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September 9, 2009

04-CC,Ala-24-8.2/10.0,0.0/2.7
04-294914
SARRA-P024(030)N
HPLUL-6204(083)N

Addendum No. 5

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN ALAMEDA AND CONTRA COSTA COUNTIES FROM EAST TEMESCAL SEPARATION TO 0.8 KM EAST OF GATEWAY BLVD.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on Wednesday, September 16, 2009.

This addendum is being issued to revise the Notice to Bidders and Special Provisions.

In the Special Provisions, Section 4, "BEGINNING OF WORK, TIME OF COMPLETION, AND LIQUIDATED DAMAGES," the first paragraph is revised as follows:

"Complete the work within the number of working days bid starting on the 55th day after contract approval or on the day you start work at the job site, whichever occurs first."

In the Special Provisions, Section 5-1.09, "PAYMENTS," the second paragraph is revised as follows:

"For the purpose of making partial payments pursuant to Section 9-1.06, "Partial Payments," of the Standard Specifications, the amount set forth for the contract items of work hereinafter listed shall be deemed to be the maximum value of the contract item of work which will be recognized for progress payment purposes:

A.	Clearing and Grubbing	$70,000
B.	Develop Water Supply	$10,000
C.	Progress Schedule (Critical Path Method)	$72,000
D.	Tunnel Excavation Plan and Test Section	$10,000,000"

In the Special Provisions, Section 10-1.03, "WATER POLLUTION CONTROL," subsection "STORM WATER POLLUTION PREVENTION PLAN," item C of the fourth paragraph is revised as follows:

"C. Tracking Control

1. Street Sweeping
2. Temporary Construction Entrance
3. Temporary Tire Wash System"

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In the Special Provisions, Section 10-1.05, "TEMPORARY STORM WATER RUN-ON BYPASS AND EXCAVATION DEWATERING," subsection "TEMPORARY EXCAVATION DEWATERING," item 4 of the first paragraph is added as follows:

> "4. Wastewater from tire washing operations as described within "Temporary Tire Wash System," of these special provisions."

In the Special Provisions, Section 10-1.185, "TEMPORARY TIRE WASH SYSTEM," is added as attached.

In the Special Provisions, Section 10-4, "SECTION 10-4. MISCELLANEOUS CONSTRUCTION," is added as attached.

In the Special Provisions, Section 12-17.203, "DISPOSAL OF EXCAVATED MATERIAL," is revised as attached.

To Bid book holders:

Inquiries or questions in regard to this addendum must be communicated as a bidder inquiry and must be made as noted in the Notice to Bidders section of the Notice to Bidders and Special Provisions.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the Bid book.

Submit bids in the Bid book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This addendum and attachments are available for the Contractors' download on the Web site:

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/04/04-294914

If you are not a Bid book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

REBECCA D. HARNAGEL
Chief, Office of Plans, Specifications & Estimates
Office Engineer
Division of Engineering Services

Attachments

10-1.185 TEMPORARY TIRE WASH SYSTEM

GENERAL

Summary

This work includes designing, placing, operating, monitoring, maintaining, and later removing a temporary tire wash system. The tire wash system must be portable and be used to remove sediment from tires and undercarriages of all trucks and equipment prior to exiting areas for contractor's use, and to prevent sediment from being tracked onto public roadways. If the tunnel excavation operations are performed at both ends, the tire wash system shall be implemented at both ends and must be portable.

The SWPPP must describe and include the use of temporary tire wash system as a water pollution control practice for non-stormwater management and materials pollution control.

For information on documents under these special provisions, refer to the Department's "Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual" (Preparation Manual) and "Construction Site Best Management Practices (BMPs) Manual".

The Preparation Manual and Dewatering Guide are available from the Department's Construction Storm Water and Water Pollution Control web site at:

http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.htm

Wastewater that can no longer be recycled in the tire washing system shall be considered as non-storm water and shall be collected and conveyed to the Temporary Non-Storm Water Treatment System (TNSWTS) for treatment and disposal as per "Temporary Storm Water Run-on Bypass and Excavation Dewatering" of these special provisions. If you do not use an TNSWTS, discharge into a POTW system. If uncontaminated groundwater, stormwater, or both are discharged to a POTW, obtain a municipal batch discharge permit. You are responsible for all costs and pre-treatment requirements related to obtaining the municipal batch discharge permit and discharging the water.

Solids removed from the tire wash system shall be disposed of in conformance with the requirements specified in "Disposal of Excavated Materials," of these special provisions.

Submittals

Submit the following within SWPPP for review and approval of the Engineer:

1. A description of the tire wash system including:

    1.1. Description of all components used in the tire wash system including, but not limited to:

        1.1.1. Estimated tire washes per day
        1.1.2. Water Supply; anticipated flow rates for wash water used per tire wash
        1.1.3. Control panel
        1.1.4. Automatic sensor
        1.1.5. Flocculent pump
        1.1.6. Vacuum truck
        1.1.7. Wastewater recycling and disposal; anticipated wastewater flow rates conveyed to the TNSWTS
        1.1.8. Solids removal and disposal
        1.1.9 Electric power supply to operate tire wash system

    1.2. Description of any chemicals used in the process to recycle water for tire washing including but not limited to flocculent and polymers. The documentation and monitoring requirements in the Coagulant Prevention Plan submittal required in "Temporary Storm Water Run-on Bypass and Excavation Dewatering" of these special provisions shall fully apply to any chemicals used in the tire wash system.

    1.3. Operation and system maintenance procedures and example maintenance log

    1.4. Field-recorded data, visual inspection, and calibration procedures and example logs

    1.5. Working drawings for tire wash system including the wastewater and solids handling processes showing:

        1.5.1. Section and plan views of tire wash system
        1.5.2. Location of sampling points for water quality measurements
        1.5.3. Flow path and placement of pipes, hoses, pumps, holding tanks, and other equipment used to convey water supply and wastewater recycling and disposal to TNSWTS
        1.5.4. General position of tire wash and discharge components relative to operations requiring tire washing
        1.5.5. Point of tire wash waste water discharge

2. Daily Inspection Report. The report form must:

    2.1. Be approved by the Engineer before use
    2.2. Include tire wash wastewater discharge volumes and number of trucks washed per day
    2.3. Date and time
    2.4. Photographs labeled with the time, date, and location
    2.5. Inspection of roadways to ensure tracking of sediment is being prevented successfully by the tire wash system
    2.6. Inspection of all components of the tire wash system to ensure proper functioning of these systems

3. POTW municipal batch discharge permit, if used
4. If you use chemical coagulants, in-line flocculants, or both, in the tire wash system, submit a Coagulant Prevention Plan (CPP) within the SWPP. The CPP must include:

    4.1. Description of the best management practices (BMPs) to prevent accidental spillage, overfeeding into the treatment system, or other mishandling of coagulant agents
    4.2. Monitoring plan for all coagulant or flocculant agents to be used
    4.3. Description of the agent (chemical and trade name description)
    4.4. Determination of acute and chronic toxicity for aquatic organisms conforming to EPA methods for the agents
    4.5. Monitoring proposal to detect residual agent at concentrations at or below established acute toxicity levels for freshwater and marine conditions for that agent
    4.6. Copy of the documentation showing RWQCB approval of the CPP and approval of the chemical coagulants or in-line flocculants proposed

The CPP must be approved by the RWQCB. It is your responsibility to obtain approval of the CPP from the RWQCB. If the RWQCB does not approve your proposal to use chemical coagulants or in-line flocculants, you must propose an alternative treatment system component to comply with the receiving water and effluent discharge limitations.

Quality Control and Assurance

Retain and submit records of temporary tire wash system including:

1. Delivery and removal of temporary tire wash system components.
2. Daily inspection report that includes all information and recorded data collected. This report must be certified as true and accurate and signed by those who gather the information.

MATERIALS

Tire Wash System

Design and implement an appropriate tire wash system for the site conditions including number of truck trips per day that need tire washing, the anticipated wash water needed per tire wash, disposal of wastewater that cannot be recycled and solids generated from the system and designed to withstand the weights and widths of trucks. The tire wash system must include components including but not limited to:

1. Collection and conveyance of treated effluent from the TNSWTS that may be used as a water supply source for the tire washing system
2. Control Panel and automatic sensors to activate washers when trucks are driven through the system
3. Flocculent pump
4. Vacuum truck
5. Solids separation tank to remove the solids from the waste generated from tire washing
6. System to recycle water for tire washing
7. Scraper conveyor to automatically evacuate solids
8. Collection and conveyance system for conveying wastewater that can be no longer recycled to TNSWTS

The allowable alternatives for temporary tire wash system shall consist of one of the following or a Department approved equivalent system:

1. MAXIMUS Series – Portable Tire Wash System manufactured by Innovative Equipment Solutions 174 Cornerstone Blvd, Ste. B, Hot Springs, AR 71913. Office: 501-525-8484, Toll Free: 1-866-303-4IES (4437). Information and details can be found at :

    http://www.innovativeequipment.org/portable.html

2. Portable STB 30 Tire Wash - Portable Tire Wash System manufactured by Stanton Systems, 50 Richard Road, Ivyland, PA 18974. Toll Free: 1-800-884-9281. Information and details can be found at:

   http://www.stantonsystems.com/portable-tire-wash/portable-tire-wash.html

3. MobyDick "Quick" 220 C+ Tire Washer - Portable Tire Wash System manufactured by InterClean Equipment, Inc., 3939 Bestech Drive Suite B, Ypsilanti, MI 48197. Phone: (734) 975-2967 or 1-800-INTERCLEAN (1-800-468-3725). Information and details can be found at:

   http://www.interclean.com/

CONSTRUCTION

Placement

Place tire wash system components at the job site:

1. Before tunnel excavation work
2. In the ingress/egress areas used by trucks as approved by the Engineer
3. Away from construction traffic or public access areas

Operation

Divert storm water away from the tire wash system to prevent mixing with tire wash wastewater.
If observations in the daily inspection report confirm tracking of sediment on roadways past the tire wash system:

1. Inspect the tire wash system immediately
2. Notify the Engineer
3. Start corrective measures to modify, repair, or replace the equipment used in the tire wash system, and propose alternative means to perform tire washing until the corrective measures are implemented.

After the Engineer inspects and accepts corrective measures:

1. Resume tire washing operations
2. Start inspecting every tire washing operations every 4 hours for a 24 hour period and document the observations in the Daily Inspection Report
3. Start regular-daily inspections

Relocate tire washing system as needed.

Monitoring

Comply with the manufacturer's instructions for all calibrations of the flow meter. Perform calibrations in the presence of the Engineer.

While the tire wash system is operated, perform:

1. Flow rate monitoring to:

   1.1. Record daily discharge volumes for tire wash wastewater
   1.2. Compute average daily volumes

Inspection

Inspect tire washing system:

1. Daily if tire washing work occurs daily
2. Weekly if tire washing work does not occur daily

Reporting

If observations and measurements confirm that tire wash wastewater is discharged to a storm drain system:

1. Submit a Notice of Discharge Report as shown in the Preparation Manual within 3 business days
2. Document the reasons and corrective work performed to prevent a reoccurrence in the Notice of Discharge

Maintenance

Maintain the various components to prevent leaks and provide proper function. If a component of the tire wash system equipment is not functioning properly, discontinue the tire washing operation and repair or replace the component.

Removal

Backfill and repair ground disturbance, including holes and depressions, caused by the installation and removal of the temporary tire wash system. Comply with Section 15-1.02, "Preservation of Property," of the Standard Specifications.

PAYMENT

Full compensation for the tire wash system including furnishing all labor, materials, tools, equipment, and incidentals, for doing all the work involved in installing, operating, maintaining, and removing all components of the tire wash system, disposing wastewater and solids removed from the tire wash system and additional monitoring of solids for disposal, shall be considered as included in the contract prices paid under the various items of work and no separate payment will be made therefor.

SECTION 10-4. MISCELLANEOUS CONSTRUCTION

10-4.01 TUNNEL EXCAVATION PLAN AND TEST SECTION

GENERAL

This work includes submittal of an equipment list, excavation plan and verification of the Contractors means and methods during the excavation and support of the first 100 meters of the bore number 4 mined tunnel top heading.

Definitions

Test Section: A length of tunnel to be used to verify the Contractor's means and methods and confirm that the Contractor's proposed equipment and tools are adequate for excavating and supporting the mined tunnel.

Submittals

Within 100 days of contract award and at least 30 days before starting tunnel excavation submit a list of equipment to be used for excavating the mined tunnel. For each piece of equipment include the equipment type, manufacturer, model number, serial number, power requirements, capacity and any other information required to uniquely identify each piece of equipment. The tunnel excavation and support equipment shall be capable of handling all support categories for the entire length of the tunnel in all anticipated ground conditions as shown on the plans and as specified in these special provisions.

Within 100 days of contract award and at least 30 days before starting tunnel excavation submit a tunnel excavation plan. The plan may incorporate working drawings required by section 12-17.202 of the special provisions.

CONSTRUCTION

If tunnel construction proceeds from both portal one and portal two the test section will be the portion of the tunnel from station 107+22.650 to 107+72.650 and from 116+63.000 to 117+13.000. If tunnel construction proceeds only from portal number 2 the test section will be the portion of the tunnel from station 116+13.000 to 117+13.000.

MEASUREMENT AND PAYMENT

Tunnel Excavation Plan and Test Section will be paid as a lump sum price. Payment will be in addition to contract item payments for tunnel excavation and additional support items.

The contract lump sum price paid for Tunnel Excavation Plan and Test Section shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in preparing and submitting the equipment list and excavation plan and for verifying the methods for construction of tunnel excavation and support, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Progress payments for Tunnel Excavation Plan and Test Section will be made as follows:

A. Equipment list submitted and accepted, then 5 percent payment will be made.
B. Excavation plan submitted and accepted, then 15 percent payment will be made.
C. If excavation proceeds from both portals:

   1. Excavation is completed from 107+22.65 to 107+72.65, then 40 percent payment will be made.
   2. Excavation is completed from 117+13.00 to 116+63.00, then 40 percent payment will be made.

D. If excavation proceeds only from portal number 2:

   1. Excavation is completed from 117+13.00 to 116+63.00, then 40 percent payment will be made.

2. Excavation is completed from 116+63.00 to 116+13.00, then 40 percent payment will be made.

12-17.203 DISPOSAL OF EXCAVATED MATERIALS

PART 1 – GENERAL

SUMMARY

This section specifies requirements for temporary stockpiling for material classification, testing and classification, handling, loading, hauling and disposing of excavated materials generated during construction of Bore No. 4 tunnel and cross passages.

Related Sections

Earthwork shall conform to the provisions in "Earthwork" of these special provisions.

Geological conditions are identified in "Geotechnical Baseline Report" of these special provisions.

Tunneling shall conform to the provisions in "Tunnel Excavation and Support" of these special provisions.

Attention is directed to "Water Pollution Control" and "Temporary Storm Water Run-on Bypass and Excavation Dewatering" of these special provisions for requirements relating to the handling and treatment of water that travels through stockpiled excavated materials and requirements relating to the tire wash system.

REFERENCES

California Code of Regulations, Title 8

California Health and Safety Code

Bay Area Quality Management District, Regulation 8, Rule 40

DEFINITIONS

Material Classification Area (MCA): A Contractor-furnished area, or on-site area as required to conform to these special provisions, to be used as a staging area for sampling, testing, and classification of excavated materials for proper disposal.

Muck: Material generated during tunnel construction activities including rock, soil, or gouge; by-products of tunneling construction operations such as wasted, damaged, or unused construction materials; and materials such as residue from blasting products.

Contaminated Excavated Materials: Excavated materials that exhibit any of the following characteristics:

Greater than 1000 ppm Total Petroleum Hydrocarbons per an approved EPA test method; or

Greater than 5 ppm Total Petroleum Hydrocarbons as gasoline per EPA Method 8015B; or

Greater than 50 ppm direct reading from either a hand held Photo-Ionization Detector calibrated by 100 ppm Hexane; or

Greater than 0.1 ppm Benzene, or greater than 10 ppm Toluene, or greater than 62 ppm Ethyl Benzene, or greater than 62 ppm Xylenes per EPA Method 8260.

Contaminated excavated materials do not include any waste or combination of wastes as defined by the following: 22 CCR §66261.24; California Health and Safety Code, Chapter 6.5, Division 20; 40 CFR §261.3 et seq.; hazardous waste in 40 CFR §171.8; and Federal Resource Conservation and Recovery Act of 1976, 42 U.S.C. §6901 et seq.

SYSTEM DESCRIPTION

Materials from the excavation of Bore No. 4 tunnel and cross passages, except for the volume of suitable excavated material required for construction outside of the portals to permanent grading limits, shall become the property of the Contractor and shall be disposed of outside the highway right of way in accordance with the requirements in Section 7-1.13, "Disposal of Material Outside the Highway Right-of-Way," of the Standard Specifications. Suitable excavated material shall not be contaminated excavated material and shall meet the requirements for its intended use specified in the Standard Specifications and these special provisions. Suitable material has average concentrations of metals and containments of concern, as measured by the 95% Upper Confidence Limit of the mean, that are below the San Francisco Bay Regional Water Quality Control Board's Table A Commercial Environmental Screening Levels or within background concentrations for the site.

The Contractor shall be responsible for selecting appropriate disposal site(s) based on the material classification and establishing the haul routes in accordance with the limitations specified herein, in "Order of Work" of these special provisions, and in the Standard Specifications. Possible disposal sites for considerations by the Contractor are:

A. Port of Oakland
   Telephone: (510) 627-1184

B. City of Oakland
   Telephone: (510) 238-7125

No agreement has been made between the Department and these entities, and the Department does not, expressly or by implication, warrant that these entities will accept excavated materials.

Stockpile locations and heights shall be as shown on approved working drawings and based on proposed construction methods.

Provide MCA of the size and arrangement required to maintain satisfactory progress during tunnel excavation. Evaluate MCA space and stockpile layout to determine the amount of material that may be accepted at the MCA on a daily basis. Consider the logistics of stockpiling, sampling, material classification, and hauling classified material from the MCA when making this determination.

Segregate and stockpile MCA materials to facilitate sampling and storage until materials have been classified. Segregate suspected contaminated excavated material in such a way that will facilitate measurement of the stock-piled volume for payment purposes. Submit measurement calculations to Engineer for verification prior to loading stockpile for hauling and disposal.

Establish and implement a sampling and analysis plan (SAP) for the excavated materials, including contaminated excavated material, in accordance with the testing requirements of the disposal site(s) and all applicable federal, state, and local laws and regulations. The SAP shall describe routine field screening and observation during excavation. All excavated soils and tunnel muck shall be monitored for visual and olfactory evidence of contamination, including but not limited to, discoloration, texture, and odor. If material has a hydrocarbon staining or odor; or exhibits unnatural color or other indications of hydrocarbon content, the excavated material will be considered suspect and will be segregated from other excavated material for separate chemical characterization to determine if it is a Contaminated Excavated Material.

Stockpile sample collection and testing of suspect materials shall be conducted in accordance to EPA SW-846. The Contractor shall collect stockpile samples at a minimum frequency of one 4-point composite sample every 1,000 cubic meters for Total Petroleum Hydrocarbons as diesel and motor oil using EPA Test Method 8015B and any other analysis required by the receiving site. More frequent sampling may be required by results of screening and observation, or by disposal facility requirements.

The Contractor shall notify the Engineer immediately of excavated material that is observed to be contaminated.

Costs associated with handling, loading, hauling and disposing of by-products introduced by tunneling operations shall be the responsibility of the Contractor.

The Contractor shall implement a tire wash system for washing mud, dirt and silt from the tires of trucks used to haul muck prior to exiting areas for contractor's use. The Contractor may propose to reuse treated non-storm water from the Temporary Non-Storm Water Treatment System (TNSWTS) as a water supply source for the tire wash system as described in "Temporary Storm Water Run-on Bypass and Excavation Dewatering" of these special provisions. Waste water used in the tire wash system shall be considered as non-storm water and shall be collected and conveyed to the Temporary Non-Storm Water Treatment System (TNSWTS) for treatment and disposal as per "Temporary Storm Water Run-on Bypass and Excavation Dewatering" of these special provisions. Discharges of Solids removed from the tire wash system shall be disposed of in conformance with the requirements specified herein for excavated materials.

SUBMITTALS

Working Drawings

Working drawings shall include complete details, information, drawings, and substantiating calculations of proposed materials, facilities, and equipment to be used and methods of construction. The working drawings shall include:

Work plan for locating, sizing, constructing, and maintaining temporary on- and off-site stockpile(s) including MCA. The work plan shall include:

1 Site layout and stockpile capacity
2 Name, address, telephone number and contact name of property owner
3 Means and methods for performing required activities at the MCA, including the layout and types of physical and protective barriers.

Contractor sampling and analyses plan including the following:

1. Sampling frequency
2. Sampling procedures
3. Sample handling
4. Chain-of-custody documentation requirement
5. Analyses protocol including proposed list of analyses and the respective analytical method and detection limits
6. Quality control and quality assurance protocols
7. Data evaluation protocol
8. Field screening using PID and handling of excavated materials subject to BAAQMD Regulation 8-40
9. Visual and Olfactory field screening procedures
10. Stockpile sampling procedures. Sample collection shall be conducted in accordance with EPA SW-846.

Details for loading, transporting, and dumping materials including:

1. Proposed haul routes and haul times from the excavation locations to the MCA, and from the MCA to the permanent disposal site(s), as applicable.
2. Methods for controlling and removing spillage, tracking of materials, and dust anywhere off-site.
3. List of disposal sites including name of site, address, telephone number and contact name for each disposal site used.
4. Reporting format to be used for listing materials accepted or not accepted at each disposal site.

Permits and licenses in accordance with the following:

1. Environmental permits to transport and dispose of all materials.
2. Permits for proposed haul routes from governing jurisdictions.
3. Permits for Contractor-provided stockpiling facilities off-site from governing jurisdictions.
4. Lease or agreement with property owner for Contractor-provided stockpiling facilities off-site.
5. RWQCB, DTSC and other state agency permits
6. Approval from City or County Planning Commissions or similar entities
7. Applicable grading permits

List of tests required by the disposal site(s).

A description of the tire wash system including:

1. Description of all components used in the tire wash system
2. Operation and maintenance procedures for all components
3. Handling and disposal of wastewater and solids from the tire wash system
4. Description of any chemicals used in the process to recycle water for tire washing including but not limited to flocculent and polymers. The documentation and monitoring requirements in the Coagulant Prevention Plan submittal required in "Temporary Storm Water Run-on Bypass and Excavation Dewatering" of these special provisions shall fully apply to any chemicals used in the tire wash system.

Daily Records

Daily records shall be submitted no later than the end of the work day following the performance of the work. Daily records shall include truck counts for the transportation of all excavated materials grouped by haul destination including material hauled from the excavation locations, MCA, any other stockpile facilities on- or off-site. Daily records shall include all test data and analysis results for the purposes of identifying contaminated excavated material, and a summary of loads that are classified as contaminated excavated materials.

Notifications

Notification shall be given to the Engineer immediately upon receiving a complaint from any source.

The Contractor shall notify the Engineer immediately upon determining that a particular stockpile of excavated material has been classified as contaminated excavated material.

QUALITY ASSURANCE

Qualifications

The laboratory used for testing excavated materials shall be certified compliant with the recommended requirements of the American Council of Independent Laboratories or ASTM E329.

Regulatory Requirements

The handling and disposal of the excavated material shall be in full compliance with all applicable federal, state, and local laws and regulations including the following:

Bay Area Air Quality Management District Regulations
San Francisco Bay Regional Water Quality Control Board
Department of Toxic Substance Control
California Code of Regulations Title 8 and Title 22
California Health and Safety Code, Chapter 6.5, Division 20
California Labor Code Section 6382
Federal parameters defined under the Resource, Conservation and Recovery Act (RCRA)
Code of Federal Regulations (CFR), 40 CFR 261, 49 CFR 171
Local agency regulations

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

GENERAL

The Contractor shall properly segregate, evaluate, handle and haul the excavated materials to appropriate disposal site(s) in accordance with the approved working drawings and these contract documents.

Suspect contaminated excavated material shall be identified by the Contractor and test data and analysis results shall be submitted to the Engineer for review and verification.

Suspect contaminated excavated material identification shall be based on one of the following:

1. Field Screening and Observation as described in the SAP.
2. A direct reading of greater than 50 ppm from either a hand held Photo-Ionization Detector as required by BAAQMD Regulation 8-40.
3. Laboratory Test Results corresponding to the definition of contaminated excavated materials

Segregate and stockpile muck in the MCA to facilitate sampling and storage until materials have been classified. Segregate suspected contaminated excavated material in such a way that will facilitate measurement of the stock-piled volume for payment purposes. Submit measurement calculations to Engineer for field verification prior to removing stockpiled material for hauling and disposal.

Perform analytical testing in accordance with the SAP and provide the test results to the engineer.

The Engineer may accept the analysis results provided by the Contractor or verify the results by collecting additional samples and performing independent testing. Upon submittal of the test results, the Contractor shall allow the Engineer 2 business days for review and verification.

The Contractor shall identify an adequate number of disposal sites to accomodate both contaminated and non-contaminated excavated material considering the characteristics of the muck and production rates. The Contractor must exhaust all options for reuse of the non-contaminated excavated material prior to disposing to a landfill. This effort shall be documented and submitted to the Engineer.

Contaminated excavated material shall be segregated and kept visibly moist by water spray, treated with a vapor suppressant, or covered with continuous heavy duty plastic sheeting or other covering to minimize emissions of organic compounds to the atmosphere, per regulatory requirements.

Cover all truck loads of excavated material during off-site transport.

Furnish and install barriers, stakes, and colored flagging to:

Delineate the MCA
Indicate the work area limits
Segregate MCA stockpile(s) for sampling and classification

Costs associated with any borings, sampling and testing performed to resolve disputes regarding classification of contaminated excavated materials shall be the responsibility of the Contractor if the resolution is determined to be in favor of the Engineer.

HAULING

The tires of muck haulage trucks shall be washed prior to exiting areas for contractors use. Tire washing shall prevent materials being tracked on to local roads and highways.

Prevent spillage of excavated material anywhere along haul routes.

Perform hauling in accordance with all regulatory requirements and "Order of Work" of these special provisions.

PART 4 – MEASUREMENT AND PAYMENT

Full compensation for the disposal of muck, including suspect material found not to be contaminated excavated materials, and excluding contaminated excavated materials, from Bore No. 4, including haulage, segregation, sampling, handling, disposal and testing, shall be considered as included in the contract prices paid per meter for tunnel excavation and support of the locations and categories listed in the Engineer's Estimate and no separate payment will be made therefor.

Full compensation for disposal of muck, including suspect material found not to be contaminated excavated materials, and excluding contaminated excavated materials, from the cross passages, including haulage, segregation, sampling, handling, disposal and testing, shall be considered as included in the contract prices paid per meter for cross passage excavation and initial support of the categories listed in the Engineer's Estimate and no separate payment will be made therefor.

Contaminated excavated material shall be measured in units of cubic meter as measured in the stock-pile, and verified by the Engineer.

The contract price paid per cubic meter for contaminated excavated material shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in additional costs of haulage, segregation, sampling, handling, and additional testing in conformance with the SAP for contaminated excavated material after identification by the Contractor and verification by the Engineer.