#### SPECIFICATIONS

#### SECTION 1

# GENERAL CONDITIONS

# 1-01 WORK TO BE DONE

The project consists of removing from service two underground storage tanks. The tanks will be removed from service by excavating for disposal off-site. Disconnecting, blocking, and/or removing piping associated with the tank will be part of removing the tank from service.

One underground tank has a capacity of approximately 15,000 gallons, is constructed of steel, and was used for diesel fuel storage. The other tank has a capacity of approximately 4,000 gallons, is constructed of steel, and was used for vinyl resin storage. The excavated tanks will be removed and transported to a hazardous waste disposal facility or cleaned until "nonhazardous" and cut-up for disposal. Any residues remaining in the tank will be removed and transported to a hazardous waste disposal or recycle site. The excavation will be backfilled with clean fill material or pea gravel, the fill will be compacted, and asphalt will be placed at the excavated area and finished to match existing grade.

Analytical and geotechnical results obtained from a test boring drilled in the immediate vicinity of the tanks are attached. The results include a detailed boring log and test results of soil samples taken from the test boring. A pre-bid inspection of the work site will be conducted.

#### 1-02 DEFINITIONS

The following terms shall be as defined herein.

Owner. The word "Owner" shall mean American Can Company. The Owners representative shall be Mr. D.P. Bergeson or his designate.

<u>Contractor</u>. The word "Contractor" means the person, firm or corporation with whom the Contract Agreement is made. Instructions and information tendered by the Engineer to

the Contractor's superintendent or agent on the work site shall be considered as having been received by the Contractor.

Engineer. The term "Engineer" means Aqua Terra Technologies, Inc., 3490 Buskirk Avenue, Suite A, Pleasant Hill, CA, 94523. (415) 934-4884.

Days. The word "Days" shall mean calendar days.

# 1-03 CONTRACT AGREEMENT

The bidder to whom award is made shall execute a written Contract Agreement and required supplementary documents and submit them to the Owner.

If any part of the work to be done under this Contract is subcontracted, the subcontract shall provide that all work to be performed thereunder shall be performed in accordance with the terms of the Contract Agreement. The subcontracting of any or all of the work to be done will in no way relieve the Contractor of any part of his responsibility under the Contract.

#### 1-04 COMMENCEMENT OF WORK AND TIME ALLOWED FOR COMPLETION

The Contractor shall commence the work covered by this Contract within 15 days from receipt of authorization to proceed, unless other arrangements are made with the Engineer. Work on this project shall be completed within 30 days from receipt of authorization to proceed.

## 1-05 PERMITS AND FEES

The Contractor shall obtain and pay for all construction permits and licenses except for those which will be obtained by the Engineer specifically defined elsewhere in this specification. The Owner will assist the Contractor, when necessary, in obtaining such permits.

The Owner will obtain specific permits for closure of the underground storage tanks.

#### 1-06 SAFETY

In accordance with generally accepted construction practices and State Law, the Contractor shall be solely and completely responsible for conditions on the job site, including safety of all persons and property during performance of the project.

This requirement shall apply continuously and not be limited to normal working hours.

The services of the Engineer in conducting construction review of the Contractor's performance is not intended to include review of the adequacy of the Contractor's work methods, equipment, or safety measures in, on, or near the construction site.

# 1-07 STATUS OF CONTRACTOR

It is stipulated and agreed that the Contractor shall be an independent contractor in the performance of this Contract and shall have complete charge of persons engaged in the performance of the work. The Contractor shall perform the work in accordance with his own methods, subject to compliance with the requirements of the Contract.

### 1-08 AUTHORITY OF ENGINEER

In all matters relating to acceptability of construction, materials, equipment, or methods, matters relating to execution and progress of work, percentage of completion, interpretation of Contract Documents and delays, the Engineer shall, within a reasonable time, render a decision on such a matter, which decision shall be final and conclusive.

#### 1-09 TESTS

Where the Specifications require work to be specially tested or approved, it shall be tested only in the presence of the Engineer after timely notice of its readiness for inspection and test, and after testing the work shall be covered up only upon the consent thereto of the Engineer.

Regardless of any test results, the Contractor is solely responsible for the quality of workmanship and materials.

# 1-10 METHODS AND APPLIANCES

The methods and appliances adopted by the Contractor shall be such as will, in the opinion of the Engineer, secure a satisfactory quality of work and will enable the Contractor to complete the work in the time agreed upon. If at any time the methods and appliances appear inadequate, the Engineer may order the Contractor to improve their character or efficiency, and the Contractor shall conform to such order; failure of the Engineer to order such improvement

of methods or efficiency will not relieve the Contractor from his obligation to perform satisfactory work or to finish it in the time agreed upon.

# 1-11 LINES AND GRADES

The Contractor shall lay out all work, and shall be responsible for any errors resulting therefrom. In all questions arising as to proper location of lines and grades, the Engineer's decision will be final.

# 1-12 PROTECTION OF WORK, PROPERTY AND PERSONS

The Contractor shall be responsible for the care of all work until its completion and final acceptance; and shall, at the Contractor's own expense, replace damaged or lost material and repair damaged parts of the work. The Contractor shall make his own provisions for properly storing and protecting all material and equipment against theft, injury, or damage from any and all causes. Damaged material and equipment shall not be used in the work.

## 1-13 CHANGES IN THE WORK

Without invalidating the Agreement, the Owner may, at any time or from time to time, order additions, deletions or revisions in the work. These will be authorized by Change Orders. Upon receipt of a Change Order, the Contractor shall proceed with the work involved. All such work shall be executed under the applicable conditions of the Contract Documents.

### 1-14 BASIS OF PAYMENT

Payment will be based upon the Contract lump sum and the Contractor's Schedule of Charges for all work provided on a time and materials basis (Contractor shall attach his Schedule of Charges). The Contractor's invoice will be paid following Owner's final acceptance of the work.

When the work is performed by other than the Contractor's organization, the Contractor shall reach an agreement with such other forces as to the distribution of payments made for such, and no additional payment therefore will be made by the Owner.

#### SECTION 2

# SLAB DEMOLITION AND UNDERGROUND TANK EXCAVATION

### 2-01 GENERAL

The Contractor shall demolish and remove from the site the concrete and asphalt paving in the general area overlying the underground tank. Minimal demolition will be required for removal of the underground tank.

The existing concrete slab overlying the 4,000 gallon tank, and the concrete piping vault overlying the 15,000 gallon tank shall be broken into pieces suitable for transport to off-site disposal. Asphalt surrounding the concrete slab and vault shall be broken to a clean edge, where necessary for excavation of the tank.

### 2-02 PIPING

The Contractor shall break all surface connections for outlet, inlet, vent, and gauge piping. The pipe leading to and from the tanks shall be cut, threaded, and capped at the excavation face and at the locations were the pipes first surface.

# 2-03 TANKS

The Contractor shall remove the tanks by excavation. Excavation shall be limited to the minimum area and depths required to remove the tank.

Prior to beginning excavation, the contractor shall establish elevation centrol on the buildings adjacent to the area of excavation. The elevation control shall be periodically confirmed during excavation and at the completion of backfilling and compaction.

#### 2-04 PAYMENT

Payment for slab demolition and tank excavation shall be made in accordance with the lump sum quoted.

#### SECTION 3

### TANKS AND EXCAVATED MATERIALS DISPOSAL

## 3-1 GENERAL

The underground storage tank contained diesel fuel and vinyl resin which is a hazardous waste. Therefore, the tanks will be treated as a hazardous waste.

It is expected that some hazardous material residues will remain in the tank during excavation. This is material that could not be removed by normal pumping equipment installed for the tank.

Organic analysis of soil samples collected from a soil boring placed in the backfill for both tanks indicated that petroleum and other hydrocarbons were present. Therefore, although non-hazardous, the excavated soils will be disposed at a Class II-1 landfill.

### 3-2 LIQUID WASTES

Liquid wastes may originate from residual materials contained within the tanks and tank piping.

The Contractor shall collect all liquid removed from the tanks. The Contractor will capture all liquid, if any, contained in piping associated with the tank prior to disconnecting. These materials shall be collected by the Contractor and placed into appropriate sealed containers for recycle or disposal. Methods shall by employed which avoid release of any of the material to the ground.

It is estimated that the volume of liquid hazardous material residue which must be removed from the tank for the transport and disposal off-site is less than approximately 200 gallons.

The Engineer will provide the required documentation for transport and disposal or recycle, and identify the facility to which the liquid shall be delivered by the Contractor.

### 3-03 SOLID WASTES

The tank and piping removed by excavation will be considered hazardous waste. The Contractor will dispose of the tank

and piping to an authorized hazardous waste receiver or hazardous waste disposal site as approved by the Engineer. All transport and disposal documentation as required by applicable laws and regulations will be defined by the Engineer.

Soils removed by tank excavation will be considered non-hazardous. The Contractor shall place excavated material directly into containers for off-site disposal by the Contractor. The disposal site for excavated materials shall be determined by the Contractor and approved by the Engineer.

The Contractor shall excavate and dispose, as directed by the Engineer, any contaminated material in excess of that required to remove the tanks.

Alternatively, tanks may be decontaminated at the excavation site. All liquids and other materials employed for decontamination shall be disposed of according to appropriate protocol for potentially hazardous waste. The tanks shall be certified to be free of contamination by an approved analytical laboratory prior to transport from the site for disposal.

## 3-04 PAYMENT

Payment for tanks and excavated materials disposal which is limited to include the tanks and any materials excavated to allow removing the tanks, shall be according to lump sum. Excavation and disposal of material excavated at the direction of the Engineer which is not required for removal of the tanks, shall be paid at time and materials rates quoted by the Contractor and accepted by the Engineer according to the Schedule of Charges submitted with the Contractor's original bid.

#### SECTION 4

### BACKFILL AND GRADING

### 4-01 GENERAL

When excavation of the tank and soils has been completed, the excavation shall be backfilled with imported clean fill material or pea gravel.

After the excavation is backfilled, the work area shall be graded to match the original surface contours which existed prior to excavation. The backfill shall be graded to allow resurfacing with an asphaltic concrete paving with a minimum thickness of three (3) inches.

Compaction of backfill will be determined by the Engineer.

## 4-02 BACKFILL MATERIAL

Prior to placing the backfill material, a firm and stable base should be prepared by removing all loose soil from the excavation. An initial working pad of granular material shall be placed to the satisfaction of the Engineer. No backfill material shall contain vegetable matter, reinforced concrete, roots, wood, debris, or any material that the Engineer has determined to be unsuitable.

Imported material shall consist of a well graded granular material with a maximum rock size of approximately three inches or shall consist of pea gravel.

All soil backfill shall be placed in layers not exceeding eight (8) inches in thickness prior to compaction. Backfill shall be compacted to at least 90 percent relative compaction in accordance with ASTM D1557 test procedure. If pea gravel is used for backfill, it shall be placed in layers not exceeding 24 inches in thickness. The pea gravel shall be compacted by vibration to the satisfaction of the Engineer.

The upper six inches of the backfill, whether graded soil or pea gravel, shall consist of Class II aggregate base rock in accordance with Section 26 of Cal-Trans Standard Specifications.

Unsuitable backfill material shall be disposed of off-site

by the Contractor.

# 4-03 COMPACTION

The Contractor's equipment and method for compaction of backfill shall be approved by the Engineer and shall consist of vibratory methods. Compaction by flooding, ponding, or jetting is not permitted.

Compacted fill shall be subject to inspection by the Engineer.

### 4-04 ROUGH GRADING

The site shall be rough graded to match the contours of the original grade which existed prior to excavation.

# 4-05 PAYMENT

Payment for backfill and grading shall be according to lump sum. Any additional work directed by the Engineer will be at time and materials rates according to the Schedule of Charges submitted with the Contractor's bid.

#### SECTION 5

# ASPHALT CONCRETE PAVING

# 5-01 GENERAL

The Contractor shall resurface the area of excavation with new asphaltic concrete paving. The asphaltic paving shall have a minimum thickness of three (3) inches.

# 5-02 SUBGRADE PREPARATION

The soil subgrade on which the slab will be constructed shall be firm and non-yielding, and free of loose material.

# 5-03 ASPHALT CONCRETE PAVING

Asphalt concrete paving shall conform with Section 39 of Cal-Trans Standard Specifications. The paving shall be placed to a minimum thickness of three (3) inches and finished to match existing grade.

## 5-04 PAYMENT

Payment for asphalt concrete paving shall be made according to the lump sum quoted by the contractor.

#### SECTION 6

### CLEANUP

### 6-01 GENERAL

During the progress of the work, the Contractor shall keep the premises occupied by him in a neat and clean condition, disposing of refuse in a satisfactory manner.

At no time shall there be any accumulation of rubbish, excavated material or equipment that will interfere with the convenience or operation of others or result in unsightly appearance of the work.

### 6-02 PROTECTION OF WORK

The Contractor shall be responsible for the care of all work until its completion and final acceptance, and he shall protect the site from erosion or drainage of material out of the work area.

### 6-03 FINAL CLEANUP

Prior to final acceptance of the work, the Contractor shall remove all temporary structures built by or for him, and remove all equipment and surplus construction material and debris from the area. The entire project, before acceptance by the Owner, shall be left in a neat and clean condition.

The Contractor shall replace any fencing or other structures removed by him for access to the work site to the same condition at which they existed prior to his commencing work.

## 6-04 PAYMENT

Payment for cleanup shall be according to the lump sum quoted by the Contractor.

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