

ARTICLE XII - ENVIRONMENTAL PROTECTION

12.1 DESCRIPTION

- (A) This work shall include the following:
- (1) Obtain the necessary permits to satisfactorily complete this project as required by the EPA, State of Hawaii and County of Kauai.
 - (2) Provide all air quality testing and monitoring work required by the permits during construction, this Article, and as specified in Article XXXII – Temporary Water Pollution, Dust, and Erosion Control.
 - (3) Provide all necessary safeguards to the environment as required under this Article and by the permits.
 - (4) Comply with the Notice of General Permit Coverage (NGPC), National Pollutant Discharge Elimination Permit Standard (NPDES) requirements, Form C, F, and G.
 - (5) Comply with the Department of Transportation – Harbors Division's *Construction Site Runoff Control Program*. The document is available for review at the Department of Transportation – Harbors Division office.
- (B) For the purpose of this specification, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare, unfavorably alter ecological balances of importance to human life, affect other species of importance to man, affect endangered or threatened species and their habitat, or degrade the utilization of the environment for aesthetic and recreational purposes. The control of environmental pollution requires consideration of air, water and land, and involves noise and solid waste-management as well as other pollutants. With the exception of those measures set forth elsewhere in these specifications, environmental protection shall consist of the prevention of environmental pollution as the result of operations conducted under this contract.
- (C) The Contractor shall submit their contact information to the Construction Engineer.

If there is a conflict between the applicable rules and regulations, these Specifications, and the Plans, the more stringent shall apply as determined by the Construction Engineer.

12.2 GENERAL REQUIREMENTS

- (A) Applicable Regulations: In order to provide for abatement and control of environmental pollution arising from the activities of the Contractor and subcontractors in the performance of this contract, the work performed shall comply with the intent of the applicable Federal, State and County laws and regulations concerning environmental pollution control and abatement, the

applicable rules and regulations as detailed in these Specifications, and the following:

- (1) State of Hawaii, Department of Health, Administrative Rules, Chapter 59, Ambient Air Quality; and Chapter 60, Air Pollution Control Law.
 - (2) State of Hawaii, Department of Health, Administrative Rules, Chapter 44A, Vehicular Noise Control.
 - (3) State of Hawaii, Department of Health, Administrative Rules, Chapter 54, Water Quality Standards.
 - (4) State of Hawaii, Department of Health, Administrative Rules, Chapter 55, Water Pollution Control.
 - (5) State of Hawaii, Occupational Safety and Health Standards, Title 12, Department of Labor and Industrial Relations.
 - (6) Kauai County Code and Interim Construction Best Management Practices (BMP's) for Sediment and Erosion Control for the County of Kauai.
 - (7) Construction Site Runoff Control Program, August 2014, Department of Transportation Harbors Division.
- (B) The Contractor shall comply with all applicable Federal, State and local laws relating to the NGPC for Discharges of Storm Water Associated with Construction Activity, including but not limited to the following:
- (1) Contractor shall keep a copy of the NGPC, Form C, enclosures, plans, reports, specifications and other related materials submitted in and with the NOI and/or later amendments to the NOI at the job site. Copies will be provided by the Construction Engineer.
 - (2) Contractor shall provide its legal name, address, contact person, telephone and fax number to the Construction Engineer to be submitted to the State Department of Health (DOH).
 - (3) 60 calendar days prior to start of construction, Contractor shall submit its site-specific BMPs to DOH. A copy shall be submitted to the Construction Engineer for their information.
 - (4) The Contractor shall be completely, and solely, responsible for obtaining approval of site-specific BMPs from DOH.
- (C) Certifications and Permits: The Contractor will be required to obtain the State of Hawaii, Department of Health, Notification of Demolition and Renovation for asbestos abatement work. The Contractor must file this notification at least ten (10) working days with the State of Hawaii, Department of Health, and with the EPA, Region IX, before the start of demolition. The Contractor shall be responsible for completing and submitting this notification in accordance with its project schedules.

12.3 CONTRACTOR USE OF PREMISES

- (A) In the event the Contractor, subcontractors and/or other persons he engages in the project must work in any other area(s) under Harbors Division control other than the one designated for this project, the Contractor shall obtain written approval from the Director or his authorized representative for said use. Adequate notification must be given to the Director or his authorized representative for said use.

12.4 EXECUTION

- (A) Compliance with the provisions of this Article by its subcontractors will be the responsibility of the Contractor.
- (B) Prior to commencement of the work, the Contractor shall meet with the Director or his authorized representative to develop mutual understandings relative to compliance with this provision and administration of the environmental pollution control program.
- (C) It is intended that the land resources within the project boundaries and outside the limits of permanent work performed under this contract be preserved in their present condition. Insofar as possible, the Contractor shall confine his activities to areas defined by the Plans and Specifications.
- (D) The Contractor shall obliterate all signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials, or any other vestiges of construction as directed by the Director or his authorized representative.
- (E) All items having any apparent historical or archaeological interest which are discovered in the course of performing the work of this contract shall be left undisturbed and shall be immediately reported to the Director or his authorized representative so that the proper authorities may be notified.
- (F) The Contractor shall not dispose of any material into Harbor waters including, but not limited to, fuels, oils, bitumens, calcium chloride, acids, construction debris, or other harmful or hazardous materials. The Contractor shall not dispose of any material into Harbor waters which will result in an increase of turbidity. It is the responsibility of the Contractor to comply with all applicable Federal, State and County laws concerning pollution of water resources.
- (G) Erosion Control
 - (1) Surface drainage from jet grout operations, trenches, cuts or fills within the construction site, whether or not completed, and from demolition, abatement and construction waste disposal areas, shall, if turbidity producing materials are present, be held in a double contained collection areas or shall be bermed to control erosion and runoff. Temporary erosion and sediment control measures such as berms, dikes, drains, or sedimentation basins, if required to meet the above standards, shall be provided and maintained until jet grout operations are complete or

permanent drainage and erosion control facilities are completed and operative. The area of exposed bare soil and waste areas shall be kept to a minimum. Fills and waste areas shall be constructed by selective placement to eliminate silts or clays on the surface that will erode and contaminate adjacent waters.

- (2) Whenever trucks or vehicles leave the site and enter surrounding paved streets, the Contractor shall prevent any material from being carried onto the pavement. Trucks hauling fine material shall be covered in compliance with PUC, State Department of Transportation, and County of Kauai regulations. Waste water shall not be discharged into existing roadways, waterways, or drainage systems such as gutters and catch basins unless treated to comply with State Department of Health water pollution regulations.
- (H) Spillage: At all times, special measures shall be taken to prevent chemicals, fuels, oils, greases, bituminous materials, waste washing, herbicides, pesticides, insecticides, and cement from entering public waters, including Harbor waters.
- (I) Washing and Waste Water: Water used in washing, abatement, demolition or construction and other waste waters shall not be allowed to enter public waters, including Harbor waters.
- (J) Disposal of any materials including tanks, wastes, effluent, trash, garbage, oil, grease, chemicals, in areas adjacent to public waters is prohibited. If any waste material is dumped in unauthorized areas, the Contractor shall remove the material and restore area to the condition of the adjacent undisturbed area. If during normal operations of the project, contaminated ground is excavated, the Contractor shall notify the Director or his authorized representative for review. Appropriate action will be determined at that time.

Construction dewatering effluent shall not be discharged, in any way, into the ocean or into drainage systems or drainage ways that ultimately empty into state waters. Dewatering, when required, shall be done by back-trenching (pit-to-pit discharge). Dewatering effluent within contaminated areas, as shown within the construction drawings, shall be infiltrated within the contaminated areas shown within the construction drawings.

(K) Disposal of Construction Debris

- (1) All rubbish, concrete, asphalt, water lines, scrap lumber and other construction site debris shall be hauled away daily and disposed of off-site by the Contractor. Such disposal shall be accomplished in compliance with all Federal, State, and County laws and regulations governing waste disposal. To the extent possible, the Contractor shall recycle demolition debris at no extra cost to the State when compared to typical disposal costs.
- (2) No burning of debris and construction waste material will be permitted on the project site at any time.

- (3) No burying of debris and/or waste material except for materials which are specifically indicated elsewhere in these Specifications as suitable for backfill shall be permitted on the project site.
- (4) All unusable debris and waste material shall be hauled away daily to an appropriate off-site disposal area. During loading operations, debris and waste materials shall be watered down to allay dust.
- (5) Cleanup shall include the collection of all waste paper and wrapping materials, cans, bottles, construction waste materials, and removal as required. Frequency of cleanup shall coincide with rubbish producing events.
- (6) Construction debris should be disposed of daily.

(L) Air Pollution Control

- (1) The Contractor, for the duration of the project, shall maintain all excavations, embankments, haul roads, permanent access roads, plant sites, waste disposal areas, borrow areas, and all other work areas within or outside the project limits free from dust which would cause a hazard to the work, or the operations of other contractors, or to persons or property. Dust shall be kept down at all times, including non-working hours, weekends and holidays. Approved temporary methods consist of water sprinkling or similar methods to control dust. Sprinkling must be repeated at such intervals as to keep all parts of disturbed areas damp at all times. The Contractor must have sufficient equipment on the job to accomplish this if sprinkling is used. Dust control shall be performed as the work proceeds and whenever a dust nuisance or hazard occurs.

Dust control activities must comply with the Hawaii Administrative Rules, Title 11 Chapter 60.1, Air Pollution Control.

- (2) The methods of dust control and costs shall be the responsibility of the Contractor. Methods of dust control shall include the use of water and/or chemicals over surfaces which may create fugitive airborne dust per HRS 11-60.1.
- (3) Wet cutting will be required for cement blocks, concrete and asphaltic concrete pavement, unless attachments are used with dry cutting equipment to capture the dust created thereby.
- (4) No unnecessary shaking of bags will be permitted where cement, mortar and plaster are used unless the dust therefrom can be confined.
- (5) No dry power brooming will be allowed in unconfined areas. No dry sweeping shall be permitted in cleaning rubbish and fines which can become airborne from floors and other paved areas. Vacuuming, wet mopping, wet and damp power sweeping are permissible. Air blowing will be permitted on written approval from the Director's authorized representative.

- (6) The Contractor shall be responsible for all damage claims in accordance with Section 7.15 - "Responsibility for Damage" of the General Provisions.
- (M) Noise
- (1) Noise shall be kept within acceptable levels at all times in conformance with the State Department of Health Administrative Rules, Title 11, Chapter 46 - Community Noise Control. All internal combustion engine powered equipment shall have mufflers to minimize noise and shall be properly maintained to reduce noise to acceptable levels. The Contractor shall comply with all applicable Federal, State and County noise rules.
- (2) The Contractor shall obtain and pay for a Community Noise Permit from the Department of Health when construction equipment or other devices emit noise at levels exceeding allowable limits.
- (3) All internal combustion engine-powered equipment shall have mufflers to minimize noise and shall be properly maintained to reduce noise to acceptable levels.
- (4) Starting-up of construction equipment meeting allowable noise limits shall not be done prior to 6:45 a.m. without prior approval of the Construction Engineer. Equipment exceeding allowable noise levels shall not be started-up prior to 7:00 a.m.
- (N) Other
- (1) Whenever trucks and vehicles enter surrounding paved streets, the Contractor shall prevent any materials from being carried or dropped onto the pavement.
- (2) Waste water shall not be discharged into existing waters such as harbors, streams, waterways, oceans, or drainage systems such as gutters and catch basins, unless treated to comply with Federal and State of Hawaii water pollution regulations. Waste water shall not be discharged into existing waterways, or drainage systems such as gutters and catch basins unless treated to comply with the State Department of Health water pollution regulations.
- (3) Trucks hauling debris and/or fine materials within and off the project site shall be covered as required by PUC Regulations.
- (4) Except in an emergency, such as a mechanical breakdown, all vehicle fueling and maintenance will be done offsite or if onsite, in a designated area. A temporary berm shall be constructed around the area to confine any runoff from the designated area. Upon project completion, the area shall be cleaned of wastes and returned to prior condition.
- (5) No dumping of waste concrete will be permitted on the site. Except for rinsing of the hopper and delivery chute, and for wheel washing when required, concrete trucks shall not be cleaned on site.

- (O) Maintenance of Pollution Control Facilities During Construction: During the life of this contract, the Contractor shall maintain all facilities constructed for pollution control as long as the operations creating the particular pollutant are being carried out, or until the material concerned has become stabilized to the extent that pollutants are no longer being created.

12.5 WARNING SIGNS

- (A) General: Furnish all labor, materials and equipment necessary to construct and install temporary warning signs and barricades that comply with OSHA requirements and as directed by the Director or his authorized representative. These warning signs and barricades shall delineate the work area and exclude the public from the work area as specified hereinafter.
- (B) Materials:
 - (1) Backing: Backing shall be 6061-T6 aluminum 0.032" minimum thickness.
 - (2) Paint: Paint shall be satin finish, exterior grade or factory based enamel or a combination thereof.
- (C) Sign Colors: Signs shall have white background; remaining items shall be similar to Rust-Oleum Federal Safety Red.
- (D) Installation: Signs shall be located at 50-foot intervals around roped off work area or at all entrances in the case of interior work. Signs shall be attached to the rope barrier, rope barrier supports, individual sign supports or buildings.
- (E) Clean-Up: Remove all signs upon completion of this project. Repair any damages caused by sign mounting and removal.

12.6 SUSPENSION OF THE WORK

- (A) Violations of any of the above requirements or any other pollution control requirements which may be specified in these Specifications shall be cause for suspension of the work creating such violation. No additional compensation shall be due to the Contractor for remedial measures to correct the offense. Also, no extension of time or compensation will be granted for delays or impacts, caused by such suspensions.
- (B) The Director or his authorized representative will notify the Contractor of any non-compliance with the foregoing provisions. The Contractor shall, after receipt of such notification, immediately take corrective action.
- (C) If the Contractor fails or refuses to comply within 72 hours after a suspension is ordered by the Construction Engineer, the Director or his authorized representative may issue an order suspending all or part of the work until satisfactory corrective action has been taken. The State reserves the right to take whatever action is necessary to correct the situation and to deduct all costs incurred by the State in taking such action from monies due the Contractor. No additional compensation shall be due the Contractor for remedial measures to

correct the condition(s), and no extension of time or compensation for extended overhead will be granted for delays for the time needed to complete remedial measures as well as caused by such suspensions.

- (D) The Director may also suspend any operations which it feels are creating pollution problems although they may not be in violation of the requirements contained herein. In this instance, work required to correct the pollution problem and prevent its recurrence shall be done by force account as described in sub-Article 4.3 - "Extra Work" of the General Provisions and paid for in accordance with sub-Article 9.4, "Extra and Force Account Work" therein. The count of elapsed working days in this situation shall be computed in accordance with sub-Article 8.7 - "Determination and Extension of Contract Time" of the General Provisions.

12.7 MEASUREMENT AND PAYMENT

Environmental Protection, including material and labor required to obtain approval of site specific BMPs for DOH, permit fees, erosion control measures, dust control, and other related work will not be measured and paid for separately but will be considered incidental to the various pay items in the Proposal Schedule which require such work.

END OF ARTICLE