JOHN ZINK® MARINE VAPOR COMBUSTION SYSTEM

Prepared for:

Pedro Alvarado
&
Don Krain

Of

Kinder Morgan

For

Philadelphia, PA.

PREPARED BY	*KEN WRIGHT*
DATE	*18-MAY-2011*
REVISION	
JZ FILE NUMBER	*VC-200805-8636-A*

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I. Introduction

John Zink Company, LLC is pleased to provide this proposal for a JOHN ZINK® [redacted] **35-2/8-1/8** Marine Vapor Combustion System (MVCS) to be located at Kinder Morgan's petroleum products terminal in Philadelphia, Pennsylvania.

The system proposed herein is for a combination marine loading and truck loading vapor control system that is designed to load cumene from either (or both) of two separate dock loading berths, so long as the combined total loading rate does not exceed 5,000 BPH. The system can also receive up to 300 scfm of truck vapors from an accumulator independent (but at the same time if desired) of the marine loading activity.

The system is designed in accordance with the appropriate sections of 33 CFR Part 154 to condition, transfer and combust the hydrocarbon vapors displaced during the loading of cumene into marine vessels.

The vapors from the truck rack vapor accumulator will always be keep completely separate from the marine loading vapors to avoid any conflict with the USCG safety rules governing the loading of vessels.

The emission of VOCs from any of the loading vapors will not exceed 10mg/Liter loaded as noted in the in the Performance Guarantee section.

It is understood that there may be reason to not include treating the truck vapors as part of this project and therefore we have also offered an alternate design and price for a unit solely dedicated to the marine loading activates.

Through the execution of hundreds of vapor control projects, John Zink has developed a thorough understanding that our customers value safety, efficiency, and ease of installation, operation and maintenance in their equipment. The design of the proposed VCU incorporates several features which enhance safety, performance and reliability. John Zink also understands that, in addition to high-quality equipment, our customers value excellence in project execution and service. Purchasing a system from John Zink provides many advantages not limited to the following:

- Experienced design and project management staff dedicated to providing excellent customer service during the execution and installation phases of a project.
- In-house fabrication ability. Because John Zink owns its own 250,000 square foot manufacturing facility, we are able to assemble most systems in our own shop which allows us to better control quality and schedule. We also assemble our control panels in-house and perform a functional test of the control panel and MVCS skids prior to shipment.
- Large service organization. Our factory trained technicians provide both preventative maintenance and emergency call-out assistance 24/7.

- Spare parts inventory for quick turn arounds.
- Portable Emission Control Systems (PECS®) for temporary compliance needs.
- Installation assistance.
- John Zink [redacted] anti-flashback burners. John Zink is the only VCU supplier to design and manufacture our own anti-flashback burners.
- Elimination of liquid seal. John Zink's anti-flashback burners allow for an additional level of safety so that liquid seal can be removed, reducing equipment maintenance.

Scope of Supply Summary

Engineering

The following items are included as "Engineering Deliverables"

1. Piping and Instrument Diagrams
2. System pressure drop calculations
3. Natural gas requirements for enrichment
4. Natural gas requirements for assist gas
5. Combustor emission data
6. Utility requirements
7. Design and specification for:
   - Dock Safety Unit (DSU)
   - Vapor Blower Unit / Vapor Staging Unit (VBU/VSU)
   - Vapor Combustion Unit (VCU)
8. General arrangement drawings with complete tagging and assembly information.
9. Control panel(s) and junction box schematics.
10. Electrical one line diagrams.
11. Structural design of combustor with foundation information for design by others.
12. Structural design of skids with foundation information for design by others.
13. Written operational procedure.
14. Documentation package for the John Zink design that will be used as part of the documentation package to obtain an exemption from compliance with the requirement for a liquid seal found in 33CFR 154.828(b)(1).

Equipment

The proposed Marine Vapor Combustion System (MVCS) is designed to control hydrocarbon emissions from vapors displaced during the loading of marine vessels safely and effectively. The MVCS consists of three main process units, two (2) Dock Safety Units (DSU), one (1) Vapor Blower Unit & Vapor Staging Unit (VBU/VSU), and one (1) Vapor Combustion Unit (VCU) with two distinctly separate burner systems for the truck rack vapors and the marine loading vapors.

DSU equipment is located on the dock. The DSU serves as protection for the marine vessels from excessive pressure, excessive vacuum, flashback, and other shore-based hazards. Vapors displaced from the marine vessel will either be inerted by the time the vessel begins to load at the dock (maximum 5% O_2) or be conditioned with natural gas to a safe composition above the upper flammable limit. The DSU will be provided on a skid, and a dual oxygen analyzer system will be used to confirm that the vapors leaving the DSU are in compliance with the USCG rules.

The VBU/VSU utilizes a centrifugal pressure blower to transfer the vapors from the DSU to the VCU. The system operating pressure is controlled by varying the motor speed to match demand requirements. Marine vapors are transferred to the VCU where they are thermally destroyed in a controlled manner. The control system is integrated between the three process

units. Each unit includes numerous components that must interact with each other, automatically adjusting to changes in flow and composition.

In addition truck rack vapors will have a dedicated vapor staging system that is tied to the overall operation of the VCU, but has no influence on the operation of the MVCS system and then if there is a combustor shutdown which will stop vapor from both sources from entering the combustor.

The system also includes a PLC system utilizing AB Control Logix remote I/O in the control panel at each skid. The AB Control Logix PLC will be mounted in a control panel located in aing that will be located in a non hazardous building located in the general area of the VCU. The PLC control system will have total Ethernet connectivity to the remote I/O and to the plant's computer system.

The design and operation of the MVCS are strictly regulated by the U.S. Coast Guard as defined in Title 33 Code of Federal Regulations Part 154 (33 CFR 154). These regulations were promulgated on June 21, 1990 in response to the requirements in the Clean Air Act for vapor control during marine loading. The regulations did not require vapor control, but established safety requirements to prevent the marine vessel from excessive pressure or vacuum, overfilling, and fire or explosion when vapor control is used. The regulations originally addressed only the marine loading of crude oil, gasoline and benzene but have been extended to the loading of many other materials including distillates and chemicals. The regulations have not been revised to address the numerous technical complexities and new environmental regulations since they were promulgated. They have, however, been significantly supplemented by a large number of U.S. Coast Guard letters, guidelines and waivers. John Zink has been integrally involved in the evolution of these regulations and supplements and assures our customers that our MVCS will meet all U.S. Coast Guard requirements.

II. Design Basis

This design basis was developed from bid specifications and from reasonable assumptions. This basis is critical to the performance of the MVCS, and both the site-specific information and the assumptions should be thoroughly reviewed to ensure that they are accurate and acceptable.

Marine Loading

Number of Berths ..... Two (2)
Number of Loading spots on berth ..... One (1)
Vessels Loaded ..... Ships and Barges
Vessels Atmospheres ..... Inerted and Non-Inerted
Vessels Loaded Simultaneously ..... One (1)
Inerted and Non-Inerted Atmospheres Loaded Simultaneously ..... No
Liquid Product Loading Rates ..... 5,000 BPH
Vapors from Products : ..... Cumene
Maximum True Vapor Pressure [1] ..... 0.4 psia
Maximum Vapor Hydrocarbon Concentration [1] ..... 2.7 mol%
Vapors from vessel with 25% growth ..... 585 scfm
Estimated Enrichment Gas [2] ..... 190 – 262 scfm
Maximum Enriched Vapors [2] ..... 847 scfm
Assist Gas [3] ..... 0 - 165 scfm
Maximum heat release from enriched marine vapors ..... 14.6 MMBtu/hr
Piping Layout (to be confirmed by customer)
DSU to KO inlet ..... 2,200 feet of 8” pipe assumed
Estimate prssure drop from DSU inlet though VCU ..... ~40” w.c.
Pressure at the facility connection (DSU Inlet) ..... ~1” w.c.

Truck Loading

Vapors from Products: ..... Gasoline, Distillates, Denatured Ethanol
Maximum True Vapor Pressure [4] ..... 5.5 psia
Maximum Vapor Hydrocarbon Concentration [4] ..... 26 mol%
Vapors from accumulataor [5] ..... 300 scfm
Maximum heat release from truck rack vapors ..... 16.2 MMBtu/hr
Required Pressure at VSU inlet ..... ~8” w.c.

Common to Facility

Maximum Estimated Heat Release ..... 30.8 MMBtu/hr
Estimated Pilot Gas [6] ..... 3.6 scfm natural gas
VOC Emissions [7] ..... < 10 mg/L loaded
Area Electrical Classification

DSU skid ..... Class I, Division II, Groups C & D
VBU/VSU skid .....Outdoor Unclassified (non-hazardous)
VCU.....Outdoor Unclassified (non-hazardous)
VFD / PLC located in building.....Indoor Unclassified (non-hazardous)
Assist & Vapor blowers Motor Type ..... TEFC (Class I, Div II)
DSU Control Panel Enclosure Type .....NEMA 4X with Z-purge
VBU/VCU Control Panel Enclosure Type..... NEMA 4X
VFD & PLC building Control Panel Type ..... NEMA 1
Detonation Arrester Classification..... Type 1, Groups D Vapors
Earthquake Zone ..... Zone 0 required; built to UBC 4
Wind Velocity .....ASCE 7-05 125 mph
Ambient Temperature ..... 20-110 ^{0}F
Electrical Power ..... 480 V, 3 Ph, 60 Hz and 120 V, 1 Ph, 60 Hz
Enrichment Gas..... Natural Gas @ 30 psig minimum
Instrument Air/Nitrogen ..... 80 psig (-40^{0}F dew point)

Notes to Design Basis

1. The maximum hydrocarbon concentration corresponds to approximately 70% saturation of a liquid with a true vapor pressure of 0.6 psia. We use a saturation level of approximately 70% based on our vessel loading experience. True vapor pressure has been verified by the customer in project specification.
2. Enrichment gas is required when the oxygen concentration of non-inerted vapors is too high to be considered “safe” in accordance with 33 CFR 154.824. The amount of enrichment gas required will vary based on the vapor flow rate and the oxygen and hydrocarbon concentrations. The maximum enrichment gas flow rate occurs at the beginning of the loading of a non-inert vessel and is automatically reduced as the vapors leaving the vessel become richer during the loading. The flow rate is calculated for vapors at 60°F and 14.7 psia at the Dock Safety Unit and will be somewhat different at other temperatures and pressures. The MVCS, however, is designed for the entire vapor temperature and pressure ranges defined in this basis.
3. Assist gas will be injected via a separate assist gas burner at the VCU when starting to load an inerted vessels while the vapors are too lean to burn properly and maintain the combustor operating temperature. As the hydrocarbon concentration becomes higher in the vapors leaving the vessel, the assist gas rate will be automatically reduced.
4. Since the vapors coming from the truck rack will be collected and mixed in the accumulator vessel, we have assumed that the vapors leaving the accumulator tank will be relatively constant ion composition. While ethanol is the main product that is loaded, the trucks at the rack are not dedicated to

ethanol and the vapors may actually contain a significant amount of gasoline. We have assumed that the vapors will be composed of approximately 30% gasoline.

5. It is our understanding that flow rate to the VCU will be controlled by a vapor blower (furnished by others)
6. Pilot gas is required continuously at a rate of approximately 0.9 scfm per pilot.
7. Refer to the Performance Guarantee in Section V.

III. Process Description

The P&IDs attached show a typical arrangement of the control equipment required to meet Coast Guard requirements. The three major components required by the regulations are the Dock Safety Unit (DSU), Vapor Blower Unit & Vapor Staging Unit (VBU/VSU) and the Vapor Combustion Unit (VCU). For this system, the VBU/VSU and VCU are packaged as separate modules.

All marine transport vessels (ships/barges) used for the transportation of organic liquids, are outfitted with a vapor collection header for the containment of the organic vapors generated during the loading process. The collected vapors are routed through a vapor hose and into the Dock Safety Unit (John Zink Supply).

The Dock Safety Unit is located at the dock and serves the purposes of protecting the marine vessel from fire/explosion, over and under pressure, and of conditioning the captured vapors to a nonflammable condition. At the DSU the non-inerted vapors are conditioned by adding enough natural gas to "enrich" the vapors leaving the vessels at least to 170% of the upper flammability limit (UFL). The John Zink system will control to approximately 200% of the UFL to avoid nuisance alarms during operation.

On the DSU, the vapors pass through an automatic quick closing block valve. The vapors are then routed through a Detonation Arrestor to the enriching gas mixer for addition of the natural gas. The amount of enrichment gas added is controlled throughout loading by using a Dual Oxygen Analyzer System. The mixed vapors are analyzed with the Dual Oxygen Analyzer System to verify the mixture is at least 170% of the UFL. For a non-inerted vessel, the system alarms at a concentration of 15.5% oxygen (170% of the UFL for methane in air) and shuts the loading process down at an oxygen concentration of 16.5% (150% of the UFL for methane in air).

The vapors leaving the Dock Safety Unit travel through piping (provided by others) to the Knockout Vessel located on the VBU / VSU skid (John Zink Supply). Any condensate that forms in the system will be collected here. The vapors will then go to a centrifugal blower The blower provides the motive force for overcoming the pressure drop created during transportation of the vapors from the marine vessel to the emission control device. The blower is equipped with a variable speed drive to control the pressure in the vapor manifold at the desired level. A pressure transmitter at the DSU sends a signal to a second pressure controller. The pressure controller, in turn, automatically adjusts the pressure control valve at the dock to maintain a slight positive pressure at the facility vapor connection.

The vapors discharged from the blower pass through another detonation arrestor and into the combustion chamber via the vapor staging valve.

Vapors from the truck rack accumulator enter the combustor via a dedicated vapor header and vapor staging system leading to a burner inside the combustor that is separate from the burners used by the marine vapors

The combustion process is aided in the combustion chamber by an assist air blower which provides part of the stoichiometric air necessary for combustion as well as providing mixing energy for efficient, smokeless operation. The remaining air required for combustion and for quenching is controlled via temperature by the natural draft dampers located at the bottom of the stack. In the event that the vapors contain too little heating value to support combustion and maintain the chamber temperature high enough to sustain good levels of VOC destruction, additional fuel will be introduced into the chamber via a dedicated burner on an “as needed” basis. The combusted vapors exit the VCU to the atmosphere.

IV. Equipment Specifications

The proposed Marine Vapor Combustion System (MVCS) is provided in modular packages to allow for convenient field installation and to provide adequate equipment spacing for ease of operation and maintenance.

The Dock Safety Units (DSU), Vapor Blower Unit / Vapor Staging Unit (VBU / VSU), will be furnished as separate skid assembled units, the Vapor combustor (VCU) will be furnished as a free standing entity. The dock is required to have a “control station” and therefore an operator control panel is mounted on the dock safety skid. There is also a control panel at the VCU to allow local combustor operation for maintenance and testing. The “main" control panel housing the PLC and HMI is included as a separate wall mounted panel that will be installed in a building supplied by others. The equipment is described in detail below. All sizes, dimensions and specifications are preliminary and may be changed in final engineering.

Marine Dock Safety Unit (DSU) Components (two DSUs are required)

The DSU is designed to handle the vapors from loading up to [redacted]. The DSU is expected to be installed in [redacted] area. The main DSU components are described below.

Pressure / Vacuum Relief Valve

One pressure / vacuum relief valve in accordance with 33 CFR 154.814 will be provided to help protect the marine vessel from excessive pressure from a faulty enrichment system or excessive vacuum from the vapor blower. The valve is equipped with flame screens.

Vapor Piping System

A carbon steel vapor piping system in accordance with 33 CFR 154.810 will be provided for the introduction of vapors into the DSU. It consists of a facility vapor connection, a vertical vent pipe for the pressure relief valve effluent, an automatic isolation valve and a manual isolation valve.

[redacted]

[redacted] is [redacted]

[redacted]

Detonation Arrestor

An [redacted] detonation arrester in accordance with 33 CFR 154.822 is required to help protect the marine vessel from fire and explosion. [redacted]

Instrumentation

Pressure instruments in accordance with 33 CFR 154.814 are provided for the measurement of the pressure of the vapor stream. [redacted]

Instrument Air Header

A galvanized instrument air header with local pressure indication and individual manual shut off valves to each individual instrument air user is furnished.

Oxygen Analyzer System

One oxygen analyzer system in accordance with 33 CFR 154.824 will be provided to sample and analyze the oxygen content of the vapors and send a signal to the enrichment gas controller. [redacted]

Enrichment Gas System

One [redacted] enrichment gas system in accordance with 33 CFR 154.824 will be provided for the DSU to add the fuel gas necessary to ensure the vapors are not in the flammable range. [redacted]

Vessel Overfill Panel

A vessel overfill panel in accordance with 33 CFR 154.812 will be provided to alarm and shut down the MVCS if the marine vessel is overfilled at each facility connection. [redacted]

Pressure Test Panel

A test panel will be provided to help perform the testing of the pressure alarms and shutdowns required by 33 CFR 154.880. [redacted]

DSU Skid

[redacted]

Vapor Blower Unit / Vapor Staging Unit (VBU/VSU) Components

A Vapor Blower Unit / Vapor Staging Unit skid (VBU/VSU) contains all components related to the vapor blower and vapor staging. The main components are described below.

Vapor Piping System

A carbon steel vapor piping system in accordance with 33 CFR 154.828 will be provided for transporting the vapors from the knockout vessel to the combustor

Knockout Vessel and Accessories

A knockout vessel in accordance with 33 CFR 154.808 will be provided is included to help remove liquid from the vapors. [redacted]

[redacted]

Vapor Blower and Accessories

A single stage centrifugal vapor blower in accordance with 33 CFR 154.824 are included to transfer the vapors from the loading connection at the DSU thru the VCU. [redacted]

[redacted]

[redacted]

Liquid Seal

[redacted]

Vapor Isolation Valves (Marine)

[redacted]

[redacted]

Detonation Arrestor (Marine)

An [redacted] detonation arrester in accordance with 33 CFR 154.822 is required to help protect the marine vessel from fire and explosion. It is a passive device that uses the element to extinguish a flame by absorbing its heat and is designed to withstand the velocities and high pressures that occur in a detonation. The arrester is designed for Group D vapors constructed with a carbon steel body and a stainless steel element. A high temperature shutdown switch is provided on the element face to detect the presence of a flame on the face of the element. The element is removable for cleaning and inspection.

Vapor Isolation Valves (Truck)

[redacted]

[redacted]

a 4" 150 # wafer style firesafe butterfly valve and is provided with a pneumatic actuator.

[redacted]

[redacted]

Pilot System

[redacted]

Assist Gas System

[redacted]

Instrument Air Header

[redacted]

VBU/VSU Instrumentation

[redacted]

VBU / VSU Skid

[redacted]

Vapor Combustor and Connected Components

[redacted]

Other Combustor Features

[redacted]

[redacted]

Control System

[redacted]

John Zink Fabrication Standards

[redacted]

Equipment Dimensions and Weights

- Dock Safety Unit (DSU): [redacted]
- Vapor Blower Unit / Vapor Staging Unit (VSU/VBU): [redacted]
- Vapor Combustor: [redacted]

V. Performance Guarantee

John Zink Company offers the following performance guarantees for the proposed Vapor Combustion Unit quoted:

- The total hydrocarbon emissions to be a maximum of [redacted] Hydrocarbon per Liter product loaded.

[redacted]

[redacted]

VI. Commercial

Pricing, Delivery, And Terms

FIRM PRICE

The Sale Price (all prices are in US Dollars) for the John Zink Marine /Truck Vapor Combustion System proposed herein includes design and fabrication. The sales price excludes freight and handling to job site, field installation, commissioning (start-up) services, applicable taxes, fees, permits, or any other charges.

Firm Price $795,620.00

Option 1:

This option removes the truck rack capabilities from the combustor by taking away the truck vapor control piping and burner . [redacted]

Net deduct ..... ($85,110.00)

Option 2

This option deletes the HMI from the John Zink scope of supply and moves the controling PLC from the building to the control panel on the VBU/VSU skid

Net deduct .....($22,535.000)

[redacted]

[redacted]

[redacted]

[redacted]

A[redacted]

[redacted]

SCHEDULE

[redacted]

COMMISSIONING/START-UP

[redacted]

VI. Exceptions and Clarifications

There are no Kinder Morgan specification considered in this pricing and pricing is based on using John Zink standard design and construction practices

VIII. Owner Requirements and Responsibilities

[redacted]

[redacted]

16. [redacted]

IX. Attachments

The following attachments are contained in this section:

A. Preliminary P&IDs
B. John Zink Standard Terms and Conditions of Sale
C. Technical Assistance Rate Sheet

ATTACHMENT A
PRELIMINARY P&IDs

[redacted]

[redacted]

[redacted]

TWO (2) REQUIRED

NO.	REVISION DESCRIPTION	BY	CK.	APP.	DATE

FOR: KINDER MORGAN

USER:

JOBSITE: PHILADELPHIA, PA.

S.O. NO.

P.O. NO.

DR. DATE:

CK. DATE:

APP. DATE:

JOHN ZINK

JOHN ZINK COMPANY LLC

PARTS AND SERVICE, CALL 1-800-755-4252 FAX (918) 234-1968

PIPING & INSTRUMENT DIAGRAM

5000 BPH SAFETY & INJECTION SKID

CERTIFIED DATE:

DRAWING NUMBER B-VC-150

REV. 0

SCALE

SHEET 1 of 1

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[redacted]

INSTRUMENT AIR
JST. PURG.
PSIG MIN.
PSIG MAX.

BY-2
3/4

NO.	REVISION DESCRIPTION	BY	CK.	APP.	DATE
1	REVISED ASSIST AIR BLOWER	TK	RDM	RDM	

FOR: KINDER MORGAN
USER:
JOBSITE: PHILADELPHIA
S.O. NO. VC-9063287
P.O. NO. 4550527071
DR. RPJ DATE: 3-15-07
CK. JRE DATE: 3-16-07
APP. RDM DATE: 3-16-07
CERTIFIED
DATE:

JOHN ZINK
JOHN ZINK COMPANY LLC
PARTS AND SERVICE, CALL 1-800-755-4252 FAX (918) 234-1968

PIPING & INSTRUMENT DIAGRAM
VAPOR COMBUSTOR UNIT
MODEL: ZCM-5-8-35-X-2/8-2/8

DRAWING NUMBER B-VC-152
REV. 1
SCALE NONE
SHEET 1 of 1

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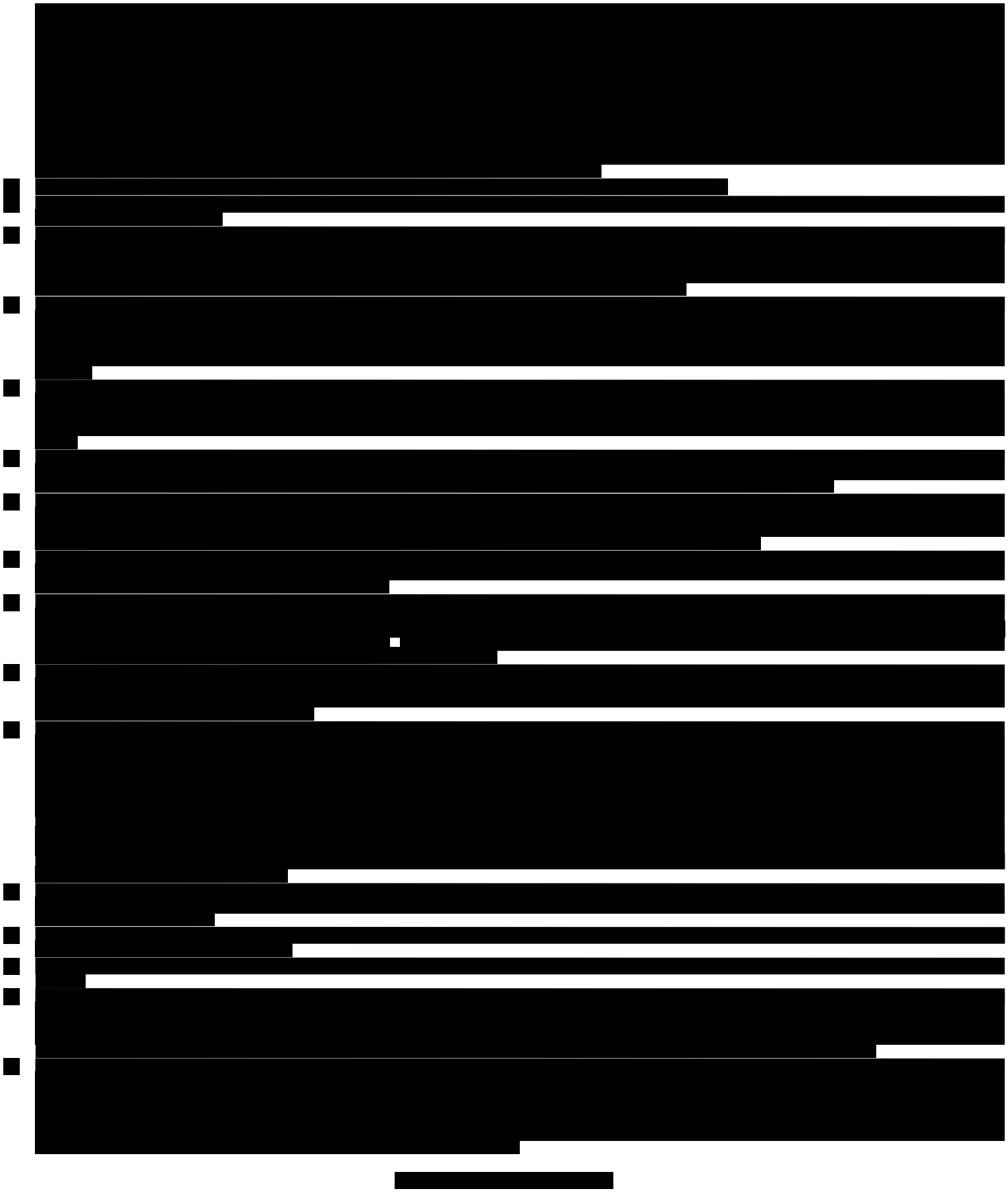

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Notes: • . • The above rates do not include travel and living expenses. • All rates are in US dollars.

OTHER FIELD CHARGES

ATTACHMENT H
TECHNICAL ASSISTANCE AGREEMENT (VAPOR CONTROLS)

1. RELATIONSHIP OF THE PARTIES. The parties hereto are independent contractors and neither the Contractor nor the Contractor's personnel are agents, servants or employees of the Company or its contractors or subcontractors. The Contractor shall notify the Company before proceeding with and upon completion of the services. At all times when Contractor's service personnel are present or performing services at the Company's work site, the Company shall provide an authorized representative to whom the Contractor's service personnel shall report and who shall be responsible for the safety of all persons and protection of all property in and adjacent to the work site. In providing the services hereunder, the Contractor assumes no right or duty to control or shut down the project or equipment or to control or direct the safety, operational, or maintenance procedures or methods utilized at the work site. Contractor assumes no responsibility for workmanship, productivity, technical qualification or training and qualification requirements of the personnel of the Company or others. Company shall provide emergency medical aid to Contractor's service personnel. Contractor shall reimburse Company for the cost of such aid.

2. ACCESS TO EQUIPMENT. Contractor shall have free access to the work site and the equipment.

3. EXCLUSIONS. Parts used shall be to the Company's account and shall be approved by the Company. Removed components shall be disposed of by, and decontamination shall be the responsibility of, the Company.

4. WARRANTY. All services shall be performed by Contractor in a workmanlike manner, consistent with U.S. industry practices. If, within three months of performance of the services, any services prove deficient, Contractor will correct the deficiency. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, EXCEPT AS EXPRESSLY STATED HEREIN. CONTRACTOR EXTENDS NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. The Contractor shall not be responsible for goods and services furnished by the Company or others, or the costs thereof, without the Contractor's prior written agreement. Company's remedies under warranty are specifically limited to the correction of any deficient services performed by Contractor and are exclusive of all other remedies.

5. INSURANCE. Contractor shall maintain, and at Company's request shall provide Company with certificates evidencing, the following insurance coverage: (a) Statutory Workers' Compensation and Employer's Liability Insurance, with limits of $500,000.00 per occurrence; (b) Commercial General Liability Insurance, with a combined single limit for bodily injury and property damage of $1,000,000.00 per occurrence and in the aggregate; and (c) Automobile Liability Insurance, with a combined single limit for bodily injury and property damage of $1,000,000.00 per accident. Contractor's certificate of insurance shall include insurers' statement that it shall endeavor to provide Company with 30 days prior written notice of reduction or cancellation of the policy. Contractor shall not be required to provide endorsements of additional insured or waiver or subrogation. Company shall maintain the risk of physical loss or damage to its property and the work site, including, but not limited to, materials, equipment and supplies being shipped to, entering into, forming part of, or intended to be incorporated into the property at or near the work site.

6. INDEMNITY. CONTRACTOR SHALL, AT ITS OWN COST AND EXPENSE AND TO THE FULLEST EXTENT ALLOWED BY APPLICABLE LAWS, SUBJECT TO THE LIMIT ON CONTRACTOR'S LIABILITY, DEFEND, INDEMNIFY AND HOLD HARMLESS COMPANY, ITS PARENT, AFFILIATES, SUBSIDIARIES, OFFICERS, DIRECTORS, EMPLOYEES AND AGENTS, AND THEIR SUCCESSORS AND ASSIGNS AGAINST ALL DAMAGES, LOSSES, COSTS, CLAIMS, STRICT LIABILITY CLAIMS, LIENS, ENCUMBRANCES, LIABILITIES, AND EXPENSES (INCLUDING ATTORNEYS' FEES), AS AND TO THE EXTENT ARISING OUT OF OR RESULTING FROM THE NEGLIGENT ACTS OR OMISSIONS OF CONTRACTOR. COMPANY SHALL, AT ITS OWN COST AND EXPENSE AND TO THE FULLEST EXTENT ALLOWED BY APPLICABLE LAWS, SUBJECT TO THE LIMITS ON COMPANY'S LIABILITY, DEFEND, INDEMNIFY AND HOLD HARMLESS CONTRACTOR, ITS PARENT, AFFILIATES, SUBSIDIARIES, OFFICERS, DIRECTORS, EMPLOYEES AND AGENTS, AND THEIR SUCCESSORS AND ASSIGNS, AGAINST ALL DAMAGES, LOSSES, COSTS, CLAIMS, STRICT LIABILITY CLAIMS, LIENS, ENCUMBRANCES, LIABILITIES, AND EXPENSES (INCLUDING ATTORNEYS' FEES), AS AND TO THE EXTENT ARISING OUT OF OR RESULTING FROM THE NEGLIGENT ACTS OR OMISSIONS OF COMPANY. ALL LIABILITY, LOSSES, DAMAGES, COSTS OR EXPENSES RESULTING FROM PERSONAL INJURY, INCLUDING DEATH, LOSS OF OR PHYSICAL DAMAGE TO PROPERTY, CAUSED BY THE JOINT OR CONCURRING ACTS OF COMPANY AND CONTRACTOR, AND THEIR RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES OR AGENTS, SHALL BE BORNE BY COMPANY AND CONTRACTOR TO THE EXTENT EACH IS DETERMINED NEGLIGENT EITHER BY AGREEMENT OF THE PARTIES OR BY A COURT OF COMPETENT JURISDICTION. THE OBLIGATIONS OF THE PARTIES UNDER THIS PARAGRAPH SHALL SURVIVE THE EXPIRATION OR OTHER TERMINATION OF THIS AGREEMENT.

7. LIMITATIONS OF LIABILITY. In no event, whether based on contract, indemnification, warranty, tort, or any other cause or combination of causes whatsoever, shall either party be liable to the other party or the other party's parent, affiliates, officers, directors, employees or agents, for loss of profit or special, incidental, indirect, or consequential damages. This limitation shall apply notwithstanding any failure of essential purpose of any limited remedy. Contractor's cumulative liability on all claims of any kind, whether based on contract, indemnification, warranty, tort, or any other cause or combination of causes whatsoever, shall in no event exceed the order price.

8. MISCELLANEOUS: (a) The Company's audit rights shall consist of Contractor making available for Company's examination, at Contractor's home offices, the directly relevant and pertinent time sheets. (b) This Agreement supersedes all previous agreements and understandings of the parties on this subject matter and constitutes the entire Agreement between the parties. (c) If any provision of this Agreement is held to be illegal or invalid for any reason by a court of competent jurisdiction, the remaining provisions hereof shall be unimpaired and the illegal or invalid provision shall be construed and applied so as to most closely effectuate its intent. (d) This Agreement shall be construed and enforced in accordance with the laws of the State of Oklahoma. The parties consent and will submit to the jurisdiction of the courts of, and of the federal courts seated in, the State of Oklahoma with respect to disputes relating to this Agreement.