

## **Bid Notice**

Polk County, a political subdivision of the State of Florida, requests the submittal of bids from vendors that are interested in providing vacuum truck cleaning services as described herein. Sealed bids must be received in the Procurement Division, prior to the due date and time listed below.

**Bid Number and Title:** Bid 23-531, Vacuum Truck Cleaning Services for Underground Stormwater Baffle Boxes

**Description:** Provide all equipment, labor, supervision, and permitting necessary to successfully provide vacuum truck cleaning services for the Parks and Natural Resources Division underground stormwater baffle box systems located in 2 separate locations within Polk County.

**Receiving Period:** Wednesday, September 6, 2023, prior to 2:00 p.m.

**Bid Opening:** Wednesday, September 6, 2023, 2:00 p.m.

**Special Instructions:** A mandatory pre-bid will be held Friday, August 25, 2023, 11:00 a.m. in the Procurement Division conference room, located at 330 W. Church St, Room 150, Bartow, FL 33830. An authorized representative or agent of the Bidder must be present at this meeting in person as evidenced by their signature on the meeting's sign-in sheet, or the Bidder's submittal will be considered non-responsive.

Attached are important instructions and specifications regarding responses to this Bid. Failure to follow these instructions could result in Bid disqualification.

**Questions** regarding this bid should be in writing and should reference the above Bid. Submit all questions to Danielle Rose, Sr. Procurement Analyst, via email at [daniellerose@polk-county.net](mailto:daniellerose@polk-county.net) or via fax at (863) 534-6789 by 4:00 p.m.; August 28, 2023.

## **Bid Registration**

You must register using this form in order to receive notice of any addenda to these documents. Please email or fax the completed form to the Procurement Division as soon as possible. It is the vendor's responsibility to verify if addenda have been issued.

Bid Number: 23-531

Bid Title: Vacuum Truck Cleaning Services for Underground Stormwater Baffle Boxes

This form is for bid registration only. Please scroll down for additional information.

Carefully complete this form and return it to the Procurement Division via e-mail to [procurement@polk-county.net](mailto:procurement@polk-county.net) or fax (863) 534-6789. You must submit one form for each bid that you are registering for.

Company Name: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email: \_\_\_\_\_

## BID SUBMITTAL INSTRUCTIONS

Respondents must submit one (1) original copy of the bid submittal prior to 2:00 p.m. on the bid receiving date. Bids must be submitted in a “sealed” parcel or electronically through Polk County’s secure website, Kiteworks. Bids will be publicly opened at 2:00 p.m. on receiving date.

### **Sealed Parcel Submittal:**

If you are submitting a sealed parcel bid, please cut along the outer border and affix this label to your sealed bid envelope to identify it as a “Sealed Bid”. Be sure to include the name of the company submitting the bid where requested.

<b>Sealed Bid. DO NOT OPEN</b>	
<b>Sealed Bid Number</b>	23-531
<b>Bid Title</b>	23-531, Vacuum Truck Cleaning Services for Underground Stormwater Baffle Boxes
<b>Due Date/Time:</b>	September 6, 2023, prior to 2:00 pm
<b>Submitted by:</b>	
<b>Deliver To:</b>	Polk County Procurement Division 330 West Church Street, Room 150, Bartow, Florida 33830

Sealed parcel bids may be mailed, express mailed or hand delivered. It is the Bidders responsibility to ensure their package is delivered to the Procurement Division prior to 2:00 p.m. on the Receiving date and time referenced above. Bids delivered at 2:00 p.m. or later will not be accepted.

### **Electronic Bid Submittal:**

If you are interested in submitting your bid electronically bidders may do so via the County’s secure electronic submittal website, Kiteworks. Bidders must email [kenbrush@polk-county.net](mailto:kenbrush@polk-county.net) at least 48 hours prior to bid opening to receive a link to upload their submittal. Please only upload your documents as a PDF file to include the Bid Sheet. Please use the naming conventions for your files as follows:

For PDF documents “Bid 23-531 –Vacuum Truck Cleaning Services submittal”

For more instructions, a video tutorial has been produced to further explain the electronic solicitation submittal process. It can be found by clicking here for Bid Submittals: [https://youtu.be/vkn\\_7AHgioE](https://youtu.be/vkn_7AHgioE). If you need assistance accessing this website due to ADA or any other reason, please email Danielle Rose at [daniellerose@polk-county.net](mailto:daniellerose@polk-county.net).

Procurement recommends that bidders submitting electronically double check the documents submitted into Kiteworks to ensure all requested information and bid sheet have been uploaded. Failure to upload the completed bid sheet will result in the bid submittal being deemed nonresponsive.

**Statement of No Bid**

**Bid #23-531, Vacuum Truck Cleaning Services for Underground Stormwater Baffle Boxes**

If you do not intend to submit a bid, please complete the information below and return to the Procurement Division via fax or e-mail. If returning by mail, please be sure the bid number and title are clearly marked on the front of the envelope.

- Insufficient time to respond
- Do not offer this product
- Specifications unclear
- Specifications too restrictive
- Unable to meet specifications
- Unable to meet bond/insurance requirements
- Schedule would not permit us to perform
- Other (please specify): \_\_\_\_\_

Company Name: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

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## **Bidder Instructions and General Information**

### **Bidder Instructions:**

To ensure acceptance of the bid, follow these instructions:

**Bid Documents Must Be Delivered to The Procurement Division Prior to 2:00 p.m. On The Date Specified. There Will Be No Exceptions.**

1. **Execution of Bid:** Bid must contain an original signature of an authorized representative in the space provided on the signature page. Bid must be typed or printed in ink. Erasable ink is not permitted. Corrections made by bidder to any bid entry must be initialed by the person who signs the bid.
2. **No Bid:** Bidders not interested in submitting a bid should return a “no bid,” with an indication of the reason for no bid and the interest in future bid solicitations.
3. **Bid Opening:** It is the responsibility of the bidder to assure that their bid is delivered or submitted electronically at the proper time and place prior to the bid opening. All bid openings shall be public, at 2:00 p.m., on the date specified in the Notice to Bidders. If multiple bids are submitted by the same vendor, Procurement will only open the most recently dated submittal. Bids, which for any reason are not so delivered, will not be considered. **Bid Submittal Forms Using Facsimile or Email Will Not Be Accepted.**

**Note:** In accordance with Florida Statute 119.071, a listing of vendors that provide a bid submittal shall be posted to the County’s website at <https://www.polk-county.net/procurement/bidstatus>. The sealed bids shall remain exempt from disclosure, including bid amounts, until recommendation of award or 30 days after bid opening, whichever event occurs first.

Should the Procurement Director reject all bids, before the recommendation of award or 30 days after bid opening, and concurrently provide notice of the County’s intent to reissue the bid, the rejected bids will remain exempt from Florida Statute 119.07 until such time as the County provides notice of recommendation of award of the reissued bid or until the County withdraws the reissued bid. The bid is not exempt for longer than 12 months after the notice of rejection of all bids.

4. **County as Gatekeeper of Documents:** This document is issued by Polk County and as such shall be the sole distributor of all addendums and/or changes to these documents. It is the responsibility of the bidder to determine issuance of documents directly with the Procurement Division. The County is not responsible for any solicitations issued through subscriber, publications, or other sources not connected with the County and the bidder should not rely on such sources for information regarding the solicitation.
5. **Taxes:** Bidders are responsible for the payment of any applicable taxes that are connected to the purchase of any materials or subcontractors used in the execution of the bid.
6. **Discounts:** Bidders may offer a cash discount for prompt payment; however, such discounts shall not be considered in determining the lowest net cost for bid

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evaluation purposes. Bidders are encouraged to reflect cash discounts in the unit prices quoted.

7. **Mistakes:** Bidders are required to examine the specifications, delivery schedule, bid prices and all instructions pertaining to the requirements of this bid. Failure to do so will be at bidder's risk. In case of a mistake in extension of a unit price, the unit price will govern. Corrections made by bidder to any bid entry must be initialed by the person who signs the bid.
8. **Invoicing and Payment:** The successful bidder shall submit an invoice to the County at the prices bid. **An original invoice shall be submitted to the appropriate User Division.** The bidder shall include the bid number and/or the purchase order number on all invoices. By submitting an invoice, Bidder's Project Manager or any authorized officer is attesting to the correctness and accuracy of all charges. Invoices will be processed for payment when approved by the appropriate Division's Project Manager or designee. The County's payment of an invoice shall not constitute evidence of the County's acceptance of the Bidders performance of the Service or the County's acceptance of any work.
9. **Conflict of Interest:** All bidders must disclose, with their bid, the name of any officer, director or agent who is also an employee of the County or any of their agencies. Furthermore, all bidders must disclose the name of any County employee who owns, directly or indirectly, any interest of any amount in the bidder's firms or any of their branches. Award of this bid shall be subject to the provisions of Chapter 112, Florida Statutes.
10. **Warranty:** Unless otherwise specified, the bidder agrees that the goods furnished under this bid shall be covered by the most favorable commercial warranty the bidder gives to any customer for comparable goods, and that the rights and remedies provided herein are in addition to and do not limit any rights afforded to the County by any other provision of this bid.
11. **Addendum:** Any changes in the bid shall be made in the form of a written addendum by the Procurement Director or his representative. No other person shall be authorized to make changes verbally or in writing. If an addendum is issued, the addendum sheet should be signed and submitted with your bid submittal.
12. **Liability:** The vendor shall hold and save the County, its officers, agents and employees harmless from liability of any kind in the performance of this bid and against claims by third parties resulting from the supplier's breach of contract or the supplier's negligence.
13. **Patents and Royalties:** The bidder, without exception, shall indemnify and save harmless the County and its employees from liability of any nature or kind, including cost and expenses for, or on account of, any copyrighted, patented or non-patented invention, process or article manufactured or used in the performance of the bid, including its use by the County. If the bidder uses any design, device or material covered by letters, patent or copyright, it is mutually agreed and understood without exception that the bid prices shall include all royalties or cost arising from the use of such design, device or material in any way involved in the work.

14. **Cone of Silence:** Bidders and any prospective bidders shall not contact, communicate with or discuss any matter relating in any way to this Bid with any member of the Polk County Board of County Commissioners or any employee of Polk County other than the County Procurement Director or the individual designated in the Procurement Division. This prohibition begins with the issuance of the Bid and ends upon award or execution of the final contract. Any such communication initiated by a bidder or prospective bidder shall be grounds for disqualifying the offender from consideration for an award pursuant to this bid and for bids or contracts to be awarded pursuant to RFPs, or Requests for Bid that the County may issue in the future.

15. **Bid Protest:** Any bidder desiring to file a bid protest, with respect to a recommended award of any bid, shall do so by filing a written protest. The written protest must be in the possession of the Procurement Division within three (3) working days of the Notice of Recommended Award mailing date. All bidders who bid will be sent a Notice of Recommended Award, unless only one bid was received.

A copy of the bid protest procedures may be obtained from the Polk County Procurement Division or can be downloaded from the County's website at <https://www.polk-county.net/procurement/protest-procedures>.

**“Failure to Follow Bid Protest Procedure Requirements Within the Time Frames Prescribed Herein as Established by Polk County, Florida, Shall Constitute a Waiver of Your Protest and Any Resulting Claim.”**

16. **Indemnification:** Vendor, to the extent permitted by law, shall indemnify, defend (by counsel reasonably acceptable to County), protect and hold the County, and its officers, employees and agents, harmless from and against any and all, claims, actions, causes of action, liabilities, penalties, forfeitures, damages, losses, and expenses whatsoever (including, without limitation, attorneys' fees, costs, and expenses incurred during negotiation, through litigation and all appeals therefrom) including, without limitation, those pertaining to the death of or injury to any person, or damage to any property, arising out of or resulting from (i) the failure of Vendor to comply with applicable laws, rules or regulations, (ii) the breach by Vendor of its obligations under any Agreement with the County entered into pursuant to this solicitation, (iii) any claim for trademark, patent, or copyright infringement arising out of the scope of Vendor's performance or nonperformance of the Agreement, or (iv) the negligent acts, errors or omissions, or intentional or willful misconduct, of Vendor, its professional associates, subcontractors, agents, and employees; provided, however, that Vendor shall not be obligated to defend or indemnify the County with respect to any such claims or damages arising out of the County's sole negligence. The obligations imposed by this Section shall survive the expiration or earlier termination of the Agreement.

17. **Public Entity:** A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for construction or repair of a public building or public

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work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity in excess of the threshold amount provided in Section 287.017, Florida Statutes, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list. When submitting this bid, the bidder hereby certifies that they have complied with said statute.

18. **Preference for Drug Free Workplace:** Whenever two or more bids, which are equal with respect to price, quality and service, are received, preference shall be given to a bid received from a business that certifies that it has implemented a drug free workplace program in accordance with Section 287.087, Florida Statutes. In order to receive preference, a signed certification of compliance must be submitted with the bid response.
19. **Sealed Bids:** All bid submittals must be completed and submitted either in a sealed parcel or submitted electronically. **(If Submitting a Sealed Parcel Bid, Please Do Not Include More Than One Bid Submittal Per Envelope.)** The original bid submittal(s) shall be submitted on the forms provided by Polk County. All bids are subject to the conditions herein; failure to comply will subject bid to rejection.
20. **Prices, Terms and Payment:** Firm prices shall be bid and include all packing, handling, shipping charges and delivery to any point within Polk County. Discount time will be computed from the date of satisfactory delivery at place of acceptance. Prices bid shall be firm for forty-five (45) days.
21. **Safety Standards:** Unless otherwise stipulated in the bid, all manufactured items and fabricated assemblies shall comply with applicable requirements of Occupational Safety and Health Act (OSHA) and carry evidence of Underwriters Laboratories' Listings (UL).
22. **Packaging:** All containers shall be suitable for storage or shipment, and all prices should include standard commercial packaging.
23. **Meets Specifications:** It is understood and agreed that any item offered or shipped as a result of this bid shall be new (current model at the time of this bid) unless otherwise specified in the specifications. The bidder represents that all equipment offered under this specification shall meet or exceed the minimum requirements specified. Bidder shall strictly adhere to delivery specifications.
24. **Silence of Specifications:** The apparent silence of this specification and any supplemental specifications to any details or the omission from same of any detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size and design are to be used. All workmanship is to be first quality. All interpretations of these specifications shall be made upon the basis of this statement.
25. **Governmental Restrictions:** In the event that any governmental restrictions may be imposed which would necessitate alteration of the material, quality, workmanship or performance of the items offered on this bid prior to delivery, it shall be the responsibility of the supplier to notify the Procurement Division at once.

Their letter shall indicate the specific regulation, which required an alteration. The County reserves the right to accept any such alteration, including any price adjustments, or to cancel the contract at no expense to the County.

26. **Toxic Substances: Notice of successful vendor(s) to provide to Polk County toxic substances (As listed in Chapter 442, Appendix "G" of the FS) if applicable.**
- a. Chapter 442 of the FS states that manufacturers, importers or distributors of any toxic substance shall prepare and provide each direct purchaser of such toxic substance with Material Safety Data Sheet(s), herein referred to as MSDS, which to the best of the manufacturer's, importer's or distributor's knowledge, is current, accurate and complete based on information then reasonably available to the manufacturer, importer or distributor. Upon notification of a new or revised MSDS the manufacturer, importer or distributor, on a timely basis not to exceed three (3) months after notification, shall provide the County with the revised information as it becomes available to the manufacturer, importer or distributor.
  - b. Failure to provide the MSDS, when applicable, shall be cause for rejection of bid.
27. **Inspection, Acceptance and Title:** Inspection and acceptance will be at the designated facility unless otherwise indicated. Title and risk of loss or damage to all items shall be the responsibility of the contract supplier until accepted by the County, unless loss or damage results from negligence by the County.
28. **Samples:** Samples of items, when called for, must be furnished free of expense and may, upon request, be returned at the bidder's expense. Each individual sample must be labeled with bidder's name, manufacturer's brand name and number, bid number and item reference. Samples of successful bidder's items may remain on file with Procurement for the term of the contract. Request for return of samples shall be accompanied by instructions, which include shipping authorization and name of carrier, and must be received within ninety (90) days after bid opening date. If instructions are not received within this time, the Procurement Division shall dispose of the samples.
29. **Code of Ethics:** If any bidder violates or is a party to a violation of the code of ethics of Polk County or the State of Florida, with respect to this bid, such bidder may be disqualified from performing the work described in this bid or from furnishing the goods or services for which the bid is submitted and shall be further disqualified from bidding on any future bids for work, goods, or services for the County.

## **General Information**

### **1. Definitions:**

- The term "County" means the Polk County, a political subdivision of the State of Florida, and its authorized designees, agents or employees.
- The term "Contract" means this bid document, any and all Addenda issued, and the Contractors bid submittal.

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- The term “Vendor”, “Contractor” means the successful bidder(s) who executes a contract with the County.
2. **Award(s):** As the best interest of the County may require, the right is reserved to make award(s) by individual item, group of items or as indicated in the Special Conditions; to reject all bids or waive any minor irregularities or technicalities in bids received. In determining the lowest responsive and responsible bidder, in addition to price, the following may be considered:
- Vendor’s evaluation – quality of performance on previous projects.
  - The ability, capacity, equipment and skill of the bidder to fulfill the contract.
  - Whether or not the bidder can fulfill the contract within the time specified, without delay or interference.
  - The character, integrity, reputation, judgment, experience and efficiency of the bidder.
  - The previous and existing compliance by the bidder with laws and ordinances relating to the contract.
  - The sufficiency of the financial resources to fulfill the contract to provide the goods and/or services.
  - The quality, availability and adaptability of the suppliers or contractual services to the particular use required.
  - The ability of the bidder to provide future maintenance and service, as required or needed.
  - The number and scope of conditions attached to the bid.
3. **Effective Date:** The date of issuance of a Notice to Commence by the County Procurement Division.
4. **Local Preference:** It is the policy of the Board of County Commissioners to afford local preference to Polk County entities in the award of bids. Preference shall be administered in accordance with the following:

When bids are received that do not exceed \$3,000,000.00, and the lowest price is offered by an entity located outside of Polk County, and the next lowest price is offered by an entity located in Polk County, and is within 2% of the lowest price offered, then the Polk County entity shall be given the opportunity to match the lowest price offered, and if agreement to match the lowest price is reached, the Polk County entity will be awarded the bid if the Polk County entity is otherwise fully qualified and meets all county requirements.

When bids are received that are greater than \$3,000,000.00 but do not exceed \$5,000,000.00, and the lowest price is offered by an entity located outside of Polk County, and the next lowest price is offered by an entity located in Polk County, and is within 1% of the lowest price offered, then the Polk County entity shall be given the opportunity to match the lowest price offered, and if agreement to match the

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lowest-price is reached, the Polk County entity will be awarded the bid if the Polk County entity is otherwise fully qualified and meets all county requirements.

When bids are received that are greater than \$5,000,000.00, and the lowest price is offered by an entity located outside of Polk County, and the next lowest price is offered by an entity located in Polk County, and is within .5% of the lowest price offered, then the Polk County entity shall be given the opportunity to match the lowest price offered, and if agreement to match the lowest price is reached, the Polk County entity will be awarded the bid if the Polk County entity is otherwise fully qualified and meets all county requirements.

For purposes of this provision the term "Polk County entity" means any business having a physical location within the boundaries of Polk County, Florida, at which employees are located and business activity is managed and controlled on a day-to-day basis. Additionally, the business must have been located within the boundaries of Polk County for a minimum of 12 months prior to the date the applicable solicitation is issued. This requirement may be evidenced through a recorded deed, an executed lease agreement, or other form of written documentation acceptable to the County. The County shall have the right, but not the obligation, to verify the foregoing requirements.

If a contract is being funded in whole or in part by assistance of any federal, state or local agency which disallows local preference, the County will adhere to those requirements by not applying this section.

This policy does not apply if this bid qualifies as a Sheltered Market bid.

5. **Vendor Preference:** It is the policy of the Board of County Commissioners to afford vendor preference to women or minority owned entities in the award of bids. Preference shall be administered in accordance with the following:

When sealed bids are received that do not exceed \$3,000,000.00, and the lowest price is offered by a non-women or minority owned entity located outside of Polk County, and a price is offered by a women or minority owned entity that is within 2% of the lowest price offered, then the women or minority owned entity shall be given the opportunity to match the lowest price offered, and if agreement to match the lowest price is reached, the women or minority owned entity will be awarded the bid if the women or minority owned entity is otherwise fully qualified and meets all County requirements.

When sealed bids are received that are greater than \$3,000,000.00 but do not exceed \$5,000,000.00, and the lowest price is offered by a non-women or minority owned entity located outside of Polk County, and a price is offered by a women or minority owned entity that is within 1% of the lowest price offered, then the women or minority owned entity shall be given the opportunity to match the lowest price offered, and if agreement to match lowest price is reached, the women or minority owned entity will be awarded the bid if the women or minority owned entity is otherwise fully qualified and meets all County requirements.

When sealed bids are received that are greater than \$5,000,000.00, and the lowest price is offered by a non-women or minority owned entity located outside of Polk

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County, and a price is offered by a women or minority owned entity that is within .5% of the lowest price offered, then the women or minority owned entity shall be given the opportunity to match the lowest price offered, and if agreement to match lowest price is reached, the women or minority owned entity will be awarded the bid if the women or minority owned entity is otherwise fully qualified and meets all County requirements.

The term "Women or Minority Owned Entity" means any business having at least 51% ownership by women or minority group members who independently control the management and day-to-day operations of the firm. Group members are Females, African Americans, Hispanic Americans, Asian-Pacific Americans, Native Americans, and Asian-Indian Americans.

If a contract is being funded in whole or in part by assistance of any federal, state or local agency which disallows this form of preference, the County will adhere to those requirements by not applying this section.

This policy in no way supersedes the Local Preference Policy.

This policy does not apply if this bid qualifies as a Sheltered Market bid.

6. **Non-Conformance to Bid Conditions:** Services not delivered as per delivery date in bid and purchase order may result in bidder being found in default, in which event any and all re-procurement costs may be charged against the defaulting vendor. This non-conformance to bid conditions may result in immediate cancellation of the purchase order.
7. **Assignment:** Any purchase order issued pursuant to this bid and the monies which may become due herein are not assignable except with the prior written approval of the Procurement Director.
8. **Disputes:** In the event of any doubt or difference of opinion as to the methods provided herein, or the level of performance rendered, the decision of the user department/division director shall be final and binding on both parties.
9. **Facilities:** The County reserves the right to inspect the bidder's facilities at any time, with prior notice.
10. **Placing of Orders:** The award of this bid does not constitute an order. Before any services can be performed, the successful bidder must receive written or oral notification in accordance with the practices of the User Division.
11. **Precedence:** Any requirement set forth in any section of the bid documents shall be binding as if called for by all sections. If there is a difference in the terms anywhere in this document, the most restrictive shall prevail.
12. **Additions/Revisions/Deletions:** Additions, revisions or deletions to the general conditions, specifications or bid price sheets that change the intent of the bid will cause the bid to be non-responsive and the bid will not be considered. The Procurement Director shall be the sole judge as to whether or not any addition, revision or deletion changes the intent of the bid.

13. **Termination/Suspension:** The County may terminate the Contract resulting from this Bid at any time, in whole or in part, in accordance with and subject to the following:
- a. The County may terminate the Contract for the County's convenience by delivering 30 days' prior written notice of termination to the Contractor.
  - b. The County may terminate the Contract immediately if the User Division determines that the Contractor is in material default of its Contract obligations, has notified the Contractor of such default by delivering a Vendor Complaint Form to the Contractor specifically describing the basis of the complaint and the conditions of the Contractor's default, and ten (10) days have passed since the Contractor's receipt of the Vendor Complaint Form without all defaults as described therein having been fully corrected. Notwithstanding anything to the contrary contained herein, the County may terminate the Contract immediately, without notice or any opportunity to cure, if the services rendered for the Contract cause or threaten endangerment to public health, safety or welfare.
  - c. Upon receipt of any termination notice as described above, the Contractor shall:
    - Immediately discontinue all work unless the County's notice directs otherwise, and
    - Deliver to the County any and all data, reports, summaries, and all other information and materials of any type or nature whatsoever, whether completed or in process, the Contractor may have accumulated or generated in the course of performing the work of the Contract.
  - d. In the event this Bid and/or the resulting Contract is terminated due to the Contractor's material default which is not cured within the allotted time period as described above, the Procurement Director may also suspend or debar the Contractor in accordance with the Suspension and Debarment Section of the County Procurement Procedures Manual. The rights and remedies of the County provided for in this Section are in addition and supplemental to any and all other rights and remedies provided by law or under the Bid and/or the resulting Contract.
14. **Cancellation:** All annual bid obligations shall prevail for at least one hundred eighty (180) days after effective date of the bid, unless bid conditions are breached as specified herein. After that period, for the protection of both parties, either party may cancel this bid in whole or part by giving thirty (30) days prior notice in writing to the other party. The County reserves the right to cancel any bid after reasonable written notice to the successful bidder should the service not be in the best interest of the County. Should the service rendered for any bid cause or threaten endangerment to public safety or welfare, the Procurement Director may cancel the bid immediately.
15. **Price Adjustments:** Any price decrease executed during the Contract period, either by reason of market change or on the part of the contractor to other customers, shall be passed on to the County.

16. **Manufacturer's Names and Approved Equivalents:** Any manufacturer's names, trade names or brand names are for information only and are not intended to limit competition. The bidder may offer any brand for which they are an authorized representative that meets or exceeds the specification for any item(s). If bids/proposals are based on equivalent products, indication should be made on the bid/proposal form of the manufacturer's name and number. Bidders shall submit with their bid/proposal, cuts, sketches, descriptive literature and/or complete specifications. Reference to literature submitted with a previous bid will not satisfy this provision. The bidder shall also explain in detail the reason(s) why the proposed equivalent will meet the specification(s) and not be considered an exception thereto. Bids/proposals lacking any written indication of intent to bid an alternate brand will be received and considered in complete compliance with the specifications as listed on the bid form. The Procurement Division shall be notified of any proposed changes in the following:

- (i) materials used;
- (ii) manufacturing process; and
- (iii) construction.

Changes shall not be binding upon the County unless evidenced by a Change Notice issued and signed by the Procurement Director.

17. **Plans and Specifications:** The specifications and other bid documents upon which the prices in the vendor's bid proposal are based on, are hereby made a part of the purchase order by reference hereto.
18. **Performance and Payment Bond:** If a bond is required, it will be called out in the Special Conditions section of the bid. The vendor shall furnish a performance and payment bond, in an amount equal to the amount awarded, as security for the faithful performance and payment of all the vendor's obligations under the bid documents. The bond shall remain in effect at least until one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the bid documents. All bonds shall be in the form prescribed by the bid document except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by Audit Staff, Bureau of Government Financial Operations, U.S. Treasury Department and A.M. Best rated A VIII or better.
19. **Annual Appropriations:** The vendor acknowledges that the County, during any fiscal year, shall not expend money, incur any liability, or enter into any agreement which, by its terms, involves the expenditure of money in excess of the amounts budgeted or the reduction of revenues for those budgeted agreements that may be available for expenditure during such fiscal year. Any agreement, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such agreement. Nothing herein contained shall prevent the making of agreements for a period exceeding one year, but any agreement so made shall be executory

only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years. Accordingly, the County's performance and obligation to pay under this agreement is contingent upon annual appropriation.

20. **Price Increase:** The Procurement Director reserves the right to increase/decrease price after the bid has been in place for a minimum of 12-months, when it is in the best interest of the County. Increases/decreases will be determined by the Consumer Price Index (CPI-U) unless otherwise stated in the Special Conditions.
21. **Uncontrollable Forces (Force Majeure):** Either party hereunder may be temporarily excused from performance if an Event of Force Majeure directly or indirectly causes its nonperformance. An "Event of Force Majeure" is defined as any event which results in the prevention or delay of performance by a party of its obligations under this Agreement and which is beyond the reasonable control of the nonperforming party. It includes, but is not limited to fire, flood, earthquakes, storms, lightning, epidemic, war, riot, civil disturbance, sabotage, and governmental actions. Neither party shall be excused from performance if non-performance is due to forces which are reasonably preventable, removable, or remediable and which the non-performing party could have, with the exercise of reasonable diligence, prevented, removed, or remedied prior to, during, or immediately after their occurrence. Within five (5) days after the occurrence of an Event of Force Majeure, the non-performing party shall deliver written notice to the other party describing the event in reasonably sufficient detail, along with proof of how the event has precluded the non-performing party from performing its obligations hereunder, and a good faith estimate as to the anticipated duration of the delay and the means and methods for correcting the delay. The non-performing party's obligations, so far as those obligations are affected by the Event of Force Majeure, shall be temporarily suspended during, but no longer than, the continuance of the Event of Force Majeure and for a reasonable time thereafter as may be required for the non-performing party to return to normal business operations. If excused from performing any obligations under this Agreement due to the occurrence of an Event of Force Majeure, the non-performing party shall promptly, diligently, and in good faith take all reasonable action required for it to be able to commence or resume performance of its obligations under this Agreement. During any such time period, the non-performing party shall keep the other party duly notified of all such actions required for it to be able to commence or resume performance of its obligations under this Agreement.

In the event of default by the successful Bidder, the County reserves the right to utilize the next lowest Bidder as the new Awardee when the default occurs within the first term of the bid. Should this occur, the next lowest Bidder will be required to provide the bid items at the prices as noted on their bid submittal.

22. **Unauthorized Alien(s):** The vendor agrees that unauthorized aliens shall not be employed nor utilized in the performance of the requirements of this solicitation. The County shall consider the employment or utilization of unauthorized aliens a violation of Section 274A(e) of the Immigration and Naturalization Act (8 U.S.C. 1324a). Such violation shall be cause for unilateral termination of this Agreement by

the County. As part of the response to this solicitation, the successful vendor will complete and submit the attached form "Affidavit Certification Immigration Laws."

**23. Employment Eligibility Verification (E-Verify)**

A. Unless otherwise defined herein, terms used in this Section which are defined in Section 448.095, Florida Statutes, as may be amended from time to time, shall have the meaning ascribed in said statute.

B. Pursuant to Section 448.095(5), Florida Statutes, the contractor hereto, and any subcontractor thereof, must register with and use the E-Verify system to verify the work authorization status of all new employees of the contractor or subcontractor. The contractor acknowledges and agrees that (i) the County and the contractor may not enter into this Agreement, and the contractor may not enter into any subcontracts hereunder, unless each party to this Agreement, and each party to any subcontracts hereunder, registers with and uses the E-Verify system; and (ii) use of the U.S. Department of Homeland Security's E-Verify System and compliance with all other terms of this Certification and Section 448.095, Fla. Stat., is an express condition of this Agreement, and the County may treat a failure to comply as a material breach of this Agreement.

C. By entering into this Agreement, the contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of this Agreement. Failure to comply will lead to termination of this Agreement, or if a subcontractor knowingly violates the statute or Section 448.09(1), Fla. Stat., the subcontract must be terminated immediately. If this Agreement is terminated pursuant to Section 448.095, Fla. Stat., such termination is not a breach of contract and may not be considered as such. Any challenge to termination under this provision must be filed in the Tenth Judicial Circuit Court of Florida no later than 20 calendar days after the date of termination. If this Agreement is terminated for a violation of Section 448.095, Fla. Stat., by the contractor, the contractor may not be awarded a public contract for a period of 1 year after the date of termination. The contractor shall be liable for any additional costs incurred by the County as a result of the termination of this Agreement. Nothing in this Section shall be construed to allow intentional discrimination of any class protected by law.

**24. Attorney's Fees and Costs:** Each party shall be responsible for its own legal and attorney's fees, costs and expenses incurred in connection with any dispute or any litigation arising out of, or relating to this Agreement, including attorney's fees, costs and expenses incurred for any appellate or bankruptcy proceedings.

**25. Public Records Law.**

(a) The Vendor acknowledges the County's obligations under Article I, Section 24, of the Florida Constitution and under Chapter 119, Florida Statutes, to release public records to members of the public upon request and comply in the handling of the materials created under this Agreement. The Vendor further acknowledges that the constitutional and statutory provisions control over the terms of this Agreement. In association with its performance pursuant to this Agreement, the Vendor shall not release or otherwise disclose the content of any documents or information that is specifically exempt from disclosure pursuant to all applicable laws.

(b) Without in any manner limiting the generality of the foregoing, to the extent applicable, the Vendor acknowledges its obligations to comply with Section 119.0701, Florida Statutes, with regard to public records, and shall:

(i) keep and maintain public records required by the County to perform the services required under this Agreement;

(ii) upon request from the County's Custodian of Public Records or his/her designee, provide the County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law;

(iii) ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the term of this Agreement and following completion of this Agreement if the Vendor does not transfer the records to the County; and

(iv) upon completion of this Agreement, transfer, at no cost, to the County all public records in possession of the Vendor or keep and maintain public records required by the County to perform the service. If the Vendor transfers all public records to the County upon completion of this Agreement, the Vendor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Vendor keeps and maintains public records upon completion of this Agreement, the Vendor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the County, upon request from the County's Custodian of Public Records, in a format that is compatible with the information technology systems of the County.

**(c) IF THE VENDOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE VENDOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE COUNTY'S CUSTODIAN OF PUBLIC RECORDS AT:**

**RECORDS MANAGEMENT LIAISON OFFICER  
POLK COUNTY**

**330 WEST CHURCH ST.**

**BARTOW, FL 33830**

**TELEPHONE: (863) 534-7527**

**EMAIL: [RML@POLK-COUNTY.NET](mailto:RML@POLK-COUNTY.NET)**

**26. Scrutinized Companies and Business Operations Certification;  
Termination.**

**A. Certification(s).**

- (i) By its execution of this Agreement, the Vendor hereby certifies to the County that the Vendor is not on the Scrutinized Companies that Boycott Israel List, created pursuant to Section 215.4725, Florida Statutes, nor is the Vendor engaged in a boycott of Israel, nor was the Vendor on such List or engaged in such a boycott at the time it submitted its bid, proposal, quote, or other form of offer, as applicable, to the County with respect to this Agreement.
- (ii) Additionally, if the value of the goods or services acquired under this Agreement are greater than or equal to One Million Dollars (\$1,000,000), then the Vendor further certifies to the County as follows:
  - (a) the Vendor is not on the Scrutinized Companies with Activities in Sudan List, created pursuant to Section 215.473, Florida Statutes; and
  - (b) the Vendor is not on the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to Section 215.473, Florida Statutes; and
  - (c) the Vendor is not engaged in business operations (as that term is defined in Florida Statutes, Section 287.135) in Cuba or Syria; and
  - (d) the Vendor was not on any of the Lists referenced in this subsection A(ii), nor engaged in business operations in Cuba or Syria when it submitted its proposal to the County concerning the subject of this Agreement.
- (iii) The Vendor hereby acknowledges that it is fully aware of the penalties that may be imposed upon the Vendor for submitting a false certification to the County regarding the foregoing matters.

**B. Termination.** In addition to any other termination rights stated herein, the County may immediately terminate this Agreement upon the occurrence of any of the following events:

- (i) The Vendor is found to have submitted a false certification to the County with respect to any of the matters set forth in subsection A(i) above, or the Vendor is found to have been placed on the Scrutinized Companies that Boycott Israel List or is engaged in a boycott of Israel.

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- (ii) The Vendor is found to have submitted a false certification to the County with respect to any of the matters set forth in subsection A(ii) above, or the Vendor is found to have been placed on the Scrutinized Companies with Activities in Sudan List, or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or has been engaged in business operations in Cuba or Syria, and the value of the goods or services acquired under this Agreement are greater than or equal to One Million Dollars (\$1,000,000).

27. **No Construction Against Drafter:** The Parties acknowledge that this Agreement and all the terms and conditions contained herein have been fully reviewed and negotiated by the Parties. Accordingly, any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not apply in interpreting this Agreement.

**Signature Acknowledgement**

(Submittal Page)

To Polk County, a Political Subdivision of the State of Florida

Date: \_\_\_\_\_

I certify that this bid is made without prior understanding, agreement or connection with any corporation, firm or person submitting a bid for the same construction, service or material and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this bid and certify that I have read and understand the bidding documents. I have completed and submitted all bid submittal forms, and I am authorized to sign this bid for the bidder. In submitting a bid to the County, the bidder offers and agrees that if the bid is accepted, the bidder will convey, sell, assign or transfer to the County all rights, titles and interests in and to all causes of action it may now or hereafter acquire under the Anti-Trust Laws of the United States and the State of Florida for price fixing relating to the particular commodities or services purchased or acquired by the County. At the County's discretion, such assignment shall be made and become effective at the time the County tender's final payment to the bidder.

Vendor Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip Code: \_\_\_\_\_

(Area Code) Telephone Number: \_\_\_\_\_

Toll Free Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

This bid may be used by any other Government Agency.  YES  NO  N/A

**Bidders Incorporation Information**

(Submittal Page)

The following section should be completed by all bidders and submitted with their bid submittal:

Company Name: \_\_\_\_\_

DBA/Fictitious Name (if applicable): \_\_\_\_\_

TIN #: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip Code: \_\_\_\_\_

County: \_\_\_\_\_

Note: Company name must match legal name assigned to the TIN number. A current W9 should be submitted with your bid submittal.

Contact Person: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Cell Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Type of Organization (select one type)

- Sole Proprietorship
- Partnership
- Non-Profit
- Sub Chapter
- Joint Venture
- Corporation
- LLC
- LLP
- Publicly Traded
- Employee Owned

State of Incorporation: \_\_\_\_\_

The Successful vendor must complete and submit this form prior to award. The Successful vendor must invoice using the company name listed above.

**Drug-Free Workplace Form**

(Submittal Page)

The undersigned vendor in accordance with Florida Statute 287.087 hereby certifies that, (Name of the Business): \_\_\_\_\_ does:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation programs, employee assistance programs and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, plea of guilty or nolo contendere to, any violation of Chapter 1893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on or require the satisfactory participation in a drug abuse assistance or rehabilitation program, if such is available in the employee's community, by any employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

Vendor Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Bid Number, Bid Title

**Non-Collusion Affidavit of Prime Bidder**

(Submittal Page)

State of \_\_\_\_\_

County of \_\_\_\_\_

\_\_\_\_\_ being first duly sworn, deposes and says that:

1. He - She is \_\_\_\_\_ of \_\_\_\_\_, the Bidder that has submitted the attached Bid;
2. He - She is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstance respecting such Bid;
3. Such Bid is genuine and is not a collusive or sham Bid;
4. Neither the said Bidders nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with such Contract or has in any manner, directly or indirectly, sought by agreement or collusion of communication or conference with any other Bidder, firm or person to fix the price or prices in the attached bid of any other Bidder, or to fix any overhead, profit or cost element of the Bid Price or the Bid Price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the County or any person interested in the proposed Contract; and
5. The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees or parties in interest, including this affiant.

Signed: \_\_\_\_\_

State of: \_\_\_\_\_

County of: \_\_\_\_\_

The foregoing instrument was acknowledged before me by means of  physical presence or  online notarization, this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by \_\_\_\_\_ (name) as \_\_\_\_\_ (title of officer) of \_\_\_\_\_ (entity name), on behalf of the company, who  is personally known to me or  has produced \_\_\_\_\_ as identification.

Notary Public Signature: \_\_\_\_\_

Printed Name of Notary Public: \_\_\_\_\_

Notary Commission Number and Expiration: \_\_\_\_\_ (AFFIX NOTARY SEAL)

### **Insurance Requirements**

The successful vendor shall purchase and maintain in force during the contract period the insurance as specified with an insurer licensed to do business in the State of Florida; rated "A" or better by A.M. Best Rating Company for Class VIII financial size category. Polk County, a political subdivision of the State of Florida, must be named as an additional insured with respect to liability arising from all work performed for Polk County, for Automobile and General Liability policies of insurance. The certificate holder must be Polk County, a political subdivision of the State of Florida, 330 W. Church St., Bartow, Florida 33830. Workers' Compensation Insurance providing statutory benefits, including those that may be required by any applicable federal statute. Any sole proprietor or partner actively engaged in the construction industry, and any corporate officer of a construction or non-construction industry corporation who elects to be exempt from the provisions of the workers' compensation law must provide either a workers' compensation exemption certificate (construction industry) or a letter stating the exemption status and number of employees (non-construction industry). Commercial General Liability Insurance \$1,000,000 combined single limit of liability for bodily injuries, death, and property damage, and personal injury resulting from any one occurrence, including the following coverages: Completed Operations, Broad Form CG. Comprehensive Automobile Liability Insurance \$1,000,000; combined single limit of liability for bodily injuries, death and property damage resulting from any one occurrence, including all owned, hired and non-owned vehicles. The general liability and workers' compensation policies shall contain a waiver of subrogation in favor of Polk County. An original certificate of insurance must be on file in the Procurement Division before a purchase order will be issued.

Each Certificate of Insurance must list the Certificate Holder as:

Polk County, a political subdivision of the State of Florida

330 W Church St, Room 150

Bartow, FL 33830

Certificates of Insurance for policies requiring additional insured status and/or the waiver of subrogation must include notations that these requirements apply. In addition, the Vendor shall supply to the County copies of the endorsements to verify these requirements.

The Vendor must provide, or cause to be provided, the County with 30 days' prior written notice regarding the cancellation, suspension, or non-renewal of or material change to any policy.

All Certificates of Insurance must be submitted on ACORD 25 forms.

The Vendor must submit updated Certificates of Insurance to the County upon the expiration of or material change to any policy.

**Insurance**

(Submittal Page)

By signing below, the Bidder is stating that they fully understand the insurance requirements for the project and if awarded the bid will provide all insurance coverage as required in this Bid.

The requirements are as follows:

- Bidder is insured with a company licensed to do business in the State of Florida
- The insurance company is rated A VIII or better by A.M. Best Rating Company (General policy)
- Polk County will be named as an additional insured for automobile liability and general liability
- The General Liability and Workers Compensation policy will contain waiver of subrogation in favor of Polk County

Company Name: \_\_\_\_\_

Bidder Signature: \_\_\_\_\_

## **Safety Requirements/Regulations**

1.0 All Bidders are required to submit, with their Bid Proposal, the Safety Requirements/Regulations form. Any questions regarding compliance with the safety requirements/regulations provision shall be directed to the County Safety Officer, Risk Management, at (863) 534-5267.

1.1 The Vendor is responsible for observing all OSHA regulations and shall self-inspect to ensure this is accomplished. The Vendor shall ensure that all personnel are properly trained and shall be able to provide documentation for their personnel that have attended training courses. Examples of such training courses are: Hazard Communications, Traffic Work Zone Safety, Personal Protective Equipment, First Aid/CPR, Permit Required Confined Space, Lock out/Tag Out of Hazardous Energy. All Vendors are required to comply with OSHA Standards regardless of the number of employees they may have.

1.2 A County representative may periodically monitor work site safety. Should there be safety and/or health violations, classified as Serious, Willful or Criminal/Willful Violations, the County's representative may have the authority, but not the duty, to require the Vendor to correct the violation in an expeditious manner. Inspections shall be based on requirements contained in law. The definitions of serious, willful and criminal/willful violations are as follows:

**Serious Violation:** A serious violation shall be deemed to exist in a place of employment if there is a substantial probability that death or serious physical harm could result from a condition which exists, or from one or more practices, means, methods, operations, or processes which have been adopted or are in use, in such place of employment unless the employer did not, and could not, with the exercise of reasonable diligence, know of the presence of the violation.

**Willful Violation:** May exist where evidence shows that the employer committed an intentional and knowing violation of the Act.

**Criminal/Willful Violation:** A repeat violation of a previously cited willful violation.

Violation of Serious, Willful or Criminal violation may have the following consequences:

Bid 23-531, Vacuum Truck Cleaning Service for Underground Stormwater Baffle Boxes

First violation: correction may be a verbal warning and the correction shall be done the same day. Written documentation may be maintained by the County.

Second violation: may result in work stoppage until the violation is corrected. The work stoppage shall not entitle the Vendor to additional contract time or compensation.

Liquidated damages provision will remain in full force and effect.

Third violation: this may constitute a breach of contract for safety violations and may result in termination of the contract at the sole discretion of the County.

Note: The County Safety Officer may stop any job to ensure the safety of all concerned.

1.3 Should the work site be in a hazardous area, the County shall furnish the Vendor with information concerning hazards such as types or identification of known toxic material, machine hazards, Material Safety Data Sheets, or any other information that would assist the Vendor in the planning of a safe work site.

1.4 The Vendor shall be aware that while working for the County, representatives from agencies such as the United States Department of Labor, Occupational Safety and Health Administration (OSHA), and the Division of Safety, State of Florida, are invitees and need not have warrants or permission to enter the work site. These agencies, as well as the County Safety Officer, enter at the pleasure of the County.

1.5 The Vendor shall designate a competent person of its organization whose duty shall be the prevention of accidents at the site. This person shall be the Vendor's superintendent unless otherwise designated in writing by the Vendor to the County. All communications to the superintendent shall be as binding as if given to the Vendor.

**Safety Requirements/Regulations Form**

Bidder must sign and have notarized:

The undersigned bidder hereby certifies that they fully understand the safety requirements/regulation provisions and will comply.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

Name of Firm \_\_\_\_\_

By \_\_\_\_\_

Title of Person Signing: \_\_\_\_\_

(SEAL)

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me by means of  physical presence or  online notarization, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, by \_\_\_\_\_ (*name*) as \_\_\_\_\_ (*title of officer*) of \_\_\_\_\_ (*entity name*), on behalf of the company, who  is personally known to me or  has produced \_\_\_\_\_ as identification.

Notary Public Signature: \_\_\_\_\_

Printed Name of Notary Public: \_\_\_\_\_

Notary Commission Number and Expiration: \_\_\_\_\_

(AFFIX NOTARY SEAL)

**Affidavit Certification Immigration Laws**

POLK COUNTY WILL NOT INTENTIONALLY AWARD COUNTY CONTRACTS TO ANY CONTRACTOR WHO KNOWINGLY EMPLOYS UNAUTHORIZED ALIEN WORKERS, CONSTITUTING A VIOLATION OF THE EMPLOYMENT PROVISIONS CONTAINED IN 8 U.S.C. SECTION 1324 A(E) {SECTION 274A(E) OF THE IMMIGRATION AND NATIONALITY ACT (“INA”)}

POLK COUNTY MAY CONSIDER THE EMPLOYMENT BY ANY CONTRACTOR OF UNAUTHORIZED ALIENS A VIOLATION OF SECTION 274A(E) OF THE INA. **SUCH VIOLATION OF THE RECIPIENT OF THE EMPLOYMENT PROVISIONS CONTAINED IN 274A(E) OF THE INA SHALL BE GROUNDS FOR UNILATERAL CANCELLATION OF THE CONTRACT BY POLK COUNTY.**

BIDDER ATTEST THAT THEY ARE FULLY COMPLIANT WITH ALL APPLICABLE IMMIGRATION LAWS (SPECIFICALLY TO THE 1986 IMMIGRATION ACT AND SUBSEQUENT AMENDMENTS).

Company Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

State of: \_\_\_\_\_

County of: \_\_\_\_\_

The foregoing instrument was acknowledged before me by means of  physical presence or  online notarization, this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by \_\_\_\_\_ (*name*) as \_\_\_\_\_ (*title of officer*) of \_\_\_\_\_ (*entity name*), on behalf of the company, who  is personally known to me or  has produced \_\_\_\_\_ as identification.

Notary Public Signature: \_\_\_\_\_

Printed Name of Notary Public: \_\_\_\_\_

Notary Commission Number and Expiration: \_\_\_\_\_

(AFFIX NOTARY SEAL)

Bid 23-531, Vacuum Truck Cleaning Service for Underground Stormwater Baffle Boxes

**EMPLOYMENT ELIGIBILITY VERIFICATION (E-VERIFY) CERTIFICATION**

(Florida Statutes, Section 448.095)

PROJECT NAME: \_\_\_\_\_

The undersigned, as an authorized officer of the contractor identified below (the “Contractor”), having full knowledge of the statements contained herein, hereby certifies to Polk County, a political subdivision of the State of Florida (the “County”), by and on behalf of the Contractor in accordance with the requirements of Section 448.095, Florida Statutes, as related to the contract entered into by and between the Contractor and the County on or about the date hereof, whereby the Contractor will provide labor, supplies, or services to the County in exchange for salary, wages, or other remuneration (the “Contract”), as follows:

1. Unless otherwise defined herein, terms used in this Certification which are defined in Section 448.095, Florida Statutes, as may be amended from time to time, shall have the meaning ascribed in said statute.

2. Pursuant to Section 448.095(5), Florida Statutes, the Contractor, and any subcontractor under the Contract, must register with and use the E-Verify system to verify the work authorization status of all new employees of the Contractor or subcontractor. The Contractor acknowledges and agrees that (i) the County and the Contractor may not enter into the Contract, and the Contractor may not enter into any subcontracts thereunder, unless each party to the Contract, and each party to any subcontracts thereunder, registers with and uses the E-Verify system; and (ii) use of the U.S. Department of Homeland Security’s E-Verify System and compliance with all other terms of this Certification and Section 448.095, Fla. Stat., is an express condition of the Contract, and the County may treat a failure to comply as a material breach of the Contract.

3. By entering into the Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The Contractor shall maintain a copy of such affidavit for the duration of the Contract. Failure to comply will lead to termination of the Contract, or if a subcontractor knowingly violates the statute or Section 448.09(1), Fla. Stat., the subcontract must be terminated immediately. If the Contract is terminated pursuant to Section 448.095, Fla. Stat., such termination is not a breach of contract and may not be considered as such. Any challenge to termination under this provision must be filed in the Tenth Judicial Circuit Court of Florida no later than 20 calendar days after the date of termination. If the Contract is terminated for a violation of Section 448.095, Fla. Stat., by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination. The Contractor shall be liable for any additional costs incurred by the County as a result of the termination of the Contract. Nothing in this Certification shall be construed to allow intentional discrimination of any class protected by law.

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 2023.

**ATTEST:**

**CONTRACTOR:**

By: \_\_\_\_\_

By: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_

Its: \_\_\_\_\_

Its: \_\_\_\_\_

### Special Conditions

1. Award will be made based on overall low bid for all items combined. Bidders must bid on all items for the bid to be considered responsive. All bid items should be bid at a fair and reasonable price; failure to do so may cause the bid to be non-responsive. The Procurement Director shall be the sole judge of what is fair and reasonable. The Procurement Director reserves the right to reject any or all bids and/or waive any minor irregularities in the bids received, whichever would be in the best interest of the County.
2. The period of performance for this bid is from October 1, 2023 through September 30, 2024. This bid will automatically renew, extending the Termination Date, for two (2) one (1) year periods, unless otherwise terminated in accordance with General Information Items #13 and #14. If the County provides notice to the Vendor at least 30 days prior to the Termination Date that it has not put in place a new bid for the goods, then this Bid shall remain in effect on a month-to-month basis until terminated by written notice from the County Procurement Division to the Vendor, but not longer than four (4) months following the termination date.
3. **Performance of Work:** The work required under this bid shall be performed by the entity submitting the bid.
4. All prices bid shall remain unchanged during the period of performance, as specified herein, and as may be adjusted in accordance with General Information, Item #20.
5. If it becomes necessary to revise or amend any part of this bid, an addendum will be issued and will be posted on the County's website at <https://www.polk-county.net/procurement/bids>. It is the sole responsibility of the bidders to check the website to ensure that all available information has been received prior to submitting a bid.
6. The Successful Bidder must register in our Vendor Database if you have not already done so prior to the award of this bid. A purchase order cannot be issued to a vendor until they are registered. You may register at the following link: <https://www.polk-county.net/procurement/vendor-registration>.
7. Any additions, deletions, or modification similar in cost or material after bid award will need to be signed off by both the user division and the successful vendor. Price for any additions, deletions, or modifications to the bid will be negotiated and agreed upon by both parties. All agreed upon additions, deletions, or modifications will also require the Procurement Director's (or designee) approval. If the addition, deletion or modification is accepted an amendment to the Bid award will be issued to the successful Bidder.
8. The County may employ other vendors to perform the work or self-perform the work described. Bidder has not been employed as the exclusive vendor to perform any such services.
9. Bidders may attend the Bid Opening via conference call or in person. The conference bridge phone number to call in is (646) 558-8656 and enter Meeting ID: 327 647 2818. A listing of all bidders will be posted to Procurement's website as soon as possible after bid opening. All information read aloud is also posted with the respective bid, construction quote or RFP on the County's website: [www.polk-county.net/procurement/bidstatus](http://www.polk-county.net/procurement/bidstatus).

### Scope of Work

This contract is for the physical maintenance and cleaning of two underground stormwater baffle box systems located in Polk County Florida. It is recommended to physically visit and inspect each system before submitting your bid.

1. Locations to be serviced:
  - **3<sup>rd</sup> Street Baffle Box:** 1825 3<sup>rd</sup> Street SE, Winter Haven, FL 33880
  - **Crescent Lake Baffle Box:** 6572 Crescent Lake Drive, Lakeland, FL 33813.
2. Successful vendor shall provide all supervision, labor, and equipment to fulfill the requirements of the scope of work except as noted below.
3. The Parks and Natural Resources Project Manager (the "Project Manager") will provide baffle box tools to access baffle box chambers for proper cleaning of each system. Materials to be removed include organic debris (leaves etc.), sand, plastic bottles, paper, Styrofoam and other discarded items.
4. The 3rd Street baffle box is a large system (15' x 30' and is 18' deep). Most of the solids collected in this system come from Cypress Gardens Blvd. in Winter Haven, Florida. The average amount of material removed from this system is approximately 7500 lbs. per cleaning. More frequent cleaning of this system will be required than for the Crescent Lake baffle box. Decanting of vac-truck liquids can be done at each location. Vac-trucks can be staged next to the system.
5. The Crescent Lake baffle box is smaller (10'x20' and is 12' deep). This system is located in South Lakeland, Florida. The average amount of material removed from this system is approximately 3500 lbs. per cleaning.
6. Work will consist of the following:
  - A. Correctly vacuum out all baffle box chambers during each scheduled cleaning event. A cleaning event should take one day or less per site. Mobilization and labor rates will only be paid at the cost shown on the bid sheet, with tipping fees to be reimbursed. Decanting of vac-truck liquids can be done at each location. Vac-trucks can stage next to the system.
  - B. The successful vendors shall be responsible for properly disposing of all debris collected in each system. The County will be responsible for reimbursing the disposal charges. A scale ticket from the disposal yard must be submitted with the successful vendors' invoice in order to be reimbursed the actual cost of the disposal.
  - C. Each system will be scheduled separately on an as needed basis and will be scheduled by the county's Project Manager.
  - D. Vendor will be responsible for set up and maintenance of traffic (**MOT**) at each site.

Bid 23-531, Vacuum Truck Cleaning Service for Underground Stormwater Baffle Boxes

- E. Any other activities necessary to keep underground stormwater systems flowing properly.
7. The successful vendor shall keep accurate records of the amount of material removed from each system. Pounds of material removed is required to fulfill this bid document. This information will be provided to the Project Manager for preparation of annual reports and will be included with your invoicing for payment.
  8. Collected materials will be disposed of at an approved disposal facility. The disposal cost will be paid by the vendor and reimbursed at cost. The successful vendor will be required to provide proper backup documentation such as the weighed scale ticket and/or tipping fee payment receipt with your invoice to the County to be reimbursed.
  9. To assist the successful vendor in the performance of their services, the county's Project Manager will provide baffle box tools for each system to access the underground chambers.
  10. The Project Manager reserves the right to modify or alter schedules, whichever is in the best interest of the County.
  11. Invoicing will be done on a monthly basis after services have been provided. Invoices should include the bid location item number, completion dates, and scale tickets along with the before and after pictures of each location on all invoices. Invoices should be sent to Polk County Parks and Natural Resources Division 4177 Ben Durrance Road Bartow, FL 33830.
  12. In order for the County to notify the vendor when issues arise or unacceptable conditions exist, as deemed by the County the successful vendor must provide a primary contact to include the contacts:
    - Name
    - Phone Number (direct and/or cell)
    - Email Address

All contact will be documented, and the County will not make more than two (2) requests for the same problem at the same location. Should the problem not be resolved within the 30-day cycle, to the satisfaction of the County, the bid may be terminated. Vendor will only be compensated for the portion of work that was completed to satisfaction.

## Qualifications

1. Vendors must possess a Polk County Local Business Tax Receipt (f/k/a Business License) in order to do business with the County. A copy of such license must be provided to the Procurement Division before award is made to the successful vendor.
2. Vendor must have been in business under the same FEIN number for past five (5) years. Evidence should be submitted with the bid submittal.
3. Any truck driver(s) assigned to this bid must hold a Commercial Driver's License (CDL) & Confined Space Certification (CSC). A copy of these documents should be included with the bid submittal, or within three days of request. If at any point a new truck driver is assigned to this bid post award, the Project Manager must be contacted, and a copy of that individuals CDL & CSC must be provided prior to any services rendered by this person.
4. Vendor must provide three (3) references from clients in which the vendor has performed truck vacuum cleaning services in similar size and scope as the prime vendor, for a three (3) year term, within the past five (5) years. Each reference should include:
  - a. Name of the client
  - b. Address of the client
  - c. Contact person to include
    - i. Phone number and email address
  - d. Period of Performance (start and end date of the services)
  - e. Brief description of the services provided.
    - i. To include the size of the baffle box

References should be submitted with the bid or must be provided within three (3) business days upon request and prior to award.

## Specifications

1. The successful vendor will be required to enter each system for proper cleaning. Confined space entry procedures consistent with CFR 1910.146 (Attachment "A") will be followed prior to entrance.
2. Bring a full load of water or a water meter. Access to a public hydrate for water is an option. Hydrants are close to each system for filling purposes. Successful vendor will assume all responsibilities for any withdrawals from public hydrates.
3. Vacuum all baffle box chambers at each system during cleaning event.

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4. Decanting is allowed at each site. Polk County's project manager will direct the crew where to decant.
5. County's project manager will schedule service of each system on an as needed basis.
6. The 3rd Street baffle box (Winter Haven) will need to be serviced an estimated 12 times per year. All service calls regardless of the times per year will be paid at the unit cost provided by the vendor for item 1 of the bid sheet.
7. The Crescent Lake baffle box (South Lakeland) will need to be serviced an estimated two (2) times per year. The cleaning schedule may vary throughout the year. The county project manager will make this determination. All service calls regardless of the times per year will be paid at the unit cost provided by the vendor for item 2 of the bid sheet.

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**Bid Sheet**

<b>Item #</b>	<b>Description</b>	<b>Estimated Cost per Cleaning</b>	<b>Times per year</b>	<b>Total</b>
1	3rd Street Baffle Box: 1825 3rd Street SE Winter Haven, FL 33880	\$	12	\$
2	Crescent Lake Baffle Box: 6572 Crescent Lake Drive Lakeland, FL 33813	\$	2	\$
<b>Basis of award grand total of items 1 – 2 combined</b>				\$

**Note: Mobilization of Equipment, Labor and MOT must be included in the cost per cleaning price.**

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**COMPANY NAME**

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This content is from the eCFR and is authoritative but unofficial.

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## Title 29 – Labor

### Subtitle B – Regulations Relating to Labor

#### Chapter XVII – Occupational Safety and Health Administration, Department of Labor

#### Part 1910 – Occupational Safety and Health Standards

#### Subpart J – General Environmental Controls

**Authority:** 29 U.S.C. 653, 655, 657; Secretary of Labor's Order No. 12–71 (36 FR 8754), 8–76 (41 FR 25059), 9–83 (48 FR 35736), 1–90 (55 FR 9033), 6–96 (62 FR 111), 3–2000 (65 FR 50017), 5–2007 (72 FR 31159), 4–2010 (75 FR 55355), or 1–2012 (77 FR 3912), as applicable. Sections 1910.141, 1910.142, 1910.145, 1910.146, and 1910.147 also issued under 29 CFR part 1911.

**Source:** 39 FR 23502, June 27, 1974, unless otherwise noted.

#### § 1910.146 Permit-required confined spaces.

(a) **Scope and application.** This section contains requirements for practices and procedures to protect employees in general industry from the hazards of entry into permit-required confined spaces. This section does not apply to agriculture, to construction, or to shipyard employment (parts 1928, 1926, and 1915 of this chapter, respectively).

(b) **Definitions.**

**Acceptable entry conditions** means the conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

**Attendant** means an individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the employer's permit space program.

**Authorized entrant** means an employee who is authorized by the employer to enter a permit space.

**Blanking or blinding** means the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.

**Confined space** means a space that:

- (1) Is large enough and so configured that an employee can bodily enter and perform assigned work; and
- (2) Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and
- (3) Is not designed for continuous employee occupancy.

**Double block and bleed** means the closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.

**Emergency** means any occurrence (including any failure of hazard control or monitoring equipment) or event internal or external to the permit space that could endanger entrants.

**Engulfment** means the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.

**Entry** means the action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

**Entry permit** (permit) means the written or printed document that is provided by the employer to allow and control entry into a permit space and that contains the information specified in paragraph (f) of this section.

**Entry supervisor** means the person (such as the employer, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this section.

Note: An entry supervisor also may serve as an attendant or as an authorized entrant, as long as that person is trained and equipped as required by this section for each role he or she fills. Also, the duties of entry supervisor may be passed from one individual to another during the course of an entry operation.

**Hazardous atmosphere** means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:

- (1) Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL);
- (2) Airborne combustible dust at a concentration that meets or exceeds its LFL;

Note: This concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet (1.52 m) or less.

- (3) Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent;
- (4) Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in subpart G, *Occupational Health and Environmental Control*, or in subpart Z, *Toxic and Hazardous Substances*, of this part and which could result in employee exposure in excess of its dose or permissible exposure limit;

Note: An atmospheric concentration of any substance that is not capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to its health effects is not covered by this provision.

- (5) Any other atmospheric condition that is immediately dangerous to life or health.

Note: For air contaminants for which OSHA has not determined a dose or permissible exposure

limit, other sources of information, such as Material Safety Data Sheets that comply with the Hazard Communication Standard, § 1910.1200 of this part, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

**Hot work permit** means the employer's written authorization to perform operations (for example, riveting, welding, cutting, burning, and heating) capable of providing a source of ignition.

**Immediately dangerous to life or health (IDLH)** means any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space.

Note: Some materials—hydrogen fluoride gas and cadmium vapor, for example—may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by sudden, possibly fatal collapse 12–72 hours after exposure. The victim “feels normal” from recovery from transient effects until collapse. Such materials in hazardous quantities are considered to be “immediately” dangerous to life or health.

**Inerting** means the displacement of the atmosphere in a permit space by a noncombustible gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible.

Note: This procedure produces an IDLH oxygen-deficient atmosphere.

**Isolation** means the process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.

**Line breaking** means the intentional opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.

**Non-permit confined space** means a confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

**Oxygen deficient atmosphere** means an atmosphere containing less than 19.5 percent oxygen by volume.

**Oxygen enriched atmosphere** means an atmosphere containing more than 23.5 percent oxygen by volume.

**Permit-required confined space (permit space)** means a confined space that has one or more of the following characteristics:

- (1) Contains or has a potential to contain a hazardous atmosphere;
- (2) Contains a material that has the potential for engulfing an entrant;
- (3) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
- (4) Contains any other recognized serious safety or health hazard.

**Permit-required confined space program** (permit space program) means the employer's overall program for controlling, and, where appropriate, for protecting employees from, permit space hazards and for regulating employee entry into permit spaces.

**Permit system** means the employer's written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.

**Prohibited condition** means any condition in a permit space that is not allowed by the permit during the period when entry is authorized.

**Rescue service** means the personnel designated to rescue employees from permit spaces.

**Retrieval system** means the equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

**Testing** means the process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.

Note: Testing enables employers both to devise and implement adequate control measures for the protection of authorized entrants and to determine if acceptable entry conditions are present immediately prior to, and during, entry.

(c) **General requirements.**

- (1) The employer shall evaluate the workplace to determine if any spaces are permit- required confined spaces.

Note: Proper application of the decision flow chart in appendix A to § 1910.146 would facilitate compliance with this requirement.

- (2) If the workplace contains permit spaces, the employer shall inform exposed employees, by posting danger signs or by any other equally effective means, of the existence and location of and the danger posed by the permit spaces.

Note: A sign reading "DANGER—PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER" or using other similar language would satisfy the requirement for a sign.

- (3) If the employer decides that its employees will not enter permit spaces, the employer shall take effective measures to prevent its employees from entering the permit spaces and shall comply with paragraphs (c)(1), (c)(2), (c)(6), and (c)(8) of this section.
- (4) If the employer decides that its employees will enter permit spaces, the employer shall develop and implement a written permit space program that complies with this section. The written program shall be available for inspection by employees and their authorized representatives.
- (5) An employer may use the alternate procedures specified in paragraph (c)(5)(ii) of this section for entering a permit space under the conditions set forth in paragraph (c)(5)(i) of this section.

- (i) An employer whose employees enter a permit space need not comply with paragraphs (d) through (f) and (h) through (k) of this section, provided that:
  - (A) The employer can demonstrate that the only hazard posed by the permit space is an actual or potential hazardous atmosphere;
  - (B) The employer can demonstrate that continuous forced air ventilation alone is sufficient to maintain that permit space safe for entry;
  - (C) The employer develops monitoring and inspection data that supports the demonstrations required by paragraphs (c)(5)(i)(A) and (c)(5)(i)(B) of this section;
  - (D) If an initial entry of the permit space is necessary to obtain the data required by paragraph (c)(5)(i)(C) of this section, the entry is performed in compliance with paragraphs (d) through (k) of this section;
  - (E) The determinations and supporting data required by paragraphs (c)(5)(i)(A), (c)(5)(i)(B), and (c)(5)(i)(C) of this section are documented by the employer and are made available to each employee who enters the permit space under the terms of paragraph (c)(5) of this section or to that employee's authorized representative; and
  - (F) Entry into the permit space under the terms of paragraph (c)(5)(i) of this section is performed in accordance with the requirements of paragraph (c)(5)(ii) of this section.

Note: See paragraph (c)(7) of this section for reclassification of a permit space after all hazards within the space have been eliminated.

- (ii) The following requirements apply to entry into permit spaces that meet the conditions set forth in paragraph (c)(5)(i) of this section.
  - (A) Any conditions making it unsafe to remove an entrance cover shall be eliminated before the cover is removed.
  - (B) When entrance covers are removed, the opening shall be promptly guarded by a railing, temporary cover, or other temporary barrier that will prevent an accidental fall through the opening and that will protect each employee working in the space from foreign objects entering the space.
  - (C) Before an employee enters the space, the internal atmosphere shall be tested, with a calibrated direct-reading instrument, for oxygen content, for flammable gases and vapors, and for potential toxic air contaminants, in that order. Any employee who enters the space, or that employee's authorized representative, shall be provided an opportunity to observe the pre-entry testing required by this paragraph.
  - (D) There may be no hazardous atmosphere within the space whenever any employee is inside the space.
  - (E) Continuous forced air ventilation shall be used, as follows:
    - (1) An employee may not enter the space until the forced air ventilation has eliminated any hazardous atmosphere;

- (2) The forced air ventilation shall be so directed as to ventilate the immediate areas where an employee is or will be present within the space and shall continue until all employees have left the space;
- (3) The air supply for the forced air ventilation shall be from a clean source and may not increase the hazards in the space.
- (F) The atmosphere within the space shall be periodically tested as necessary to ensure that the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere. Any employee who enters the space, or that employee's authorized representative, shall be provided with an opportunity to observe the periodic testing required by this paragraph.
- (G) If a hazardous atmosphere is detected during entry:
  - (1) Each employee shall leave the space immediately;
  - (2) The space shall be evaluated to determine how the hazardous atmosphere developed; and
  - (3) Measures shall be implemented to protect employees from the hazardous atmosphere before any subsequent entry takes place.
- (H) The employer shall verify that the space is safe for entry and that the pre-entry measures required by paragraph (c)(5)(ii) of this section have been taken, through a written certification that contains the date, the location of the space, and the signature of the person providing the certification. The certification shall be made before entry and shall be made available to each employee entering the space or to that employee's authorized representative .
- (6) When there are changes in the use or configuration of a non-permit confined space that might increase the hazards to entrants, the employer shall reevaluate that space and, if necessary, reclassify it as a permit-required confined space.
- (7) A space classified by the employer as a permit-required confined space may be reclassified as a non-permit confined space under the following procedures:
  - (i) If the permit space poses no actual or potential atmospheric hazards and if all hazards within the space are eliminated without entry into the space, the permit space may be reclassified as a non-permit confined space for as long as the non-atmospheric hazards remain eliminated.
  - (ii) If it is necessary to enter the permit space to eliminate hazards, such entry shall be performed under paragraphs (d) through (k) of this section. If testing and inspection during that entry demonstrate that the hazards within the permit space have been eliminated, the permit space may be reclassified as a non-permit confined space for as long as the hazards remain eliminated.

Note: Control of atmospheric hazards through forced air ventilation does not constitute elimination of the hazards. Paragraph (c)(5) covers permit space entry where the employer can demonstrate that forced air ventilation alone will control all hazards in the space.

- (iii) The employer shall document the basis for determining that all hazards in a permit space have been eliminated, through a certification that contains the date, the location of the space, and the signature of the person making the determination. The certification shall be made available to each employee entering the space or to that employee's authorized representative.
  - (iv) If hazards arise within a permit space that has been declassified to a non-permit space under paragraph (c)(7) of this section, each employee in the space shall exit the space. The employer shall then reevaluate the space and determine whether it must be reclassified as a permit space, in accordance with other applicable provisions of this section.
- (8) When an employer (host employer) arranges to have employees of another employer (contractor) perform work that involves permit space entry, the host employer shall:
- (i) Inform the contractor that the workplace contains permit spaces and that permit space entry is allowed only through compliance with a permit space program meeting the requirements of this section;
  - (ii) Apprise the contractor of the elements, including the hazards identified and the host employer's experience with the space, that make the space in question a permit space;
  - (iii) Apprise the contractor of any precautions or procedures that the host employer has implemented for the protection of employees in or near permit spaces where contractor personnel will be working;
  - (iv) Coordinate entry operations with the contractor, when both host employer personnel and contractor personnel will be working in or near permit spaces, as required by paragraph (d)(11) of this section; and
  - (v) Debrief the contractor at the conclusion of the entry operations regarding the permit space program followed and regarding any hazards confronted or created in permit spaces during entry operations.
- (9) In addition to complying with the permit space requirements that apply to all employers, each contractor who is retained to perform permit space entry operations shall:
- (i) Obtain any available information regarding permit space hazards and entry operations from the host employer;
  - (ii) Coordinate entry operations with the host employer, when both host employer personnel and contractor personnel will be working in or near permit spaces, as required by paragraph (d)(11) of this section; and
  - (iii) Inform the host employer of the permit space program that the contractor will follow and of any hazards confronted or created in permit spaces, either through a debriefing or during the entry operation.
- (d) **Permit-required confined space program** (permit space program). Under the permit space program required by paragraph (c)(4) of this section, the employer shall:
- (1) Implement the measures necessary to prevent unauthorized entry;
  - (2) Identify and evaluate the hazards of permit spaces before employees enter them;
  - (3) Develop and implement the means, procedures, and practices necessary for safe permit space entry operations, including, but not limited to, the following:

- (i) Specifying acceptable entry conditions;
  - (ii) Providing each authorized entrant or that employee's authorized representative with the opportunity to observe any monitoring or testing of permit spaces;
  - (iii) Isolating the permit space;
  - (iv) Purging, inerting, flushing, or ventilating the permit space as necessary to eliminate or control atmospheric hazards;
  - (v) Providing pedestrian, vehicle, or other barriers as necessary to protect entrants from external hazards; and
  - (vi) Verifying that conditions in the permit space are acceptable for entry throughout the duration of an authorized entry.
- (4) Provide the following equipment (specified in paragraphs (d)(4)(i) through (d)(4)(ix) of this section) at no cost to employees, maintain that equipment properly, and ensure that employees use that equipment properly:
- (i) Testing and monitoring equipment needed to comply with paragraph (d)(5) of this section;
  - (ii) Ventilating equipment needed to obtain acceptable entry conditions;
  - (iii) Communications equipment necessary for compliance with paragraphs (h)(3) and (i)(5) of this section;
  - (iv) Personal protective equipment insofar as feasible engineering and work practice controls do not adequately protect employees;
  - (v) Lighting equipment needed to enable employees to see well enough to work safely and to exit the space quickly in an emergency;
  - (vi) Barriers and shields as required by paragraph (d)(3)(v) of this section.
  - (vii) Equipment, such as ladders, needed for safe ingress and egress by authorized entrants;
  - (viii) Rescue and emergency equipment needed to comply with paragraph (d)(9) of this section, except to the extent that the equipment is provided by rescue services; and
  - (ix) Any other equipment necessary for safe entry into and rescue from permit spaces.
- (5) Evaluate permit space conditions as follows when entry operations are conducted:
- (i) Test conditions in the permit space to determine if acceptable entry conditions exist before entry is authorized to begin, except that, if isolation of the space is infeasible because the space is large or is part of a continuous system (such as a sewer), pre-entry testing shall be performed to the extent feasible before entry is authorized and, if entry is authorized, entry conditions shall be continuously monitored in the areas where authorized entrants are working;
  - (ii) Test or monitor the permit space as necessary to determine if acceptable entry conditions are being maintained during the course of entry operations; and
  - (iii) When testing for atmospheric hazards, test first for oxygen, then for combustible gases and vapors, and then for toxic gases and vapors.

- (iv) Provide each authorized entrant or that employee's authorized representative an opportunity to observe the pre-entry and any subsequent testing or monitoring of permit spaces;
- (v) Reevaluate the permit space in the presence of any authorized entrant or that employee's authorized representative who requests that the employer conduct such reevaluation because the entrant or representative has reason to believe that the evaluation of that space may not have been adequate;
- (vi) Immediately provide each authorized entrant or that employee's authorized representative with the results of any testing conducted in accord with paragraph (d) of this section.

Note: Atmospheric testing conducted in accordance with appendix B to § 1910.146 would be considered as satisfying the requirements of this paragraph. For permit space operations in sewers, atmospheric testing conducted in accordance with appendix B, as supplemented by appendix E to § 1910.146, would be considered as satisfying the requirements of this paragraph.

- (6) Provide at least one attendant outside the permit space into which entry is authorized for the duration of entry operations;

Note: Attendants may be assigned to monitor more than one permit space provided the duties described in paragraph (i) of this section can be effectively performed for each permit space that is monitored. Likewise, attendants may be stationed at any location outside the permit space to be monitored as long as the duties described in paragraph (i) of this section can be effectively performed for each permit space that is monitored.

- (7) If multiple spaces are to be monitored by a single attendant, include in the permit program the means and procedures to enable the attendant to respond to an emergency affecting one or more of the permit spaces being monitored without distraction from the attendant's responsibilities under paragraph (i) of this section;
- (8) Designate the persons who are to have active roles (as, for example, authorized entrants, attendants, entry supervisors, or persons who test or monitor the atmosphere in a permit space) in entry operations, identify the duties of each such employee, and provide each such employee with the training required by paragraph (g) of this section;
- (9) Develop and implement procedures for summoning rescue and emergency services, for rescuing entrants from permit spaces, for providing necessary emergency services to rescued employees, and for preventing unauthorized personnel from attempting a rescue;
- (10) Develop and implement a system for the preparation, issuance, use, and cancellation of entry permits as required by this section;
- (11) Develop and implement procedures to coordinate entry operations when employees of more than one employer are working simultaneously as authorized entrants in a permit space, so that employees of one employer do not endanger the employees of any other employer;
- (12) Develop and implement procedures (such as closing off a permit space and canceling the permit) necessary for concluding the entry after entry operations have been completed;

- (13) Review entry operations when the employer has reason to believe that the measures taken under the permit space program may not protect employees and revise the program to correct deficiencies found to exist before subsequent entries are authorized; and

Note: Examples of circumstances requiring the review of the permit space program are: any unauthorized entry of a permit space, the detection of a permit space hazard not covered by the permit, the detection of a condition prohibited by the permit, the occurrence of an injury or near-miss during entry, a change in the use or configuration of a permit space, and employee complaints about the effectiveness of the program.

- (14) Review the permit space program, using the canceled permits retained under paragraph (e)(6) of this section within 1 year after each entry and revise the program as necessary, to ensure that employees participating in entry operations are protected from permit space hazards.

Note: Employers may perform a single annual review covering all entries performed during a 12-month period. If no entry is performed during a 12-month period, no review is necessary. Appendix C to § 1910.146 presents examples of permit space programs that are considered to comply with the requirements of paragraph (d) of this section.

(e) **Permit system.**

- (1) Before entry is authorized, the employer shall document the completion of measures required by paragraph (d)(3) of this section by preparing an entry permit.

Note: Appendix D to § 1910.146 presents examples of permits whose elements are considered to comply with the requirements of this section.

- (2) Before entry begins, the entry supervisor identified on the permit shall sign the entry permit to authorize entry.
- (3) The completed permit shall be made available at the time of entry to all authorized entrants or their authorized representatives, by posting it at the entry portal or by any other equally effective means, so that the entrants can confirm that pre-entry preparations have been completed.
- (4) The duration of the permit may not exceed the time required to complete the assigned task or job identified on the permit in accordance with paragraph (f)(2) of this section.
- (5) The entry supervisor shall terminate entry and cancel the entry permit when:
  - (i) The entry operations covered by the entry permit have been completed; or
  - (ii) A condition that is not allowed under the entry permit arises in or near the permit space.
- (6) The employer shall retain each canceled entry permit for at least 1 year to facilitate the review of the permit-required confined space program required by paragraph (d)(14) of this section. Any problems encountered during an entry operation shall be noted on the pertinent permit so that appropriate revisions to the permit space program can be made.

- (f) **Entry permit.** The entry permit that documents compliance with this section and authorizes entry to a permit space shall identify:
- (1) The permit space to be entered;
  - (2) The purpose of the entry;
  - (3) The date and the authorized duration of the entry permit;
  - (4) The authorized entrants within the permit space, by name or by such other means (for example, through the use of rosters or tracking systems) as will enable the attendant to determine quickly and accurately, for the duration of the permit, which authorized entrants are inside the permit space;

Note: This requirement may be met by inserting a reference on the entry permit as to the means used, such as a roster or tracking system, to keep track of the authorized entrants within the permit space.

- (5) The personnel, by name, currently serving as attendants;
- (6) The individual, by name, currently serving as entry supervisor, with a space for the signature or initials of the entry supervisor who originally authorized entry;
- (7) The hazards of the permit space to be entered;
- (8) The measures used to isolate the permit space and to eliminate or control permit space hazards before entry;

Note: Those measures can include the lockout or tagging of equipment and procedures for purging, inerting, ventilating, and flushing permit spaces.

- (9) The acceptable entry conditions;
- (10) The results of initial and periodic tests performed under paragraph (d)(5) of this section, accompanied by the names or initials of the testers and by an indication of when the tests were performed;
- (11) The rescue and emergency services that can be summoned and the means (such as the equipment to use and the numbers to call) for summoning those services;
- (12) The communication procedures used by authorized entrants and attendants to maintain contact during the entry;
- (13) Equipment, such as personal protective equipment, testing equipment, communications equipment, alarm systems, and rescue equipment, to be provided for compliance with this section;
- (14) Any other information whose inclusion is necessary, given the circumstances of the particular confined space, in order to ensure employee safety; and
- (15) Any additional permits, such as for hot work, that have been issued to authorize work in the permit space.

- (g) **Training.**

- (1) The employer shall provide training so that all employees whose work is regulated by this section acquire the understanding, knowledge, and skills necessary for the safe performance of the duties assigned under this section.
  - (2) Training shall be provided to each affected employee:
    - (i) Before the employee is first assigned duties under this section;
    - (ii) Before there is a change in assigned duties;
    - (iii) Whenever there is a change in permit space operations that presents a hazard about which an employee has not previously been trained;
    - (iv) Whenever the employer has reason to believe either that there are deviations from the permit space entry procedures required by paragraph (d)(3) of this section or that there are inadequacies in the employee's knowledge or use of these procedures.
  - (3) The training shall establish employee proficiency in the duties required by this section and shall introduce new or revised procedures, as necessary, for compliance with this section.
  - (4) The employer shall certify that the training required by paragraphs (g)(1) through (g)(3) of this section has been accomplished. The certification shall contain each employee's name, the signatures or initials of the trainers, and the dates of training. The certification shall be available for inspection by employees and their authorized representatives.
- (h) **Duties of authorized entrants.** The employer shall ensure that all authorized entrants:
- (1) Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
  - (2) Properly use equipment as required by paragraph (d)(4) of this section;
  - (3) Communicate with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to evacuate the space as required by paragraph (i)(6) of this section;
  - (4) Alert the attendant whenever:
    - (i) The entrant recognizes any warning sign or symptom of exposure to a dangerous situation, or
    - (ii) The entrant detects a prohibited condition; and
  - (5) Exit from the permit space as quickly as possible whenever:
    - (i) An order to evacuate is given by the attendant or the entry supervisor,
    - (ii) The entrant recognizes any warning sign or symptom of exposure to a dangerous situation,
    - (iii) The entrant detects a prohibited condition, or
    - (iv) An evacuation alarm is activated.
- (i) **Duties of attendants.** The employer shall ensure that each attendant:
- (1) Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
  - (2) Is aware of possible behavioral effects of hazard exposure in authorized entrants;

- (3) Continuously maintains an accurate count of authorized entrants in the permit space and ensures that the means used to identify authorized entrants under paragraph (f)(4) of this section accurately identifies who is in the permit space;
- (4) Remains outside the permit space during entry operations until relieved by another attendant;

Note: When the employer's permit entry program allows attendant entry for rescue, attendants may enter a permit space to attempt a rescue if they have been trained and equipped for rescue operations as required by paragraph (k)(1) of this section and if they have been relieved as required by paragraph (i)(4) of this section.

- (5) Communicates with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space under paragraph (i)(6) of this section;
  - (6) Monitors activities inside and outside the space to determine if it is safe for entrants to remain in the space and orders the authorized entrants to evacuate the permit space immediately under any of the following conditions:
    - (i) If the attendant detects a prohibited condition;
    - (ii) If the attendant detects the behavioral effects of hazard exposure in an authorized entrant;
    - (iii) If the attendant detects a situation outside the space that could endanger the authorized entrants; or
    - (iv) If the attendant cannot effectively and safely perform all the duties required under paragraph (i) of this section;
  - (7) Summon rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards;
  - (8) Takes the following actions when unauthorized persons approach or enter a permit space while entry is underway:
    - (i) Warn the unauthorized persons that they must stay away from the permit space;
    - (ii) Advise the unauthorized persons that they must exit immediately if they have entered the permit space; and
    - (iii) Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space;
  - (9) Performs non-entry rescues as specified by the employer's rescue procedure; and
  - (10) Performs no duties that might interfere with the attendant's primary duty to monitor and protect the authorized entrants.
- (j) **Duties of entry supervisors.** The employer shall ensure that each entry supervisor:
- (1) Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;

- (2) Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin;
- (3) Terminates the entry and cancels the permit as required by paragraph (e)(5) of this section;
- (4) Verifies that rescue services are available and that the means for summoning them are operable;
- (5) Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations; and
- (6) Determines, whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space, that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.

**(k) Rescue and emergency services.**

- (1) An employer who designates rescue and emergency services, pursuant to paragraph (d)(9) of this section, shall:
  - (i) Evaluate a prospective rescuer's ability to respond to a rescue summons in a timely manner, considering the hazard(s) identified;

Note to paragraph (k)(1)(i): What will be considered timely will vary according to the specific hazards involved in each entry. For example, § 1910.134, Respiratory Protection, requires that employers provide a standby person or persons capable of immediate action to rescue employee(s) wearing respiratory protection while in work areas defined as IDLH atmospheres.

- (ii) Evaluate a prospective rescue service's ability, in terms of proficiency with rescue-related tasks and equipment, to function appropriately while rescuing entrants from the particular permit space or types of permit spaces identified;
- (iii) Select a rescue team or service from those evaluated that:
  - (A) Has the capability to reach the victim(s) within a time frame that is appropriate for the permit space hazard(s) identified;
  - (B) Is equipped for and proficient in performing the needed rescue services;
- (iv) Inform each rescue team or service of the hazards they may confront when called on to perform rescue at the site; and
- (v) Provide the rescue team or service selected with access to all permit spaces from which rescue may be necessary so that the rescue service can develop appropriate rescue plans and practice rescue operations.

Note to paragraph (k)(1): Non-mandatory appendix F contains examples of criteria which employers can use in evaluating prospective rescuers as required by paragraph (k)(1) of this section.

- (2) An employer whose employees have been designated to provide permit space rescue and emergency services shall take the following measures:
  - (i) Provide affected employees with the personal protective equipment (PPE) needed to conduct permit space rescues safely and train affected employees so they are proficient in the use of that PPE, at no cost to those employees;
  - (ii) Train affected employees to perform assigned rescue duties. The employer must ensure that such employees successfully complete the training required to establish proficiency as an authorized entrant, as provided by paragraphs (g) and (h) of this section;
  - (iii) Train affected employees in basic first-aid and cardiopulmonary resuscitation (CPR). The employer shall ensure that at least one member of the rescue team or service holding a current certification in first aid and CPR is available; and
  - (iv) Ensure that affected employees practice making permit space rescues at least once every 12 months, by means of simulated rescue operations in which they remove dummies, manikins, or actual persons from the actual permit spaces or from representative permit spaces. Representative permit spaces shall, with respect to opening size, configuration, and accessibility, simulate the types of permit spaces from which rescue is to be performed.
- (3) To facilitate non-entry rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a permit space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant. Retrieval systems shall meet the following requirements.
  - (i) Each authorized entrant shall use a chest or full body harness, with a retrieval line attached at the center of the entrant's back near shoulder level, above the entrant's head, or at another point which the employer can establish presents a profile small enough for the successful removal of the entrant. Wristlets may be used in lieu of the chest or full body harness if the employer can demonstrate that the use of a chest or full body harness is infeasible or creates a greater hazard and that the use of wristlets is the safest and most effective alternative.
  - (ii) The other end of the retrieval line shall be attached to a mechanical device or fixed point outside the permit space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device shall be available to retrieve personnel from vertical type permit spaces more than 5 feet (1.52 m) deep.
- (4) If an injured entrant is exposed to a substance for which a Material Safety Data Sheet (MSDS) or other similar written information is required to be kept at the worksite, that MSDS or written information shall be made available to the medical facility treating the exposed entrant.

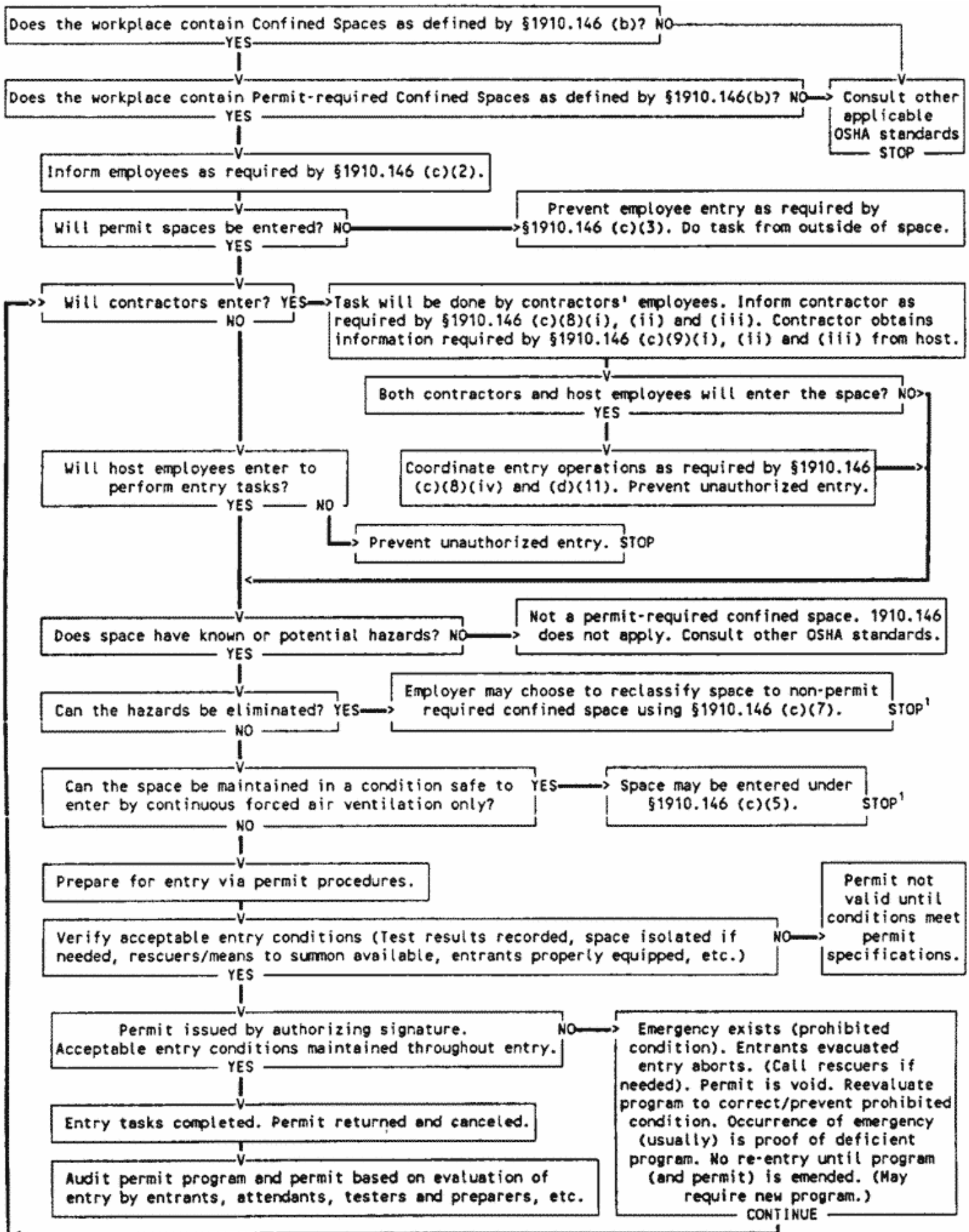
(l) ***Employee participation.***

- (1) Employers shall consult with affected employees and their authorized representatives on the development and implementation of all aspects of the permit space program required by paragraph (c) of this section.
- (2) Employers shall make available to affected employees and their authorized representatives all information required to be developed by this section.

## Appendixes to § 1910.146—Permit-required Confined Spaces

Note: Appendixes A through F serve to provide information and non-mandatory guidelines to assist employers and employees in complying with the appropriate requirements of this section.

### APPENDIX A TO § 1910.146—PERMIT-REQUIRED CONFINED SPACE DECISION FLOW CHART



¹ Spaces may have to be evacuated and re-evaluated if hazards arise during entry  
 29 CFR 1910.146(l)(2) (enhanced display)

## Appendix B to § 1910.146—Procedures for Atmospheric Testing

Atmospheric testing is required for two distinct purposes: evaluation of the hazards of the permit space and verification that acceptable entry conditions for entry into that space exist.

(1) *Evaluation testing.* The atmosphere of a confined space should be analyzed using equipment of sufficient sensitivity and specificity to identify and evaluate any hazardous atmospheres that may exist or arise, so that appropriate permit entry procedures can be developed and acceptable entry conditions stipulated for that space. Evaluation and interpretation of these data, and development of the entry procedure, should be done by, or reviewed by, a technically qualified professional (e.g., OSHA consultation service, or certified industrial hygienist, registered safety engineer, certified safety professional, certified marine chemist, etc.) based on evaluation of all serious hazards.

(2) *Verification testing.* The atmosphere of a permit space which may contain a hazardous atmosphere should be tested for residues of all contaminants identified by evaluation testing using permit specified equipment to determine that residual concentrations at the time of testing and entry are within the range of acceptable entry conditions. Results of testing (i.e., actual concentration, etc.) should be recorded on the permit in the space provided adjacent to the stipulated acceptable entry condition.

(3) *Duration of testing.* Measurement of values for each atmospheric parameter should be made for at least the minimum response time of the test instrument specified by the manufacturer.

(4) *Testing stratified atmospheres.* When monitoring for entries involving a descent into atmospheres that may be stratified, the atmospheric envelope should be tested a distance of approximately 4 feet (1.22 m) in the direction of travel and to each side. If a sampling probe is used, the entrant's rate of progress should be slowed to accommodate the sampling speed and detector response.

(5) *Order of testing.* A test for oxygen is performed first because most combustible gas meters are oxygen dependent and will not provide reliable readings in an oxygen deficient atmosphere. Combustible gasses are tested for next because the threat of fire or explosion is both more immediate and more life threatening, in most cases, than exposure to toxic gasses and vapors. If tests for toxic gasses and vapors are necessary, they are performed last.

## Appendix C to § 1910.146—Examples of Permit-required Confined Space Programs

### Example 1.

*Workplace.* Sewer entry.

*Potential hazards.* The employees could be exposed to the following:

*Engulfment.*

*Presence of toxic gases.* Equal to or more than 10 ppm hydrogen sulfide measured as an 8-hour time-weighted average. If the presence of other toxic contaminants is suspected, specific monitoring programs will be developed.

*Presence of explosive/flammable gases.* Equal to or greater than 10% of the lower flammable limit (LFL).

*Oxygen Deficiency.* A concentration of oxygen in the atmosphere equal to or less than 19.5% by volume.

#### A. *Entry Without Permit/Attendant*

*Certification.* Confined spaces may be entered without the need for a written permit or attendant provided that the space can be maintained in a safe condition for entry by mechanical ventilation alone, as provided in § 1910.146(c)(5). All spaces shall be considered permit-required confined spaces until the pre-entry procedures demonstrate otherwise. Any employee required or permitted to pre-check or enter an enclosed/confined space shall have successfully completed, -as a minimum, the training as required by the following sections of these procedures. *A written copy of operating and rescue procedures as required by these procedures shall be at the work site for the duration of the job.* The Confined Space Pre-Entry Check List must be completed by the LEAD WORKER before entry into a confined space. This list verifies completion of items listed below. This check list shall be kept at the job site for duration of the job. If circumstances dictate an interruption in the work, the permit space must be re-evaluated and a new check list must be completed.

*Control of atmospheric and engulfment hazards.*

*Pumps and Lines.* All pumps and lines which may reasonably cause contaminants to flow into the space shall be disconnected, blinded and locked out, or effectively isolated by other means to prevent development of dangerous air contamination or engulfment. Not all laterals to sewers or storm drains require blocking. However, where experience or knowledge of industrial use indicates there is a reasonable potential for contamination of air or engulfment into an occupied sewer, then all affected laterals shall be blocked. If blocking and/or isolation requires entry into the space the provisions for entry into a permit- required confined space must be implemented.

*Surveillance.* The surrounding area shall be surveyed to avoid hazards such as drifting vapors from the tanks, piping, or sewers.

*Testing.* The atmosphere within the space will be tested to determine whether dangerous air contamination and/or oxygen deficiency exists. Detector tubes, alarm only gas monitors and explosion meters are examples of monitoring equipment that may be used to test permit space atmospheres. Testing shall be performed by the LEAD WORKER who has successfully completed the Gas Detector training for the monitor he will use. The minimum parameters to be monitored are oxygen deficiency, LFL, and hydrogen sulfide concentration. A written record of the pre-entry test results shall be made and kept at the work site for the duration of the job. The supervisor will certify in writing, based upon the results of the pre-entry testing, that all hazards have been eliminated. Affected employees shall be able to review the testing results. The most hazardous conditions shall govern when work is being performed in two adjoining, connecting spaces.

*Entry Procedures.* If there are no non-atmospheric hazards present and if the pre-entry tests show there is no dangerous air contamination and/or oxygen deficiency within the space and there is no reason to believe that any is likely to develop, entry into and work within may proceed. Continuous testing of the atmosphere in the

immediate vicinity of the workers within the space shall be accomplished. The workers will immediately leave the permit space when any of the gas monitor alarm set points are reached as defined. Workers will not return to the area until a SUPERVISOR who has completed the gas detector training has used a direct reading gas detector to evaluate the situation and has determined that it is safe to enter.

*Rescue.* Arrangements for rescue services are not required where there is no attendant. See the rescue portion of section B., below, for instructions regarding rescue planning where an entry permit is required.

#### *B. Entry Permit Required*

*Permits.* Confined Space Entry Permit. All spaces shall be considered permit-required confined spaces until the pre-entry procedures demonstrate otherwise. Any employee required or permitted to pre-check or enter a permit-required confined space shall have successfully completed, as a minimum, the training as required by the following sections of these procedures. *A written copy of operating and rescue procedures as required by these procedures shall be at the work site for the duration of the job.* The Confined Space Entry Permit must be completed before approval can be given to enter a permit-required confined space. This permit verifies completion of items listed below. This permit shall be kept at the job site for the duration of the job. If circumstances cause an interruption in the work or a change in the alarm conditions for which entry was approved, a new Confined Space Entry Permit must be completed.

*Control of atmospheric and engulfment hazards.*

*Surveillance.* The surrounding area shall be surveyed to avoid hazards such as drifting vapors from tanks, piping or sewers.

*Testing.* The confined space atmosphere shall be tested to determine whether dangerous air contamination and/or oxygen deficiency exists. A direct reading gas monitor shall be used. Testing shall be performed by the SUPERVISOR who has successfully completed the gas detector training for the monitor he will use. The minimum parameters to be monitored are oxygen deficiency, LFL and hydrogen sulfide concentration. A written record of the pre-entry test results shall be made and kept at the work site for the duration of the job. Affected employees shall be able to review the testing results. The most hazardous conditions shall govern when work is being performed in two adjoining, connected spaces.

*Space Ventilation.* Mechanical ventilation systems, where applicable, shall be set at 100% outside air. Where possible, open additional manholes to increase air circulation. Use portable blowers to augment natural circulation if needed. After a suitable ventilating period, repeat the testing. Entry may not begin until testing has demonstrated that the hazardous atmosphere has been eliminated.

*Entry Procedures.* The following procedure shall be observed under any of the following conditions: 1.) Testing demonstrates the existence of dangerous or deficient conditions and additional ventilation cannot reduce concentrations to safe levels; 2.) The atmosphere tests as safe but unsafe conditions can reasonably be expected to develop; 3.) It is not feasible to provide for ready exit from spaces equipped with automatic fire suppression systems and it is not practical or safe to deactivate such systems; or 4.) An emergency exists and it is not feasible to wait for pre-entry procedures to take effect.

All personnel must be trained. A self contained breathing apparatus shall be worn by any person entering the space. At least one worker shall stand by the outside of the space ready to give assistance in case of emergency. The standby worker shall have a self contained breathing apparatus available for immediate use. There shall be at least one additional worker within sight or call of the standby worker. Continuous powered communications shall be maintained between the worker within the confined space and standby personnel.

If at any time there is any questionable action or non- movement by the worker inside, a verbal check will be made. If there is no response, the worker will be moved immediately. *Exception:* If the worker is disabled due to falling or impact, he/she shall not be removed from the confined space unless there is immediate danger to his/her life. Local fire department rescue personnel shall be notified immediately. The standby worker may only enter the confined space in case of an emergency (wearing the self contained breathing apparatus) and only after being relieved by another worker. Safety belt or harness with attached lifeline shall be used by all workers entering the space with the free end of the line secured outside the entry opening. The standby worker shall attempt to remove a disabled worker via his lifeline before entering the space.

When practical, these spaces shall be entered through side openings—those within 3<sup>1</sup>/<sub>2</sub> feet (1.07 m) of the bottom. When entry must be through a top opening, the safety belt shall be of the harness type that suspends a person upright and a hoisting device or similar apparatus shall be available for lifting workers out of the space.

In any situation where their use may endanger the worker, use of a hoisting device or safety belt and attached lifeline may be discontinued.

When dangerous air contamination is attributable to flammable and/or explosive substances, lighting and electrical equipment shall be Class 1, Division 1 rated per National Electrical Code and no ignition sources shall be introduced into the area.

Continuous gas monitoring shall be performed during all confined space operations. If alarm conditions change adversely, entry personnel shall exit the confined space and a new confined space permit issued.

*Rescue.* Call the fire department services for rescue. Where immediate hazards to injured personnel are present, workers at the site shall implement emergency procedures to fit the situation.

## Example 2.

*Workplace.* Meat and poultry rendering plants.

Cookers and dryers are either batch or continuous in their operation. Multiple batch cookers are operated in parallel. When one unit of a multiple set is shut down for repairs, means are available to isolate that unit from the others which remain in operation.

Cookers and dryers are horizontal, cylindrical vessels equipped with a center, rotating shaft and agitator paddles or discs. If the inner shell is jacketed, it is usually heated with steam at pressures up to 150 psig (1034.25 kPa). The rotating shaft assembly of the continuous cooker or dryer is also steam heated.

*Potential Hazards.* The recognized hazards associated with cookers and dryers are the risk that employees could be:

1. Struck or caught by rotating agitator;
2. Engulfed in raw material or hot, recycled fat;
3. Burned by steam from leaks into the cooker/dryer steam jacket or the condenser duct system if steam valves are not properly closed and locked out;
4. Burned by contact with hot metal surfaces, such as the agitator shaft assembly, or inner shell of the cooker/dryer;
5. Heat stress caused by warm atmosphere inside cooker/dryer;
6. Slipping and falling on grease in the cooker/dryer;
7. Electrically shocked by faulty equipment taken into the cooker/dryer;
8. Burned or overcome by fire or products of combustion; or
9. Overcome by fumes generated by welding or cutting done on grease covered surfaces.

*Permits.* The supervisor in this case is always present at the cooker/dryer or other permit entry confined space when entry is made. The supervisor must follow the pre-entry isolation procedures described in the entry permit in preparing for entry, and ensure that the protective clothing, ventilating equipment and any other equipment required by the permit are at the entry site.

*Control of hazards.* Mechanical. Lock out main power switch to agitator motor at main power panel. Affix tag to the lock to inform others that a permit entry confined space entry is in progress.

*Engulfment.* Close all valves in the raw material blow line. Secure each valve in its closed position using chain and lock. Attach a tag to the valve and chain warning that a permit entry confined space entry is in progress. The same procedure shall be used for securing the fat recycle valve.

*Burns and heat stress.* Close steam supply valves to jacket and secure with chains and tags. Insert solid blank at flange in cooker vent line to condenser manifold duct system. Vent cooker/dryer by opening access door at discharge end and top center door to allow natural ventilation throughout the entry. If faster cooling is needed, use a portable ventilation fan to increase ventilation. Cooling water may be circulated through the jacket to reduce both outer and inner surface temperatures of cooker/dryers faster. Check air and inner surface temperatures in cooker/dryer to assure they are within acceptable limits before entering, or use proper protective clothing.

*Fire and fume hazards.* Careful site preparation, such as cleaning the area within 4 inches (10.16 cm) of all welding or torch cutting operations, and proper ventilation are the preferred controls. All welding and cutting operations shall be done in accordance with the requirements of 29 CFR part 1910, subpart Q, OSHA's welding standard. Proper ventilation may be achieved by local exhaust ventilation, or the use of portable ventilation fans, or a combination of the two practices.

*Electrical shock.* Electrical equipment used in cooker/dryers shall be in serviceable condition.

*Slips and falls.* Remove residual grease before entering cooker/dryer.

*Attendant.* The supervisor shall be the attendant for employees entering cooker/dryers.

*Permit.* The permit shall specify how isolation shall be done and any other preparations needed before making entry. This is especially important in parallel arrangements of cooker/dryers so that the entire operation need not be shut down to allow safe entry into one unit.

*Rescue.* When necessary, the attendant shall call the fire department as previously arranged.

### Example 3.

*Workplace.* Workplaces where tank cars, trucks, and trailers, dry bulk tanks and trailers, railroad tank cars, and similar portable tanks are fabricated or serviced.

*A. During fabrication.* These tanks and dry-bulk carriers are entered repeatedly throughout the fabrication process. These products are not configured identically, but the manufacturing processes by which they are made are very similar.

*Sources of hazards.* In addition to the mechanical hazards arising from the risks that an entrant would be injured due to contact with components of the tank or the tools being used, there is also the risk that a worker could be injured by breathing fumes from welding materials or mists or vapors from materials used to coat the tank interior. In addition, many of these vapors and mists are flammable, so the failure to properly ventilate a tank could lead to a fire or explosion.

*Control of hazards.*

*Welding.* Local exhaust ventilation shall be used to remove welding fumes once the tank or carrier is completed to the point that workers may enter and exit only through a manhole. (Follow the requirements of 29 CFR 1910, subpart Q, OSHA's welding standard, at all times.) Welding gas tanks may never be brought into a tank or carrier that is a permit entry confined space.

*Application of interior coatings/linings.* Atmospheric hazards shall be controlled by forced air ventilation sufficient to keep the atmospheric concentration of flammable materials below 10% of the lower flammable limit (LFL) (or lower explosive limit (LEL), whichever term is used locally). The appropriate respirators are provided and shall be used in addition to providing forced ventilation if the forced ventilation does not maintain acceptable respiratory conditions.

*Permits.* Because of the repetitive nature of the entries in these operations, an "Area Entry Permit" will be issued for a 1 month period to cover those production areas where tanks are fabricated to the point that entry and exit are made using manholes.

*Authorization.* Only the area supervisor may authorize an employee to enter a tank within the permit area. The area supervisor must determine that conditions in the tank trailer, dry bulk trailer or truck, etc. meet permit requirements before authorizing entry.

*Attendant.* The area supervisor shall designate an employee to maintain communication by employer specified means with employees working in tanks to ensure their safety. The attendant may not enter any permit entry confined space to rescue an entrant or for any other reason, unless authorized by the rescue procedure and, and even then, only after calling the rescue team and being relieved by as attendant by another worker.

*Communications and observation.* Communications between attendant and entrant(s) shall be maintained throughout entry. Methods of communication that may be specified by the permit include voice, voice powered radio, tapping or rapping codes on tank walls, signalling tugs on a rope, and the attendant's observation that work activities such as chipping, grinding, welding, spraying, etc., which require deliberate operator control continue normally. These activities often generate so much noise that the necessary hearing protection makes communication by voice difficult.

*Rescue procedures.* Acceptable rescue procedures include entry by a team of employee-rescuers, use of public emergency services, and procedures for breaching the tank. The area permit specifies which procedures are available, but the area supervisor makes the final decision based on circumstances. (Certain injuries may make it necessary to breach the tank to remove a person rather than risk additional injury by removal through an existing manhole. However, the supervisor must ensure that no breaching procedure used for rescue would violate terms of the entry permit. For instance, if the tank must be breached by cutting with a torch, the tank surfaces to be cut must be free of volatile or combustible coatings within 4 inches (10.16 cm) of the cutting line and the atmosphere within the tank must be below the LFL.

*Retrieval line and harnesses.* The retrieval lines and harnesses generally required under this standard are usually impractical for use in tanks because the internal configuration of the tanks and their interior baffles and other structures would prevent rescuers from hauling out injured entrants. However, unless the rescue procedure calls for breaching the tank for rescue, the rescue team shall be trained in the use of retrieval lines and harnesses for removing injured employees through manholes.

*B. Repair or service of "used" tanks and bulk trailers.*

*Sources of hazards.* In addition to facing the potential hazards encountered in fabrication or manufacturing, tanks or trailers which have been in service may contain residues of dangerous materials, whether left over from the transportation of hazardous cargoes or generated by chemical or bacterial action on residues of non-hazardous cargoes.

*Control of atmospheric hazards.* A "used" tank shall be brought into areas where tank entry is authorized only after the tank has been emptied, cleansed (without employee entry) of any residues, and purged of any potential atmospheric hazards.

*Welding.* In addition to tank cleaning for control of atmospheric hazards, coating and surface materials shall be removed 4 inches (10.16 cm) or more from any surface area where welding or other torch work will be done and care taken that the atmosphere within the tank remains well below the LFL. (Follow the requirements of 29 CFR 1910, subpart Q, OSHA's welding standard, at all times.)

*Permits.* An entry permit valid for up to 1 year shall be issued prior to authorization of entry into used tank trailers, dry bulk trailers or trucks. In addition to the pre-entry cleaning requirement, this permit shall require the employee safeguards specified for new tank fabrication or construction permit areas.

*Authorization.* Only the area supervisor may authorize an employee to enter a tank trailer, dry bulk trailer or truck within the permit area. The area supervisor must determine that the entry permit requirements have been met before authorizing entry.

APPENDIX D TO § 1910.146—SAMPLE PERMITS

Appendix D - 1  
Permit-required confined space Entry Permit  
Date and Time Issued: \_\_\_\_\_  
Date and Time Expires: \_\_\_\_\_  
Job Supervisor: \_\_\_\_\_  
Work to be performed: \_\_\_\_\_  
Equipment to be worked on: \_\_\_\_\_  
Stand-by personnel: \_\_\_\_\_

Atmospheric Checks: Time \_\_\_\_\_  
Oxygen \_\_\_\_\_ %  
Explosive \_\_\_\_\_ % L.F.L.  
Toxic \_\_\_\_\_ PPM

Tester's signature \_\_\_\_\_  
Source isolation (No Entry): N/A Yes No  
Pumps or lines blinded, ( ) ( ) ( )  
disconnected, or blocked ( ) ( ) ( )  
Ventilation Modification: N/A Yes No  
Mechanical ( ) ( ) ( )  
Natural Ventilation only ( ) ( ) ( )  
Atmospheric check after  
isolation and Ventilation:  
Oxygen \_\_\_\_\_ %  
Explosive \_\_\_\_\_ % L.F.L.  
Toxic \_\_\_\_\_ PPM  
Time \_\_\_\_\_ PPM H<sub>2</sub>S

Testers signature \_\_\_\_\_  
Communication procedures: \_\_\_\_\_  
Rescue procedures: \_\_\_\_\_

Periodic atmospheric tests:  
Oxygen \_\_\_\_\_ % Time \_\_\_\_\_ % Time \_\_\_\_\_  
Oxygen \_\_\_\_\_ % Time \_\_\_\_\_ % Time \_\_\_\_\_  
Explosive \_\_\_\_\_ % Time \_\_\_\_\_ % Time \_\_\_\_\_  
Explosive \_\_\_\_\_ % Time \_\_\_\_\_ % Time \_\_\_\_\_  
Toxic \_\_\_\_\_ % Time \_\_\_\_\_ % Time \_\_\_\_\_  
Toxic \_\_\_\_\_ % Time \_\_\_\_\_ % Time \_\_\_\_\_

Prepared By: (Supervisor) \_\_\_\_\_  
Reviewed By: (Unit Supervisor) \_\_\_\_\_  
Viewed By: (Cs Operations Personnel): \_\_\_\_\_  
(printed name) \_\_\_\_\_  
(signature) \_\_\_\_\_

Permit to be kept at job site. Return job site copy to Safety Office following job completion.  
Original (Safety Office) Yellow (Unit Supervisor) Hard (Job site)

Appendix D - 2

ENTRY PERMIT  
PERMIT VALID FOR 8 HOURS ONLY. ALL PERMIT COPIES REMAIN AT SITE UNTIL JOB COMPLETED  
DATE: - SITE LOCATION/DESCRIPTION

PURPOSE OF ENTRY  
SUPERVISOR(S) in charge of crews Type of Crew Phone #

COMMUNICATION PROCEDURES  
ESCUE PROCEDURES (PHONE NUMBERS AT BOTTOM)

<b>BOLD DENOTES MINIMUM REQUIREMENTS TO BE COMPLETED AND REVIEWED PRIOR TO ENTRY*</b>	<b>REQUIREMENTS COMPLETED</b>	<b>DATE TIME</b>
Lock Out/De-energize/Try-out	Full Body Harness w/"D" ring	
Line(s) Broken-Capped-Blank	Emergency Escape Retrieval Eq	
Surge-Flush and Vent	Lifelines	
entilation	Fire Extinguishers	
ecure Area (Post and Flag)	Lighting (Explosive Proof)	
reathing Apparatus	Protective Clothing	
esuscitator - Inhalator	Respirator(s) (Air Purifying)	
tandby Safety Personnel	Burning and Welding Permit	

Note: Items that do not apply enter N/A in the blank.

\*\* RECORD CONTINUOUS MONITORING RESULTS EVERY 2 HOURS \*\*

<b>CONTINUOUS MONITORING**</b>	Permissible
EST(S) TO BE TAKEN	Entry Level
PERCENT OF OXYGEN	19.5% to 23.5%
<b>LOWER FLAMMABLE LIMIT</b>	Under 10%
<b>CARBON MONOXIDE</b>	+35 PPM
romatic Hydrocarbon	+ 1 PPM * 5PPM
ydrogen Cyanide	(Skin) * 4PPM
ydrogen Sulfide	+10 PPM *15PPM
ulfur Dioxide	+ 2 PPM * 5PPM
mmonia	*35PPM

Short-term exposure limit:Employee can work in the area up to 15 minutes.

8 hr. Time Weighted Avg.:Employee can work in area 8 hrs (longer with appropriate respiratory protection).

REMARKS:

GAS TESTER NAME & CHECK # INSTRUMENT(S) USED MODEL &/OR TYPE SERIAL &/OR UNIT #

SAFETY STANDBY PERSON(S) CHECK # CONFINED SPACE ENTRANT(S) CHECK # CONFINED SPACE ENTRANT(S) CHECK #

SUPERVISOR AUTHORIZATION - ALL CONDITIONS SATISFIED Safety 4901 Gas Coordinator 4529/5387 DEPARTMENT/PHONE

AMBULANCE 2800 FIRE 2900

## Appendix E to § 1910.146—Sewer System Entry

Sewer entry differs in three vital respects from other permit entries; first, there rarely exists any way to completely isolate the space (a section of a continuous system) to be entered; second, because isolation is not complete, the atmosphere may suddenly and unpredictably become lethally hazardous (toxic, flammable or explosive) from causes beyond the control of the entrant or employer, and third, experienced sewer workers are especially knowledgeable in entry and work in their permit spaces because of their frequent entries. Unlike other employments where permit space entry is a rare and exceptional event, sewer workers' usual work environment is a permit space.

(1) *Adherence to procedure.* The employer should designate as entrants only employees who are thoroughly trained in the employer's sewer entry procedures and who demonstrate that they follow these entry procedures exactly as prescribed when performing sewer entries.

(2) *Atmospheric monitoring.* Entrants should be trained in the use of, and be equipped with, atmospheric monitoring equipment which sounds an audible alarm, in addition to its visual readout, whenever one of the following conditions are encountered: Oxygen concentration less than 19.5 percent; flammable gas or vapor at 10 percent or more of the lower flammable limit (LFL); or hydrogen sulfide or carbon monoxide at or above 10 ppm or 35 ppm, respectively, measured as an 8-hour time-weighted average. Atmospheric monitoring equipment needs to be calibrated according to the manufacturer's instructions. The oxygen sensor/broad range sensor is best suited for initial use in situations where the actual or potential contaminants have not been identified, because broad range sensors, unlike substance-specific sensors, enable employers to obtain an overall reading of the hydrocarbons (flammables) present in the space. However, such sensors only indicate that a hazardous threshold of a class of chemicals has been exceeded. They do not measure the levels of contamination of specific substances. Therefore, substance-specific devices, which measure the actual levels of specific substances, are best suited for use where actual and potential contaminants have been identified. The measurements obtained with substance-specific devices are of vital importance to the employer when decisions are made concerning the measures necessary to protect entrants (such as ventilation or personal protective equipment) and the setting and attainment of appropriate entry conditions. However, the sewer environment may suddenly and unpredictably change, and the substance-specific devices may not detect the potentially lethal atmospheric hazards which may enter the sewer environment.

Although OSHA considers the information and guidance provided above to be appropriate and useful in most sewer entry situations, the Agency emphasizes that each employer must consider the unique circumstances, including the predictability of the atmosphere, of the sewer permit spaces in the employer's workplace in preparing for entry. Only the employer can decide, based upon his or her knowledge of, and experience with permit spaces in sewer systems, what the best type of testing instrument may be for any specific entry operation.

The selected testing instrument should be carried and used by the entrant in sewer line work to monitor the atmosphere in the entrant's environment, and in advance of the entrant's direction of movement, to warn the entrant of any deterioration in atmospheric conditions. Where several entrants are working together in the same immediate location, one instrument, used by the lead entrant, is acceptable.

(3) *Surge flow and flooding.* Sewer crews should develop and maintain liaison, to the extent possible, with the local weather bureau and fire and emergency services in their area so that sewer work may be delayed or interrupted and entrants withdrawn whenever sewer lines might be suddenly flooded by rain or fire suppression activities, or whenever flammable or other hazardous materials are released into sewers during emergencies by industrial or transportation accidents.

(4) *Special Equipment.* Entry into large bore sewers may require the use of special equipment. Such equipment might include such items as atmosphere monitoring devices with automatic audible alarms, escape self-contained breathing apparatus (ESCBAs) with at least 10 minute air supply (or other NIOSH approved self-rescuer), and waterproof flashlights, and may also include boats and rafts, radios and rope stand-offs for pulling around bends and corners as needed.

## Appendix F to § 1910.146—Rescue Team or Rescue Service Evaluation Criteria (Non-Mandatory)

(1) This appendix provides guidance to employers in choosing an appropriate rescue service. It contains criteria that may be used to evaluate the capabilities both of prospective and current rescue teams. Before a rescue team can be trained or chosen, however, a satisfactory permit program, including an analysis of all permit-required confined spaces to identify all potential hazards in those spaces, must be completed. OSHA believes that compliance with all the provisions of § 1910.146 will enable employers to conduct permit space operations without recourse to rescue services in nearly all cases. However, experience indicates that circumstances will arise where entrants will need to be rescued from permit spaces. It is therefore important for employers to select rescue services or teams, either on-site or off-site, that are equipped and capable of minimizing harm to both entrants and rescuers if the need arises.

(2) For all rescue teams or services, the employer's evaluation should consist of two components: an initial evaluation, in which employers decide whether a potential rescue service or team is adequately trained and equipped to perform permit space rescues of the kind needed at the facility and whether such rescuers can respond in a timely manner, and a performance evaluation, in which employers measure the performance of the team or service during an actual or practice rescue. For example, based on the initial evaluation, an employer may determine that maintaining an on-site rescue team will be more expensive than obtaining the services of an off-site team, without being significantly more effective, and decide to hire a rescue service. During a performance evaluation, the employer could decide, after observing the rescue service perform a practice rescue, that the service's training or preparedness was not adequate to effect a timely or effective rescue at his or her facility and decide to select another rescue service, or to form an internal rescue team.

### A. Initial Evaluation

I. The employer should meet with the prospective rescue service to facilitate the evaluations required by § 1910.146(k)(1)(i) and § 1910.146(k)(1)(ii). At a minimum, if an off-site rescue service is being considered, the employer must contact the service to plan and coordinate the evaluations required by the standard. Merely posting the service's number or planning to rely on the 911 emergency phone number to obtain these services at the time of a permit space emergency would not comply with paragraph (k)(1) of the standard.

II. The capabilities required of a rescue service vary with the type of permit spaces from which rescue may be necessary and the hazards likely to be encountered in those spaces. Answering the questions below will assist employers in determining whether the rescue service is capable of performing rescues in the permit spaces present at the employer's workplace.

1. What are the needs of the employer with regard to response time (time for the rescue service to receive notification, arrive at the scene, and set up and be ready for entry)? For example, if entry is to be made into an IDLH atmosphere, or into a space that can quickly develop an IDLH atmosphere (if ventilation fails or for other reasons), the rescue team or service would need to be standing by at the permit space. On the other hand, if the danger to entrants is restricted to mechanical hazards that would cause injuries (e.g., broken bones, abrasions) a response time of 10 or 15 minutes might be adequate.

2. How quickly can the rescue team or service get from its location to the permit spaces from which rescue may be necessary? Relevant factors to consider would include: the location of the rescue team or service relative to the employer's workplace, the quality of roads and highways to be traveled, potential bottlenecks or traffic congestion that might be encountered in transit, the reliability of the rescuer's vehicles, and the training and skill of its drivers.

3. What is the availability of the rescue service? Is it unavailable at certain times of the day or in certain situations? What is the likelihood that key personnel of the rescue service might be unavailable at times? If the rescue service becomes unavailable while an entry is underway, does it have the capability of notifying the employer so that the employer can instruct the attendant to abort the entry immediately?

4. Does the rescue service meet all the requirements of paragraph (k)(2) of the standard? If not, has it developed a plan that will enable it to meet those requirements in the future? If so, how soon can the plan be implemented?

5. For off-site services, is the service willing to perform rescues at the employer's workplace? (An employer may not rely on a rescuer who declines, for whatever reason, to provide rescue services.)

6. Is an adequate method for communications between the attendant, employer and prospective rescuer available so that a rescue request can be transmitted to the rescuer without delay? How soon after notification can a prospective rescuer dispatch a rescue team to the entry site?

7. For rescues into spaces that may pose significant atmospheric hazards and from which rescue entry, patient packaging and retrieval cannot be safely accomplished in a relatively short time (15–20 minutes), employers should consider using airline respirators (with escape bottles) for the rescuers and to supply rescue air to the patient. If the employer decides to use SCBA, does the prospective rescue service have an ample supply of replacement cylinders and procedures for rescuers to enter and exit (or be retrieved) well within the SCBA's air supply limits?

8. If the space has a vertical entry over 5 feet in depth, can the prospective rescue service properly perform entry rescues? Does the service have the technical knowledge and equipment to perform rope work or elevated rescue, if needed?

9. Does the rescue service have the necessary skills in medical evaluation, patient packaging and emergency response?

10. Does the rescue service have the necessary equipment to perform rescues, or must the equipment be provided by the employer or another source?

## B. Performance Evaluation

Rescue services are required by paragraph (k)(2)(iv) of the standard to practice rescues at least once every 12 months, provided that the team or service has not successfully performed a permit space rescue within that time. As part of each practice session, the service should perform a critique of the practice rescue, or have another qualified party perform the critique, so that deficiencies in procedures, equipment, training, or number of personnel can be identified and corrected. The results of the critique, and the corrections made to respond to the deficiencies identified, should be given to the employer to enable it to determine whether the rescue service can quickly be upgraded to meet the employer's rescue needs or whether another service must be selected. The following questions will assist employers and rescue teams and services evaluate their performance.

1. Have all members of the service been trained as permit space entrants, at a minimum, including training in the potential hazards of all permit spaces, or of representative permit spaces, from which rescue may be needed? Can team members recognize the signs, symptoms, and consequences of exposure to any hazardous atmospheres that may be present in those permit spaces?
2. Is every team member provided with, and properly trained in, the use and need for PPE, such as SCBA or fall arrest equipment, which may be required to perform permit space rescues in the facility? Is every team member properly trained to perform his or her functions and make rescues, and to use any rescue equipment, such as ropes and backboards, that may be needed in a rescue attempt?
3. Are team members trained in the first aid and medical skills needed to treat victims overcome or injured by the types of hazards that may be encountered in the permit spaces at the facility?
4. Do all team members perform their functions safely and efficiently? Do rescue service personnel focus on their own safety before considering the safety of the victim?
5. If necessary, can the rescue service properly test the atmosphere to determine if it is IDLH?
6. Can the rescue personnel identify information pertinent to the rescue from entry permits, hot work permits, and MSDSs?
7. Has the rescue service been informed of any hazards to personnel that may arise from outside the space, such as those that may be caused by future work near the space?
8. If necessary, can the rescue service properly package and retrieve victims from a permit space that has a limited size opening (less than 24 inches (60.9 cm) in diameter), limited internal space, or internal obstacles or hazards?
9. If necessary, can the rescue service safely perform an elevated (high angle) rescue?

10. Does the rescue service have a plan for each of the kinds of permit space rescue operations at the facility? Is the plan adequate for all types of rescue operations that may be needed at the facility? Teams may practice in representative spaces, or in spaces that are “worst-case” or most restrictive with respect to internal configuration, elevation, and portal size. The following characteristics of a practice space should be considered when deciding whether a space is truly representative of an actual permit space:

(1) Internal configuration.

(a) Open—there are no obstacles, barriers, or obstructions within the space. One example is a water tank.

(b) Obstructed—the permit space contains some type of obstruction that a rescuer would need to maneuver around. An example would be a baffle or mixing blade. Large equipment, such as a ladder or scaffold, brought into a space for work purposes would be considered an obstruction if the positioning or size of the equipment would make rescue more difficult.

(2) Elevation.

(a) Elevated—a permit space where the entrance portal or opening is above grade by 4 feet or more. This type of space usually requires knowledge of high angle rescue procedures because of the difficulty in packaging and transporting a patient to the ground from the portal.

(b) Non-elevated—a permit space with the entrance portal located less than 4 feet above grade. This type of space will allow the rescue team to transport an injured employee normally.

(3) Portal size.

(a) Restricted—A portal of 24 inches or less in the least dimension. Portals of this size are too small to allow a rescuer to simply enter the space while using SCBA. The portal size is also too small to allow normal spinal immobilization of an injured employee.

(b) Unrestricted—A portal of greater than 24 inches in the least dimension. These portals allow relatively free movement into and out of the permit space.

(4) Space access.

(a) Horizontal—The portal is located on the side of the permit space. Use of retrieval lines could be difficult.

(b) Vertical—The portal is located on the top of the permit space, so that rescuers must climb down, or the bottom of the permit space, so that rescuers must climb up to enter the space. Vertical portals may require knowledge of rope techniques, or special patient packaging to safely retrieve a downed entrant.

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