

## ***Water Pollution Control for Work in Sensitive Areas***

### **10-1. WATER POLLUTION CONTROL**

**The Contractor is advised that failure to fully comply with the provisions of this Section, and all requirements listed in the resource agency permits obtained for the project, where applicable, except where amended in writing and signed by the Director of Public Works, shall constitute substantial non-compliance with the requirements of the Clean Water Act and the National Pollution Discharge Elimination System (NPDES) and the Contract.**

**The County shall provide periodic site monitoring to ensure that the work complies with the requirements specified herein and in any resource agency permits. The County will provide the Contractor with copies of the monitoring reports. Should the work be found to be non-compliant, a follow up site monitoring visit will be conducted to ensure the items have been corrected. The costs associated with any compliance monitoring required beyond a single follow up site monitoring visit shall be deducted from the final payment for all of the Contract work.**

**The provisions of Section 7-1.01G, "Water Pollution," of the Standard Specifications are superseded by the following.**

Attention is directed to Section 20-2, "Temporary Erosion Control," of these Special Provisions for requirements relating to Contractor Response, Stockpiles and Staging Areas.

Construction sites are common sources of water pollution. Materials and wastes that blow or wash into a storm drain, gutter, or street have a direct impact on local creeks and wetlands, San Francisco Bay and the Pacific Ocean. The Contractor shall be responsible for any environmental damage caused by his operations and those of his subcontractors or employees.

Water pollution control materials may consist of temporary erosion controls such as silt fencing, straw mulch and straw logs; spill cleanup materials such as absorbent pads or cat litter; runoff controls such as sand bags or continuous berms, etc. Attention is directed to Section 20, "Erosion and Sediment Control," of these Specifications and the plans for specific erosion control requirements.

Water pollution controls shall be applied, maintained and removed by the Contractor as specified herein and as directed by the Engineer. For construction activities occurring between June 15 and September 15, applicable water pollution control materials, such as silt fencing and spill cleanup materials, shall be available at the work site prior to commencing any work. For construction activities occurring between September 15 and June 15, all applicable water pollution control measures, such as runoff **and erosion**

controls, shall be installed and all applicable water pollution control materials, such as straw mulch and spill cleanup materials, shall be available at the work site prior to commencing any work.

#### Water Pollution Control Program

Before starting any work on the project, the Contractor shall submit, for acceptance by the Engineer, a written program including applicable plan drawings and details to control water pollution effectively during construction of the project. The program shall show the schedule for the erosion control work included in the contract and for all water pollution control measures which the Contractor proposes to take in connection with construction of the project to minimize the effects of the operations upon water resources. The Contractor shall not perform any clearing and grubbing or earthwork on the project, other than that specifically authorized in writing by the Engineer, until the program has been accepted.

If the measures being taken by the Contractor are inadequate to control water pollution effectively, the Engineer may direct the Contractor to revise the operations and the water pollution control program. The directions will be in writing and will specify the items of work for which the Contractor's water pollution control measures are inadequate. No further work shall be performed on those items until the water pollution control measures are adequate and, if also required, a revised water pollution control program has been accepted. Attention is directed to Section \_\_\_\_, " ", "Contractor Response," for additional provisions relating to correction of the Contractor's water pollution control program, and payment.

The Engineer will notify the Contractor of the acceptance or rejection of any submitted or revised water pollution control program in not more than 5 working days.

The County will not be liable to the Contractor for failure to accept all or any portion of an originally submitted or revised water pollution control program, nor for any delays to the work due to the Contractor's failure to submit an acceptable water pollution control program or failure to adhere to the provisions of an accepted water pollution control program.

#### Contractor Response

The Contractor is advised that he may be required to respond to the work site after hours and/or on weekends or holidays to mitigate potential erosion or sedimentation and/or to repair damaged silt fencing and other erosion controls. Failure to respond within four (4) hours of notification by the Department of Public Works shall constitute substantial non-compliance with these Special Provisions.

Should the County Road Maintenance Division be required to provide any after-hours, weekend or holiday repairs to the Contractor's silt fencing or erosion controls due to the Contractor's failure to respond, all costs associated with providing that response,

including overtime wages, equipment and material costs, shall be deducted from the Contractor's final payment. The Contractor shall also be fully responsible for any fines, penalties or mitigations imposed by any regulatory agency caused by his failure to respond, regardless if the County Road Maintenance Division attempts any repairs or pollution prevention work in his absence.

#### Excavation and Grading

Excavation and grading activities shall be scheduled for dry weather periods. Excavation and grading activities shall not be allowed to commence or continue during periods of rainfall or runoff.

The Contractor may elect to perform excavation or grading activities immediately prior to periods of forecasted rain if he certifies in writing to the Engineer that the site will be completely secured against erosion and/or water pollution at the conclusion of the work day and prior to any rainfall. The work site shall be considered as completely secured against erosion and/or water pollution if the turbidity of runoff from the site does not exceed the turbidity of runoff from adjacent, undisturbed sites by more than 50 NTUs (Nephelometric Turbidity Units). Should the turbidity of runoff from the work site exceed this limit, the Contractor shall be required to immediately place additional erosion and/or water pollution controls at his expense as directed by the Engineer, and shall be subject to any administrative fines or penalties associated with water quality or permit violations, and no additional compensation will be allowed therefor.

The Contractor shall not commence any excavation, backfilling, grading or stockpiling operations until water pollution control materials have been delivered to the work site. The Contractor shall certify in writing that the quantity of water pollution control materials at the site is sufficient to protect against water pollution caused by the work, and shall specify the type of material and intended use in the written certification.

Sediment-laden runoff from the construction sites and/or staging areas shall not be allowed to enter into existing drainage ditches, **storm drain facilities** or **any water body**.

It is recommended that the Contractor control the amount of runoff entering upon construction and staging areas, particularly during excavation, to reduce the amount of temporary controls required. Temporary diversion berms and/or sandbags may be employed to divert runoff from entering upon construction and staging areas as approved by the Engineer.

#### General Housekeeping

Materials shall be protected from rainfall to prevent runoff contamination at the source. Exposed piles of soil or construction materials shall be covered with plastic sheeting secured with sandbags or temporary roofs.

The Contractor shall place trashcans and recycling receptacles around the site for use by his forces. Trashcans and recycling receptacles shall be kept covered and shall be emptied at appropriate intervals to reduce litter at the site.

Paved surfaces shall be dry-swept as necessary to prevent water pollution. If pavement flushing is necessary, silt ponds or other techniques to trap sediment and other pollutants shall be required.

The Contractor shall maintain portable toilets in good working order and wastes shall be disposed of properly. The Contractor shall check toilets frequently for leaks, and repair or replace any toilets found to be leaking. Portable toilets shall be protected against tipping by ground anchors, bollards, or any other suitable means as approved by the Engineer.

#### Materials/Waste Handling

The Contractor shall practice source reduction by minimizing waste when ordering materials. Only the amount necessary to finish the job shall be delivered to the site.

The Contractor is encouraged to use recyclable materials whenever possible, and to recycle construction, maintenance or demolition debris such as concrete, asphalt, scrap metal, solvents, degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, batteries, and tires.

Dumpsters shall be covered, maintained, and checked frequently for leaks. It is recommended that dumpsters be lined with plastic to prevent leakage of liquids. At no time will the Contractor be permitted to wash dumpsters at the site.

All wastes and demolition debris shall be disposed of properly outside the highway right of way. No waste materials or debris shall be stored or buried in the street or near a creek or stream bed

#### Vehicle Maintenance

The Contractor shall designate a completely contained area of the construction site, well away from streams or storm drain inlets, for auto and equipment parking, refueling, and routine vehicle and equipment maintenance. The area shall be bermed if necessary to contain any spills or leaks.

All vehicles and heavy equipment shall be maintained in good repair. The Contractor shall inspect frequently for and immediately repair any leaks.

The Contractor shall perform major maintenance, repair jobs, and vehicle and equipment washing off site.

The Contractor shall require the use of drip pans or drop cloths to catch drips and spills if any vehicle or equipment fluids (e.g. motor oil, radiator coolant, etc.) must be drained on

site. All spent fluids shall be stored in separate containers, and recycled whenever possible, or disposed of as hazardous waste.

Diesel oil shall not be used to lubricate or clean equipment or parts.

Vehicle batteries shall be recycled whenever possible.

#### Spill Prevention and Response

Fluids spills shall not be hosed down. The Contractor shall use dry cleanup methods (absorbent materials, cat litter, and/or rags) whenever possible. If water must be used, the Contractor will be required to collect the water and spilled fluids and dispose of it as hazardous waste. Spilled fluids shall not be allowed to soak into the ground or enter into any drainage facility or creek.

Spilled dry materials shall be swept up immediately. The Contractor shall not wash down or bury any dry spills.

Spills on dirt areas shall be removed by digging up and properly disposing of contaminated soil.

The Contractor shall report significant spills to the Engineer immediately

#### Tire Washing

Should the Contractor's equipment be found to be tracking mud onto a public road, the Engineer shall require a tire-washing swale at the exit from the construction site and/or staging areas. The Engineer shall also require that mud be removed from the traveled way by whatever means necessary for traffic safety and to prevent water pollution.

#### Roadwork and Paving

The Contractor shall avoid creating excess dust when breaking and/or removing asphalt or concrete. Broken asphalt and/or concrete pieces shall be completely removed from the site as soon as possible, or shall be stored in a separate, secure stockpile protected from rainfall and runoff. **Material derived from roadway work shall not be allowed to enter any ditch, storm drain facility or natural water body.**

Slurry resulting from sawcutting operations shall be shoveled or vacuumed and completely removed from the site. The Contractor shall not be permitted to sweep or flush any sawcutting debris or slurry into any **ditch, storm drain facility, natural water body** or roadside area.

### Concrete and Mortar

The Contractor shall ensure that concrete and mortar are contained within the lines and grades shown on the Plans and not allowed to leave the construction site. Any excess concrete, mortar and/or mix water placed or spilled beyond the limits of concrete construction as shown on the Plans shall be immediately collected, removed and disposed of properly.

No washout of concrete mixers or trucks will be permitted at the project site.

Dry sacks of cement shall be protected against rainfall, runoff and wind. Opened sacks of cement shall be secured and protected from spilling.

### Training

The County shall provide introductory training to the Contractor, his employees and subcontractors at the job site before work commences. This training will provide background information on sensitive species, permit requirements and site-specific water quality issues. The Contractor shall require that his foremen and subcontractors attend this training. The Contractor shall be required to train any new or replacement personnel on the specific requirements at his own expense.

### Payment

The last paragraph of Section 7-1.01G, "Water Pollution", of the Standard Specifications is superseded by the following:

“The Contract lump sum price paid for Water Pollution Control shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work required for water pollution control, including but not limited to temporary erosion control, as specified in Section 20-2, “Temporary Erosion Control,” of these Special Provisions, submittal of a written program and working drawings, in a form approved by the Engineer, for a water pollution control plan, as specified in these Special Provisions, the Standard Specifications and as directed by the Engineer, and no additional compensation will be allowed therefore.