px solid black; display: inline-block; width: 150px; height: 15px; vertical-align: middle;"></span>
---

**II. PROPERTY OWNER**

Name	Contact Person		
Mailing Address	Title		
City	State	Zip	Phone (    )    --

**III. DEVELOPER/CONTRACTOR INFORMATION**

Developer/Contractor	Contact Person		
Mailing Address	Title		
City	State	Zip	Phone (    )    --

**IV. CONSTRUCTION PROJECT INFORMATION**

Site/Project Name		Site Contact Person	
Physical Address/Location		Latitude _____°	Longitude _____°
City (or nearest City)		Zip	Site Phone Number (    )    --
Emergency Phone Number (    )    --			
A. Total size of construction site area: _____ Acres	C. Percent of site imperviousness (including rooftops):		D. Tract Number(s): _____, _____
B. Total area to be disturbed: _____ Acres (% of total _____)	Before Construction: _____%		E. Mile Post Marker: _____
After Construction: _____%			

**Appendix C — Storm Water Pollution Prevention Plan**

F. Is the construction site part of a larger common plan of development or sale? <input type="checkbox"/> YES <input type="checkbox"/> NO	G. Name of plan or development: _____
H. Construction commencement date: ____/____/____ I. % of site to be mass graded: _____	J. Projected construction dates: Complete grading: ____/____/____      Complete project: ____/____/____
K. Type of Construction (Check all that apply): 1. <input type="checkbox"/> Residential      2. <input type="checkbox"/> Commercial      3. <input type="checkbox"/> Industrial      4. <input type="checkbox"/> Reconstruction      5. <input type="checkbox"/> Transportation 6. <input type="checkbox"/> Utility      Description: _____      7. <input type="checkbox"/> Other (Please List): _____	

**V. BILLING INFORMATION**

SEND BILL TO: <input type="checkbox"/> OWNER (as in II. above)	Name	Contact Person	
<input type="checkbox"/> DEVELOPER (as in III. above)	Mailing Address	Phone/Fax	
<input type="checkbox"/> OTHER (enter information at right)	City	State	Zip

**VI. REGULATORY STATUS**

A. Has a local agency approved a required erosion/sediment control plan?.....	<input type="checkbox"/> YES <input type="checkbox"/> NO
Does the erosion/sediment control plan address construction activities such as infrastructure and structures?.....	<input type="checkbox"/> YES <input type="checkbox"/> NO
Name of local agency: _____ Phone: (    )    --	
B. Is this project or any part thereof, subject to conditions imposed under a CWA Section 404 permit of 401 Water Quality Certification?.....	<input type="checkbox"/> YES <input type="checkbox"/> NO
If yes, provide details: _____	

**VII. RECEIVING WATER INFORMATION**

A. Does the storm water runoff from the construction site discharge to (Check all that apply): 1. <input type="checkbox"/> <b>Indirectly to waters of the U.S.</b> 2. <input type="checkbox"/> <b>Storm drain system - Enter owner's name:</b> _____ 3. <input type="checkbox"/> <b>Directly to waters of U.S. (e.g. , river, lake, creek, stream, bay, ocean, etc.)</b>
B. Name of receiving water: (river, lake, creek, stream, bay, ocean): _____

**VIII. IMPLEMENTATION OF NPDES PERMIT REQUIREMENTS**

<p><b>A. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (check one)</b></p> <p><input type="checkbox"/> A SWPPP has been prepared for this facility and is available for review: Date Prepared: ____/____/____ Date Amended: ____/____/____</p> <p><input type="checkbox"/> A SWPPP will be prepared and ready for review by (enter date): ____/____/____</p> <p><input type="checkbox"/> A tentative schedule has been included in the SWPPP for activities such as grading, street construction, home construction, etc.</p>	
<p><b>B. MONITORING PROGRAM</b></p> <p><input type="checkbox"/> A monitoring and maintenance schedule has been developed that includes inspection of the construction BMPs before anticipated storm events and after actual storm events and is available for review.</p> <p>If checked above: A qualified person has been assigned responsibility for pre-storm and post-storm BMP inspections to identify effectiveness and necessary repairs or design changes..... <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Name: _____ Phone: (     )     -- _____</p>	
<p><b>C. PERMIT COMPLIANCE RESPONSIBILITY</b></p> <p>A qualified person has been assigned responsibility to ensure full compliance with the Permit, and to implement all elements of the Storm Water Pollution Prevention Plan including:</p> <p>1. Preparing an annual compliance evaluation..... <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Name: _____ Phone: (     )     -- _____</p> <p>2. Eliminating all unauthorized discharges..... <input type="checkbox"/> YES <input type="checkbox"/> NO</p>	

**IX. VICINITY MAP AND FEE (must show site location in relation to nearest named streets, intersections, etc.)**

<p>Have you included a vicinity map with this submittal? ..... <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Have you included payment of the annual fee with this submittal?..... <input type="checkbox"/> YES <input type="checkbox"/> NO</p>
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**X. CERTIFICATIONS**

<p>“I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan will be complied with.”</p>	
<p>Printed Name: _____</p>	<p>Date: _____</p>
<p>Signature: _____</p>	
<p>Title: _____</p>	