| Authored By:<br>John Atchison | **Blanchard Refining Company LLC**<br>**Galveston Bay Refinery** | Doc No.: REW-000023-GB<br>Rev No: 0 |
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| Doc Custodian:<br>Environmental Supervisor | **ENV-43 Portable Tank Ordering, Use and Return Process** | Refinery Environmental Work Procedure |
| Approved By:<br>Eric Kaysen | | |
| Date Approved: 7/26/2021 | Next Review Date: 8/31/2026 | Effective Date: 8/20/2021 |

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## 1.0 Purpose

The purpose of this procedure is to define the steps and information needed to order, use and return portable tanks > 100 gallons. The procedure also defines requirements associated with the use of frac, or temporary, tanks and vessels used in support of planned or routine maintenance, startup and shutdown (MSS) or turnaround (TAR) activities. The Environmental Protection agency (EPA) and/or the Texas Commission on Environmental Quality (TCEQ) regulate materials that are processed in portable tanks.

## 2.0 Scope

This procedure applies to the usage of portable tanks in all Refinery, Docks, operating areas, laboratory, storage, maintenance and contractor facilities.

## 3.0 Procedure

3.1 Roles and Responsibilities

3.1.1 Portable tanks, also known as frac or poly tanks must not be used to manage RCRA hazardous waste. Tank truck trailers or other vessels must used for hazardous waste going offsite for disposal. Portable tanks must only be used for plant wastewater intended for treatment and disposed in the MPC Refinery plant wastewater treatment system or in the underground injection wells.

3.1.2 Carbon steel portable tanks must not be used for corrosive materials with a pH below 3 or greater than 11.5. Poly tanks or other acid resistant materials of construction must be used for corrosive liquids. Carbon steel portable tanks are designed for processing of non-corrosive wastewaters, process water mixtures, organic contaminated water mixtures, and other non-corrosive liquid materials. Small amounts of acids and bases whose intended use is for pH adjustment can be added for processing purposes.

3.1.3 Portable tanks are not designed for transporting materials and must not be moved with materials in them. Vacuum trucks and tank trailers must be used for the storage and movement/transfer of hazardous wastewaters or other liquid waste. See Section IX for more details.

3.1.4 Training on this procedure is given to the site via VTA's.

3.2 Portable Tank Ordering Process

3.2.1 The ordering unit will provide the following information to the Environmental Department (MSS (SME) Subject Matter Expert and Waste Water (SME) Subject Matter Expert and the BWON (SME) Subject Matter Expert) by e-mailing the completed section (A) of Portable Tank Ordering, Use & Return Form MSS-0011 (Prior to Use). The SME's can be located on the Environmental Sharepoint site. This form will be maintained follow the tank until the tank is off-rented. If the tank is relocated to another job onsite the ordering process must re-initiated.

3.2.2 Filling emissions for tanks shall be calculated using the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Loading Operations" and standing emissions determined by the Environmental Department using: TCEQ publication titled "Technical Guidance Package for Chemical Sources - Storage Tanks."

3.2.3 Attach the MSDS on all chemicals or compounds that will be put into the portable tank and the approximate percentage of each chemical. Also include a brief explanation of the project. Names of all materials refined or manufactured onsite that will enter the frac tank or poly tank, including water, organics, etc. Benzene or other light volatiles in the material entering the portable tank will require at a minimum the tank be closed when not

in use and may require the tank be fitted with air emission controls (see section VII) and a level gauge for level monitoring if one is not included on the tank.

3.2.4 Ensure all frac, or temporary, tanks and vessels used in support of MSS or TAR activities >100 gallons are covered at all times except when emptying or filling and equipped with submerged fill pipes that discharge within 6 inches of the tank/vessel bottom. The rental contractor will ensure GBR that all tanks ordered will be equipped with a submerged fill pipe located within 6" of the bottom of the tank. Additionally, ensure the exterior surfaces of these tanks/vessels that are exposed to the sun are white or aluminum effective May 1, 2013 (note, this does not apply to tanks/vessels that only vent to atmosphere when being filled)

3.2.4.1 A "container" means any portable waste management unit in which a material is stored, transported, treated, or otherwise handled. Containers used to store, transport or handle materials that may meet the definition of waste under the BWON regulations within the Galveston Bay Refinery and Galveston Bay Refinery Docks must comply with the inspection and monitoring requirements of 40 CFR §61.345. Each container that stores waste material containing a volatile organic compound (VOC) must be inspected with a portable instrument used to detect VOC leaks from individual sources as specified in 40 CFR §60 Appendix A, US EPA Method 21, initially, quarterly and annually after the container loaded to any extent and is closed to ensure there are no VOC emission leaks over 500 ppmv.

3.2.4.2 The pH, temperature and pressure of the material entering the portable tank must be identified. Frac and poly tanks are not designed for pressure or vacuum service.

3.2.4.3 The estimated volume and whether there will be any solids.

3.2.4.4 A Disposal Plan approved by the Environmental Department. If wastewater generated by the project is unable to

3.2.4.4.1 be treated by the refinery wastewater treatment facilit (i.e., non-wastewater, incompatible, etc.) via the appropriate unit oil water separator or

3.2.4.4.2 be reclaimed by the unit, or

3.2.4.4.3 be reclaimed by the refinery via the slop oil tank, or

3.2.4.4.4 be disposed of in the underground injection wells, the generating unit must use a tank truck trailer or other container designed to transport hazardous materials over the road to an offsite disposal facility. The Environmental Department will be responsible for locating a disposal facility and providing manifests or bill-of ladings for off-site shipments.

3.2.5 Forward this information to the Environmental Group. This can be done by:

3.2.5.1 E-mail to the Environmental MSS SME Waste Water SME and the BWON SME. The SMEs contact information can be located on the Environmental Sharepoint site.

3.2.5.2 During off-hours (before or after normal business hours), call the rental company and email the form to the MSS SME Waste Water SME and the BWON SME the following working day.

3.2.6 Based on the above information the Environmental Department will assist the ordering unit in choosing the type of portable tank, help refine a disposal plan and determine if air emissions controls are needed. Note, additional air emissions monitoring and recordkeeping may be required depending on the air emissions control device used.

3.2.7 Once Section A of the form is completed and all information is confirmed the Environmental Department will e-mail approval back to the rental team at the Refinery.

3.2.8 Once approval from Environmental has been received,

3.2.8.1 For the Refinery –

3.2.8.1.1 The requestor must request a tank from the tank vendor.The Rental Team will "release" the requisition and the tank will be delivered.

3.3 Tank Usage

3.3.1 Once tank is put into service, the requestor shall fill out section B "Tank/Vessel Loading Process" on the same Form MSS-0011 with the information you used to request a tank and forward to the Environmental Group The BWON SME shall give the LDAR group notification that the tank must be initially monitored once the tank is in service and tracking may begin to perform quarterly monitoring thereafter per the BWON regulations.

If dual carbon canisters alone are used on a portable tank(s) then monitoring must be conducted for benzene and VOCs, once every hour to determine breakthrough and recorded. If the dual carbon system has a liquid scrubber upstream of the carbon canisters monitoring may be extended to every 12 hours to determine breakthrough. Single carbon canisters are not allowed. Breakthrough is defined as 1 ppmv of benzene and 50 ppmv of VOC above background. Once breakthrough occurs the lead carbon canister must be switched to the lag canister and the initial carbon canister shall be changed out within 24 hours.

Monitoring of the carbon canisters shall be performed using an instrument meeting the requirements of EPA Method 21 (40 CFR 60, Appendix A) with the following exceptions:

3.3.1.1 The instrument (such as an UltraRae) shall be calibrated within 24 hours of use. The instrument response factor shall be less than 2.0 seconds. The calibration gas and the gas to be to be measured, and its approximate response factor shall be recorded on Form MSS-012.

3.3.1.2 During sampling, data recording shall not begin until after two times the instrument response time. The date and time shall be recorded, and VOC concentration shall be monitored for at least five minutes, recording VOC concentration each minute. Benzene shall be monitored two times, five minutes apart and recorded. Monitoring results shall be recorded on Form MSS-012. All forms shall be sent to the MSS SME as soon as the frac tank is no longer in use. or by the 5$^{th}$ working day of the following month if the portable tank is in use for longer than one month.

3.4 Storage Limits

3.4.1 **Note**: If the portable tank will be used onsite at the same location for a period exceeding one year or longer the Environmental Department must be notified 60 days before the 1 year limit has been reached. After one year the portable tank is a waste management unit and must be registered with the state regulatory agency. The Environmental Department will be required to submit a permit application. Users must make all attempts to avoid this situation.

3.5 Portable Tank Return Process

3.5.1 When the project is complete, the ordering customer will ensure the portable tank is decontaminated and emptied according to the disposal plan and there are no nuisance odors. Portable tanks, specifically frac tanks, are not designed by the manufacturer or permitted by the DOT to be moved with more than 5 gallons of water or 1-inch of residue in them.

3.5.2 The ordering customer will complete Section C of Portable tank Ordering, Use & Return Form MSS-0011 "After Use" (Unloading and Return Process) located in Attachment C and email to Environmental (MSS SME, Waste Water SME and BWON SME) after every tank/vessel use. The Environmental MSS SME will ensure that these documents are retained.

3.5.3 Once decontamination is complete

3.5.3.1 For the Refinery –

3.5.3.1.1 Call the rental vendor for pickup. Failure to have material adequately removed will slow down the process of taking the portable tank off rent and rental costs will increase.

3.5.4 Once the tank is properly empty the Environmental Department will issue a bill of lading to the requester for shipment offsite for washout, if necessary.

## 4.0 Definitions

4.1 None

## 5.0 References

5.1 TCEQ "Technical Guidance Package for Chemical Sources - Loading Operations"

5.2 TCEQ "Technical Guidance Package for Chemical Sources - Storage Tanks"

## 6.0 Attachments

6.1 ENV-43A Form MSS-11 Portable Tank Ordering, Use & Return

6.2 ENV-43B Form MSS-12 Portable Tank Calibration & Monitoring Log

## 7.0 Revision History

| Revision Number | Description of Change | Written by | Approved by | Revision Date | Effective Date |
|---|---|---|---|---|---|
| 0 | Original Issue. New integrated site procedure replaces GBR-HESS-ENV-43 and REW-N134-BWON-FORM02-TC under MOC 93391. | J. L. Atchinson | E. R. Kaysen | 7/26/2021 | 8/20/2021 |