

CHEVRON U.S.A. INC.
ENGINEERING DEPARTMENT - EL PASO, TEXAS

SPECIFICATION NO. EP-399-N
September 2, 1980 (EBW)
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PLAINTIFF'S EXHIBIT

CHV-687

SPECIFICATION NO. EP-399-N
INSULATION AND WEATHERCOATING
FOR CAUSTIC INJECTION PIPING

SECTION I - GENERAL REQUIREMENTS

1.0 SCOPE OF WORK

1.1 CONTRACTOR shall provide all materials, utilities, tools, construction equipment, labor, including supervision and inspection, and all items of a consumable nature that are required for the insulation and weathercoating of piping, valves, and fittings in the Caustic Injection Facility at the Chevron U.S.A. Inc., El Paso Refinery, as detailed by this specification, including the drawings and other attachments listed in the appendix.

This work includes but is not limited to:

- (A) Insulation in accordance with Standard Drawings GO-N99783-4 and GB-N99993-1 of all lines shown on drawings listed in the appendix.
- (B) Insulation work shall include all valves, flanges and fittings associated with piping on drawings listed in the appendix.
- (C) Insulation shall be N14 (1" thick) on piping 2" and below; N15 (1 1/2" thick) on 3" piping. All insulation shall be Hydrous Calcium Silicate Johns-Manville Thermo-12 (asbestos-free) or COMPANY approved equal.
- (D) Weathercoating shall be 0.016" thick corrugated aluminum pipe jacket with moisture barrier backing manufactured by Childers Mfg. or COMPANY approved equal.
- (E) CONTRACTOR will clean up and dispose of daily, all debris and trash created by the work being done.

2.0 WORK, MATERIAL AND UTILITIES BY COMPANY OR OTHERS

- 2.1 Utilities: COMPANY will furnish without charge industrial fresh water, 110V electrical power and 80 psig air at nearest point of supply to working site. Connections and extensions from this point to CONTRACTOR'S work areas shall be provided and installed by CONTRACTOR.
- 2.2 Inspection: COMPANY will provide mechanical, ultrasonic and radiographic weld inspection when required.

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2.3 Work by Others: The following items of work related to the facility will be performed for COMPANY by others:

(A) COMPANY will fabricate and install all new and replacement piping.

(B) COMPANY will provide a site within the refinery for trash disposal.

3.0 SEQUENCE OF WORK

The sequence of work shall be as mutually agreed between the COMPANY and CONTRACTOR and shall be consistent with the facing sheet of the agreement.

4.0 INTENT

The facility shall be complete in every respect, constructed in accordance with generally accepted, current good practices of the several trades involved and the detailed requirements of this specification and ready to operate in the manner expressed or implied herein, regardless of whether or not full details of such completeness or practices are contained herein. The specifications and drawings are not complete in every detail and CONTRACTOR shall comply with their true intent taken as a whole, and shall not avail himself of any errors or omissions to the detriment of the work. Should any error, omission or discrepancy appear in drawings, specifications and instructions, CONTRACTOR shall notify COMPANY at once, and COMPANY will issue instructions to be followed. If CONTRACTOR proceeds prior to receiving such instructions, necessary corrections shall be at CONTRACTOR'S expense. Anything not indicated on the drawings or specified in the specifications which is necessary for full and faithful construction of the facility in accordance with the true intent of this agreement or anything indicated on the drawings but not specified, or vice versa, shall be provided and incorporated at the expense of CONTRACTOR to the same extent as though fully set forth in both the drawings and the specifications.

5.0 COMPANY REVIEW AND APPROVAL

COMPANY'S review of, approval of, or agreement to the performance of certain items of work or the provisions of certain material shall in no way relieve CONTRACTOR of full responsibility for the performance of such work, or for the adequacy of such material. All such reviews, approvals or agreements shall be obtained through COMPANY'S construction representative, or in a manner previously approved in writing by COMPANY'S construction representative.

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SECTION 2 - GENERAL CONDITIONS AND PERFORMANCE OF WORK

6.0 PRECEDENCE

6.1 The following items shall take precedence in the order listed in the event of conflict:

- a) Facing Sheet of Agreement
- b) Terms and Conditions
- c) Refinery Instruction No. 1404
- d) This Specification
- e) Construction Drawings in Appendix A.1 attached to this specification
- f) Standard Specifications in Appendix A.3 attached to this specification
- g) Standard Drawings in Appendix A.2 attached to this specification
- h) Reference Drawings and Specifications, Engineering Instructions, Recommended Practices, and Refinery Instructions in Appendix A.4 attached to this specification.

6.2 As used in the standard specifications attached hereto: (a) "Purchaser" shall mean COMPANY; (b) "Supplier" or "Vendor" shall mean CONTRACTOR; and (c) "Purchaser's Inspector" shall mean COMPANY Construction Representative.

6.3 Unless otherwise expressly provided in this Specification, (a) any data, specifications, material, and work or any other matter which is covered by this Agreement which the standard specifications require to be provided by COMPANY shall instead be provided by CONTRACTOR; (b) any provisions of the standard specifications requiring COMPANY to inspect certain material or work shall mean that COMPANY has an option, rather than the obligation, to so inspect such material or work; (c) any warranty or guarantee provisions contained in the standard specifications shall be of no effect and the warranty and guarantee provisions of this Specification, if any, shall apply; and (d) any item of material, work, inspection or testing to be furnished at extra expense to COMPANY pursuant to the standard specifications shall be furnished under this Specification at no increase in CONTRACTOR'S compensation.

All provisions in the standard specifications concerning compensation or payment to CONTRACTOR in case of delay shall be of no effect, and the provisions of the Terms and Conditions and of this Specification shall apply.

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In the engineering instructions, reference to COMPANY'S personnel shall be of no effect, and CONTRACTOR'S personnel shall perform all activities which are to be performed under the engineering instructions, except as otherwise provided elsewhere in this Specification.

Where standard specifications on materials contain sections covering COMPANY'S normal requirement for purchasing and field erection, these sections shall be of no effect except as otherwise expressly stated in this Specification.

7.0 FIELD REPRESENTATIVES

7.1 COMPANY'S Representative

COMPANY will maintain a Representative in the field pursuant to Section 3.0 of Refinery Instruction No. 1404, General Instructions to Contractors Working Within the Refinery, attached.

Examples of his functions are to:

- a) Establish and maintain field liaison between CONTRACTOR'S Construction Representative and COMPANY.
- b) Provide materials to CONTRACTOR as provided in this Specification.
- c) Review CONTRACTOR'S construction schedule.
- d) Provide drawings and other detailed information.
- e) Explain drawings and specifications as required.
- f) Make such inspections as COMPANY may desire in order to check the quality and progress of the work.
- g) Review and approve field changes or material substitutions, or any other matter where COMPANY'S approval or agreement is required by this Agreement.
- h) Negotiate with CONTRACTOR'S Construction Representative the adjustment in compensation arising from a Change.

7.2 CONTRACTOR'S Construction Representative

CONTRACTOR shall maintain a Construction Representative in the field at all times who shall act in full charge of CONTRACTOR'S work and maintain field liaison between CONTRACTOR and COMPANY'S Construction Representative.

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Examples of his functions are to:

- a) Represent CONTRACTOR in matters pertaining to construction quality, performance schedule and accounting practice.
- b) Represent CONTRACTOR during tests, including but not limited to all tests related to Acceptance of the Facility.
- c) Receive materials from COMPANY as provided in this Specification.
- d) Negotiate for CONTRACTOR the adjustment in compensation arising from a Change.

8.0 OTHER CONTRACTS

COMPANY reserves the right to let other contracts or perform other services in connection with CONTRACTOR'S work hereunder. CONTRACTOR shall afford others equitable opportunities for the introduction and storage of their materials and the execution of their work and shall properly coordinate its work with theirs.

9.0 SCHEDULE

CONTRACTOR shall maintain a detailed construction schedule for all phases of the work.

- 9.1 The construction schedule shall indicate, for each portion of the Facility, the date of the start of the work thereon, job progress and completion date. Completion dates on such construction schedule shall agree with the Facing Sheet of this Agreement.
- 9.2 COMPANY'S Construction Representative will review the schedule with CONTRACTOR'S Construction Representative at periodic intervals to verify that the Facility is progressing as scheduled. Modifications to the schedule which affect the completion dates established in the schedule must be approved in writing by both CONTRACTOR and COMPANY.
- 9.3 It is understood that the CONTRACTOR'S compensation, as provided for in the Facing Sheet of this Agreement, includes all overtime payments, premiums, bonuses or other extras required to meet this schedule, and that CONTRACTOR shall not be entitled to additional compensation for these amounts except as otherwise provided herein.

10.0 WORK WEEK AND OVERTIME

CONTRACTOR shall pursue to field construction work on a 40-hour per week work schedule in accordance with Section 5.0 of Refinery Instruction No. 1404, General Instruction to Contractors Working Within the Refinery, attached.

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11.0 PLANT REGULATIONS

Prior to the commencement of work, CONTRACTOR shall become familiar with the plant regulations specified in the attached Refinery Instruction No. 1404, General Instructions to Contractors Working Within the Refinery and the following regulations. CONTRACTOR shall be responsible for compliance with these regulations during the execution of his work.

11.1 Electrical Safety Requirements

CONTRACTOR shall provide and use ground fault circuit interrupters for personnel protection at all construction sites (including areas inside existing plants) on all 120 volt single phase 15 and 20 ampere receptacle outlets.

Hubbell type GFP or Porta-Power Pak Inc. Model 72 series are typical of acceptable portable receptacle units.

Ground fault circuit interrupters shall not be used in areas where flammable vapors are present.

It is essential that the polarity of the conductors in all cords, plugs and receptacles supplying single pole portable ground fault circuit interrupter units be properly maintained to insure proper operation of the units.

11.2 Work Space and Storage Area

COMPANY will assign space in the general vicinity of the CONTRACTOR'S work for CONTRACTOR'S office, work space and storage area.

11.3 Safeguarding Work and Property

Construction activities along the pipeline routes shall be confined to the pipeway and immediate area wherever practicable or required. CONTRACTOR'S operations shall be so conducted that a minimum of damage and inconvenience is caused to other refinery facilities, the public or to owners and tenants of adjoining property affected by the work.

CONTRACTOR'S work and equipment shall be guarded by barricades, delineators, trench covers, etc. Lights shall be installed at idle machinery, or at other obstructions on roads and accessible areas from sunset to sunrise.

CONTRACTOR shall be responsible for installing temporary roads, as directed by the COMPANY representative, to maintain access to existing operating and maintenance facilities while construction is proceeding.

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All electrical poles, guys, pipelines, drains and other facilities on or near the working area shall be plainly delineated, fenced or roped off by CONTRACTOR, as directed by COMPANY representative before the work begins. Repair of any damages to these facilities shall be the responsibility of the CONTRACTOR. When CONTRACTOR, after due notice, fails to restore any facility as required herein at the completion or during the course of the work, COMPANY may perform this work and deduct the cost from the sum due or to become due CONTRACTOR.

12.0 TEMPORARY CONSTRUCTION FACILITIES

- 12.1 CONTRACTOR shall provide and install all necessary temporary facilities including, but not limited to: tool rooms, locker rooms, toilets, office and storehouse. All temporary installations shall be subject to approval by COMPANY prior to installation.
- 12.2 In addition, CONTRACTOR shall provide all necessary temporary equipment and building including but not limited to: shoring, concrete forms, bracing, ladders, scaffolding, staging, drop cloths and tarpaulins.
- 12.3 CONTRACTOR shall maintain all temporary facilities, material and equipment in a safe and adequate manner and remove them immediately upon completion of the work requiring their presence.

13.0 DRAWINGS AND DIMENSIONS

- 13.1 COMPANY will provide to CONTRACTOR two copies of all pertinent standard drawings, standard specifications, reference drawings, and construction drawings. One copy of Vendor's drawings will be provided for all equipment that COMPANY supplies.
- 13.2 CONTRACTOR shall be responsible for notifying company if there are any errors in the specification drawings, and/or conflicts with existing facilities. CONTRACTOR shall submit any proposed change or suggested deviation from the drawings to COMPANY for written approval before beginning fabrication and/or installation.

14.0 INSPECTION AND TESTING

- 14.1 General: CONTRACTOR shall be solely responsible for thorough craft inspection during construction and for the quality of the work. COMPANY will make such inspection as COMPANY may desire in order to check the progress and quality of the work, to see that CONTRACTOR'S employees are properly qualified in their respective crafts, that workmanship is of an acceptable grade, and that all requirements of this specification are being met. Such inspection or any other inspection or testing by COMPANY shall in no way relieve CONTRACTOR of full responsibility for the work hereunder.

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SECTION 3 - CONSTRUCTION

This section amplifies the construction details for some portions of CONTRACTOR'S work. The provisions are generally applicable to all the facilities covered by this specification.

15.0 INSULATION

All insulation work shall be by CONTRACTOR and installed in accordance with Standard Drawings GA-N99783-4 and GB-N99993-1 and as directed by our COMPANY representative. All insulation materials will be furnished by CONTRACTOR. CONTRACTOR shall be responsible for relaying all technical questions pertaining to insulation work to COMPANY for resolution.

16.0 CLEANING UP

During the performance of the work, CONTRACTOR shall keep a reasonable degree of order by disposing of accumulated rubbish and waste material and, at the completion of the work, the site shall be cleared of all debris, left-over tools, consumable supplies, and material which may have accumulated in the performance of the work. Where the CONTRACTOR, after due notice, fails to keep the area of his work reasonably clean and safe, or fails to clean this area at the completion of the work, COMPANY may perform this work; the cost of such work shall be for CONTRACTOR'S account and may be deducted from the sums due or to become due CONTRACTOR.

17.0 COMPLETION

The work will be considered "complete" when CONTRACTOR has performed all work expressly stated or implied in this specification.

E. Bruce Wallman
Engineer

1/16/81
Date

[Signature]
Lead Engineer
1/16/81
Date

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A.1 CONSTRUCTION DRAWINGS

<u>Number</u>	<u>Title</u>
PD-16-29953-3 Sheet No. 4	Discharge to Injection Quill Crude Unit No. 6 Plant 16
PD-16-29953-1 Sheet No. 3	Pump MG-1641 Discharge to Injection Quill Crude Unit No. 6 Plant 16
PD-16-29953-2 Sheet No. 9A	Cooling Water Supply to E-1649 Crude Unit No. 6 Plant 16
PD-16-29953-1 Sheet No. 10A	Cooling Water Return from E-1649 Crude Unit No. 6 Plant 16
PD-16-29953-3 Sheet No. 9	Cooling Water To E-1649 from CW 1291-8"-A, Crude Unit No. 6 Plant 16
PD-16-29953-3 Sheet No. 10	Cooling Water Return from E-1649 to CW 1309-8"-A Crude Unit No. 6 Plant 16
PD-16-29953-3 Sheet No. 8	Discharge from Pumps G-1641 and G-1641A, Crude Unit No. 6 Plant 16
PD-16-29953-4 Sheet No. 11	Condensate to D-1649, Crude Unit No. 6 Plant 16
PD-16-29953-2 Sheet No. 6	G-1641 and G-1641 A Suction and D-1649 Overflow No. 6 Crude Unit Plant 16

A.2 STANDARD DRAWINGS

GA-N99783-4	Standard Insulation for Hot Piping
GB-N99993-1	Standard Insulation Item Numbers

A.3 STANDARD SPECIFICATIONS

None

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A.4 REFERENCE DRAWINGS AND SPECIFICATIONS,
ENGINEERING INSTRUCTIONS, RECOMMENDED PRACTICES,
AND REFINERY INSTRUCTIONS

None