

PLAINTIFF'S EXHIBIT

ETCO-765

SPECIFICATIONS
FOR
DISMANTLE IDLE "TEL" FACILITIES
(Phase II)

ETHYL CORPORATION

Baton Rouge, Louisiana

PROJECTS B-4104 & B-4893

ETHYL CORPORATION
ETHYL TOWER
451 FLORIDA STREET
BATON ROUGE, LOUISIANA 70801

DATE: December 17, 1979

ETH00003520

Specifications

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Section I

Scope of the Work

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SECTION I

SCOPE OF THE WORK

The intent and scope of this project is (1) to dismantle and remove such idle TEL facilities as are indicated (a) on the drawings included in the "List of Drawings" found in Section 2 "Applicable Drawings, Engineering Standards and Engineering Specifications," (b) facilities described below, and (c) other facilities identified in the field for removal, (2) to perform such work as is required by the "Special Conditions," Section 3, and other requirements included in these Specifications and all mutually agreed upon revisions or additions to any of the above, and (3) to perform all work which is implicit or accessory to the above whether or not expressly stated.

In general, the facilities to be dismantled and removed are located in three buildings referred to as Building Numbers 0101, 0102 and 0122 (reference Baton Rouge Plant Plot Plan). All equipment from the buildings is to be removed, and the buildings demolished with the exception of the furnace stack supported by building 0101, which is to remain in operation. Contaminated equipment will be decontaminated by the Contractor at the existing decontamination facility on plant site. All process equipment, piping and structures remains the property of Ethyl.

The dimensions for building 0101 are approximately 170' x 65' x 85' high at the top of the penthouse roof. Building 0122 dimensions are approximately 47' x 32' x 52' high at the roof peak.

Equipment which is initially non-contaminated is to be prepared for removal from the Ethyl plant site immediately upon removal from buildings. This equipment having been properly identified as instructed below and in the "Special Conditions," Section 3, is to be loaded directly from the buildings onto the trucks used for removal. The equipment will be weighed and sold for scrap by Ethyl under the existing arrangements for sale of scrap materials from the Baton Rouge Plant. This activity is to be coordinated by Construction with Baton Rouge Plant Central Stores, who is responsible for accounting for the sale of this scrap materials.

Contaminated and non-contaminated process equipment and piping will be identified by Ethyl in the field to the Contractor for the purpose of marking. Marking is to be done by the Contractor. Generally contaminated equipment and piping will be marked with yellow paint and non-contaminated equipment and piping will be marked with green paint. During dismantle, in cases where no markings are evident or markings are not understood, it will be the responsibility of the Contractor to request clarification before dismantling. The Contractor is to assure that all contaminated and non-contaminated process equipment and piping are adequately marked for future identification before it is removed from the buildings. Drawing references of major equipment to be removed are given in Section 2, "Applicable Drawings, Engineering Standards and Engineering Specifications."

The TEL Plant will be in operation during the dismantling work. The Contractor must keep all cranes, trucks, equipment, supplies, personnel, etc., in locations approved by the Construction Coordinator and Contractor must not interfere with normal traffic flow. The jobsite is to be kept clean and orderly at all times.

The Contractor must request work permits as described in "Special Conditions," Section 3. Burning is restricted and is allowed only in accordance with the work permits. The Construction Coordinator or designated alternate will prescribe the safety precautions required for the weather, plant operations and other conditions prevailing at the time. A TEL Operations safety man with authority to stop all work will be assigned.

The following is a summary of major items which are to be accomplished and gives an outline of the basic scope of the project.

1. Contaminated equipment and piping to be prepared for transporting (blanked off when required), in a method satisfactory to Ethyl, and then removed from the building.
2. Non-contaminated equipment and piping to be removed from the buildings.
3. Contaminated equipment to be laid down in designated area on the Baton Rouge Plant, dismantled, decontaminated and placed in a designated storage area for weathering by the Contractor, as per Ethyl requirements described in "Special Conditions," Section 3.
4. The furnace exhaust stacks now supported by building 0101 must remain operational. It may remain in existing location or a new stack built. (See note below.)
5. An on-plant decontamination facility will be maintained and operated by the Contractor.
6. An on-plant contaminated equipment storage area will be managed by the Contractor to weather contaminated equipment.
7. Waste from the decontamination facility will be disposed of on plant by the Contractor, per Ethyl requirements, as described in "Special Conditions," Section 3.
8. The usable equipment now stored in these buildings will be moved by Ethyl to other storage areas.
9. Buildings to be removed to grade elevation (curbs to be removed, slabs to remain).
10. The structural steel of building 0122 which is part of pipe rack on north side of the building is to remain. It is to be sandblasted and painted after all brick, tile, etc., are removed.

NOTE: If the furnace exhaust stack remains in the existing location, it will be supported by the structural steel of four bays on the northwest corner of building 0101. The Contractor will be required to install new bracing, as designated by Ethyl. After bracing the Contractor will sandblast and paint entire structure. The Contractor will be notified at a later date as how the stack will be handled.

All engineering design work to relocate the stack or to brace existing structural steel to leave stack in place will be done by Ethyl Corporation

The condition of the jobsite after completion of the work is described below:

Grade elevation is to match existing paved surface and be free of tripping hazards. Existing surface drains remaining in the vicinity of the jobsite are to be preserved or restored to workable conditions.

The Contractor is to perform work as directed by the assigned Ethyl Corporation Construction Coordinator.

The Contractor is to furnish labor, supervision, materials, appliances, equipment, staging, rigging, scaffolding, cartage, protection, roping, and permits as required for proper and lawful dismantling and removal of the above described materials, equipment, structures, etc. in accordance with the terms and conditions as stated in the Contractual Agreement dated September 12, 1979.

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Section 2

Drawings, Engineering Standards and Engineering Specifications

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1 - ENGINEERING DRAWINGS

<u>Bldg. No.</u>	<u>Drawing No.</u>	<u>Rev. No.</u>	<u>Title or Subject</u>
----	---	--	Baton Rouge Plant Plot Plan
0101	W-31503	24	Lead House - Arrangement
0101	W-31498	7	Lead House - 1st Floor Plan
0101	W-31499	12	Lead House - 2nd & 3rd Floor Plan
0101	W-31501	15	Lead House - 4th & 5th Floor Plan
0122	W-31588	27	TEL Washing House - Arrangements
0102	W-33247	15	Exchanger House Arrangement & Piping
0101	W-31620	10	Lead House - Exhaust Stacks
0101	W-32068	19	Distillation Kettle Arrangement
----	4142 10200	0	Decontamination Pad & Contaminated Equipment Storage
0101	W-31502	14	Lead House - 4th & 5th Floor Plan
0101	W-34025	20	Furnace Exhaust System - Arrangement
0101	W-31677	6	Autoclave Arrangement

The above listed drawings do not give an exact representation of equipment and buildings to be dismantled and removed, due to missing items and changes to building and equipment not recorded on drawings. However, it does give a good basic representation of the overall buildings, equipment arrangement and equipment size. The equipment and buildings to be removed are best identified by inspection and are to be removed where is-as is.

2 - ENGINEERING STANDARDS

Ethyl Corporation's Engineering Standards shall apply where deemed appropriate by Ethyl and will be made available for review by the Contractor on request in Ethyl's Engineering Department.

3 - ENGINEERING SPECIFICATIONS

Ethyl Corporation's Engineering Specifications shall apply where deemed appropriate by Ethyl and will be made available for review by the Contractor on request in Ethyl's Engineering Department.

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Section 3

Special Conditions

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A. Working Conditions

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Prior to the start of work, contractor personnel will be given an initial lead check (urine and blood) by the OWNER's Medical Department. Periodic (approximately every 6-8 weeks) lead checks (urine) of contractor personnel are required for the duration of the job. Blood checks are required in addition to these urine tests as required by OWNER's Medical Department and Federal Standards. Upon termination or separation, and upon completion of the job, each contractor personnel will receive another urine and blood test for lead levels. Additional lead checks may be required as determined by OWNER's Medical Department.

Work restrictions of Contractor personnel may result from these lead checks. Recommended action by the OWNER's Medical Department concerning work restrictions will be consistent with that for OWNER's employees.

Contractor's employees will shower and change clothes completely after any accidental lead exposure. They will report immediately to OWNER's Medical Department, (after showering, etc.), for further disposition.

OWNER will brief the CONTRACTOR and their personnel on safety regulations and procedures related to handling contaminated equipment.

CONTRACTOR is to require that any foreman assigned to job must, previous to assuming work on job site, be fully instructed by OWNER on the safety rules and regulations governing the work. Also the CONTRACTOR is to provide regular instruction to all personnel assigned to job on the safety and hygiene rules and regulations governing the work.

The CONTRACTOR is to require that its personnel wear appropriate work clothes. OWNER will supply such clothes to CONTRACTOR. Contractor personnel will wear their own work shoes. The shoes may not be removed from the plant until the job is completed or until such person leaves the job.

CONTRACTOR is to require that its personnel shower and change clothes before leaving the plant and that appropriate shower clogs be worn. OWNER will provide the CONTRACTOR with an area suitable for this purpose and with appropriate shower clogs.

CONTRACTOR is to require that all personnel wear hard hats and clean long sleeved shirts with the sleeves rolled down and the cuff buttoned about the wrists. CONTRACTOR is to require that its personnel wear clean appropriate work gloves. CONTRACTOR is to require that its personnel carry on their person and use when needed appropriate safety goggles and respirators. OWNER will provide CONTRACTOR with such safety goggles and respirators along with instructions for proper use.

CONTRACTOR is to require all personnel to wear respirators at all times inside fenced work areas unless work requires that a fresh air mask be used. CONTRACTOR will require that its personnel use fresh air masks when inside the building, when on the decontamination pad, and at all times when burning or cutting with a torch. OWNER will provide CONTRACTOR with such respirators and fresh air masks.

In the event that there is area contamination from operating units, all personnel are required to vacate the area until such times as OWNER advises CONTRACTOR that it is safe to re-enter the area. CONTRACTOR is to provide to OWNER an evacuation plan to account for personnel in area prior to start of work.

A. Working Requirements (Continued)

CONTRACTOR is required to decontaminate CONTRACTOR's work areas contaminated by releases from operating units or other sources. CONTRACTOR, before resuming work after decontamination is completed, is required to obtain approval to start work from OWNER's safety man.

From time-to-time, as the OWNER deems necessary, the CONTRACTOR shall be briefed on working safety rules and regulations, to which the CONTRACTOR is expected to adhere. The cost of any lost time experienced by the CONTRACTOR, as a result of CONTRACTOR safety violations, will be borne by the CONTRACTOR. For the purpose of illustration and not by way of limitation, the following is a list of typical safety rules and regulations:

- Smoking will be allowed only in designated areas.
- No food, drink, gum chewing or tobacco chewing will be allowed in work areas.
- Face to be clean shaven each day.
- Wash hands and face and change shirt before eating lunch.
- Wash hands and face before eating, smoking, etc.
- Portable water coolers are not permissible in work areas. Temporary electric water cooler can be installed in buildings.
- Proper use of respiratory equipment is required at all times.

Work on the outside of the buildings next to operating buildings will be limited to those times approved by OWNER's safety man.

CONTRACTOR will maintain and supply to OWNER daily a list of names of CONTRACTOR's personnel working in the area.

B. Site Preparation

Prior to the removal of any equipment from the buildings, the following site preparation must be accomplished by the CONTRACTOR, unless otherwise noted.

1. Secure dismantling area with approved fencing and barricades.
2. Verify that building utilities have been disconnected by OWNER.
3. Install temporary air, water, power lines, and air for personnel fresh air masks. (Tie-in and disconnect times and locations must be approved in advance by OWNER.)
4. Run temporary sludge lines from buildings to furnace pits and drain water from all equipment and piping.
5. Repair existing concrete decontamination pad, and provide appropriate handling, safety, and cleaning equipment for decontamination work.
6. On-plant storage site to be organized for contaminated equipment storage in accordance with OWNER's instructions and drainage requirements.

C. Material and Equipment Handling

Contaminated and non-contaminated process equipment and piping will be identified in the field to the CONTRACTOR by the OWNER's safety man. The CONTRACTOR will mark all contaminated equipment and piping with yellow paint and all non-contaminated equipment and piping

C. Material and Equipment Handling (Continued)

with green paint. CONTRACTOR is to require that all marked equipment be verified by OWNER's safety man. All equipment is to be marked in such manner that it is readily identifiable from dismantling through loading on truck for removal from job site.

Contaminated equipment must be separated by mechanical means, prepared for transporting, (blanked off when required) removed from the building, transported to the decontamination area, decontaminated, and stored at the OWNER's on-plant site storage area. Equipment is to be virtually metal clean and subject to approval by OWNER. In all cases of contaminated equipment disassembly and removal, OWNER shall provide, and the CONTRACTOR shall require, necessary air monitoring.

Non-contaminated equipment, piping, and structures may be dismantled by burning, under authority of a valid burn permit, or other means determined to be acceptable to OWNER. Dismantling by burning will be limited and carefully controlled.

Non-contaminated equipment is to be placed by the CONTRACTOR on OWNER's contracted truck for immediate removal from the plant. It is the responsibility of the CONTRACTOR to supervise the loading of such trucks and assure that only non-contaminated equipment, piping and structures are placed on such trucks. CONTRACTOR is to require verification from OWNER's Construction Coordinator that all such trucks contain only non-contaminated equipment before the trucks are released to leave job site.

Asbestos insulation must be removed from equipment and piping, and must then be disposed of by the CONTRACTOR at an off-plant site in accordance with published OSHA and EPA regulations. All insulation is to be assumed to be asbestos.

D. Decontamination Procedures

Contractor's personnel involved in opening contaminated equipment, cleaning it, and preparing it for scrap are required to wear fresh air masks. Rubber aprons, rubber gloves and rubber boots are required when flushing and cleaning equipment with liquids.

Piping to be decontaminated, is to first be moved onto the decontamination pad. The flanges at both ends of each pipe section are to be removed. Each pipe section is to be flushed with permanganate solution. The solution is to be flushed through each pipe section to insure that there is not any blockage in pipe. Once it has been proven the pipe section is open, it can be cut, by burning, into appropriate lengths for prepared scrap.

The pipe sections are to be cleaned of build-up by mechanical or other means to bare metal when practical. OWNER's safety man will determine the required cleanliness. After cleaning, the pipe is to be moved to the prepared storage area for weathering.

If, after opening pipe and permanganating, a pipe section is found plugged, it is proposed to cut pipe with pipe cutter (roller type) into smaller lengths to find plug. Before using this procedure, the magnitude of the problem will be first evaluated. If small quantities are involved this pipe could be buried. Additional evaluation of mechanically cutting pipe is required before this procedure is used.

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D. Decontamination Procedures (Continued)

Vessels to be decontaminated, are to be moved onto the decontamination pad, opened and flushed with permanganate solution. All build-up material, which can be readily removed from the vessel by flushing with water and/or light mechanical means, is to be removed. The vessels should then be "flushed" (heated by natural gas torch). A second build-up removal operation is then made.

Vessels are to be cleaned to bare metal when practical. OWNER's safety man will determine the required cleanliness. The vessels are then to be cut up into sections and then moved to the prepared storage area for weathering.

All liquid waste, including cleaning solutions, from the decontamination pad is to be collected in the sump and pump into the prepared storage tank. The liquid waste is then transferred to a portable tank and transported by CONTRACTOR to the plant contaminated liquid settling basin, SB-1, for disposal.

All solid waste material from the decontamination pad is to be collected on the pad and placed in covered portable containers. The containers are to be transported by the CONTRACTOR to the plant contaminated liquid settling basin, SB-1, for disposal.

E. Permits

Daily, the CONTRACTOR is to advise the Construction Coordinator or designated alternate of projected work plans. The CONTRACTOR will be advised of the work permits required for the work planned. The work permit forms must be filled out by the CONTRACTOR and submitted to the Construction Coordinator or designated alternate the day preceeding the day the work is to be performed. The CONTRACTOR is to pick up the approved forms from the Construction Coordinator or his designated alternate the morning of the day the work is performed and comply with the safety precautions prescribed.

The OWNER's assigned safety man will monitor all work and will have the authority to stop all or any part of the work until acts or conditions that are unsafe in his opinion are corrected.

F. General

The CONTRACTOR will secure work area at all times with approved fencing and barricades. The CONTRACTOR will provide and maintain at all times limited access to work area. The CONTRACTOR will require any personnel not daily assigned to work area to sign in through Construction office and obtain permission before entering. A daily log is to be maintained by the CONTRACTOR of people entering the area.

CONTRACTOR will implement all requirements of OSHA so as to be in compliance with all applicable regulations. In particular and not by way of limitation, Contractor's employees will be provided a complete physical examination to comply with all aspects of OSHA asbestos and inorganic lead standards. Also, Contractor's employees will be certified by a physician as being able to wear a respirator. The OWNER's Medical Department is not available for use to meet these requirements.

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