

**Kirby Inland Marine, LP**

55 Waugh Drive, Suite 1000  
Houston, Texas 77007

DEPARTMENT OF  
TRANSPORTATION  
SAFETY OPERATIONS

201 APR 26 A 10:07



P.O. Box 1537  
Houston, Texas 77251-1537  
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April 21, 2011

Docket Management Facility (M-30)  
U.S. Department of Transportation  
West Building Ground Floor, Room W12-140  
1200 New Jersey Avenue, SE.  
Washington, DC 20590-0001

**RE: Comments on Notice of Proposed Rule Making  
United States Coast Guard Marine Vapor Recovery System Requirements**

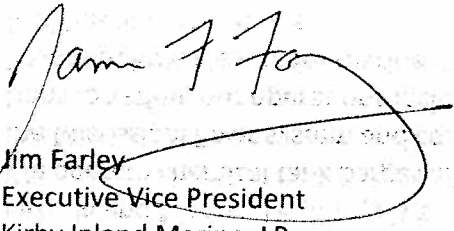
Dear Sir:

Kirby Inland Marine, LP (Kirby) is an inland marine transportation company based in Houston, Texas. We operate chemical tank barges all along the Gulf Intracoastal Waterway and the entire length of the Mississippi River system and connecting inland waterways. In addition to waterborne transportation, our operations include shoreside tank barge cleaning. As such, the Notice of Proposed Rule Making for marine vapor control systems has the potential to impact our current facilities and operations.

Kirby appreciates the opportunity to comment on the proposed rule language. The comments attached to this letter reflect Kirby's long operational history of safely performing cargo transfers and cleaning chemical tank barges, and we have specifically identified areas where further consideration should be given to the rule language with regard to the effectiveness of the requirements.

Should you have any questions or wish to discuss the following comments in more detail, please contact me at (713) 435-1603 or email address [jim.farley@kirbycorp.com](mailto:jim.farley@kirbycorp.com).

Sincerely,

  
Jim Farley  
Executive Vice President  
Kirby Inland Marine, LP

| Citation               | Comment on Proposed Rule Language                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| 33 CFR §154.500(e)(3)  | The Hazmat Service marking requirement for vessel crossover hoses would require every unmanned tank barge to have transfer procedures with a specified cargo hose service requirement. This requirement should be satisfied with company crossover hose records being kept on manned vessels or at other approved for specific barge transfers. Crossover hoses are a resource that gets moved from vessel to vessel. The hoses are often not dedicated to a tank barge.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 33 CFR §154.500(h)     | This will require all fuel transfer hoses used for fueling barge pump engine fuel tanks to be fitted with an automatic back pressure shutoff nozzle. Please consider revising requirement to state, "Each hose used to transfer fuel to a vessel that has a fill pipe for which containment cannot practically be provided must be equipped with an automatic back pressure shutoff nozzle or the Person in Charge (PIC) must constantly monitor the transfer."                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 33 CFR §154.2020(b)(4) | The term "multi-breasted barge loading" is not commonly used in the tank barge industry. It should instead be referenced as "two barge, doubled-up loading", "side by side tandem barge loading", or "tandem barge loading with crossover hoses" to better enable industry to understand and implement requirements using this language.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 33 CFR §154.2020(c)    | Language as it is written currently is difficult to understand. Consider revising it to read "Prior to operating a VCS to control tank vessel vapor during cargo line clearing back to the vessel cargo tank(s), the cargo line clearance system must be reviewed by a certifying entity. The requirements of 33 CFR §154.2104 must be certified as being met."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 33 CFR §154.2021       | The requirement, "Each facility vapor control system (VCS) must undergo an operational review by a certifying entity within three years of its initial certification or last operational review, to ensure its proper operation and maintenance", is unnecessary if a preventative maintenance program is in place and there have been no modifications to the vapor control system from a cargo or process perspective. Facility owners should be allowed flexibility when a preventative maintenance program is in place. Please revise the requirement to state, "Each facility vapor control system (VCS) must undergo an initial operational review by a certifying entity. A operational review by a certifying entity must be conducted if the vapor control system is modified or a new cargo is introduced to the system which is significantly different than cargoes already authorized for the system." |
| 33 CFR §154.2101(g)    | The requirement to have all facility transfer hoses/arms electrically insulated to ensure discontinuity between the vessel and the facility is a major operational change. Does this prohibit electrical bonding cables placed from the facility to the vessel before cargo transfers?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Citation               | Comment on Proposed Rule Language                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| 33 CFR §154.2105(d)(1) | <p>Many facilities equipped with detonation arrestors are operated safely by following manufacturer's specification and design. Requiring the facility to have a detonation arrestor as close as practical to the facility connection is a valid requirement. However, the distance requirement which states, "The total pipe length between the detonation arrestor and the facility vapor connection must not exceed 18 meters (59.1 feet)" is arbitrary. This requirement will result in costly and unnecessary modifications to existing facilities when exact locations of detonation arrestors are slightly outside the distance requirements. Please remove the distance requirement or allow existing facilities to maintain current locations as long as the detonation arrestor is located as close as practical to the facility connection.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 33 CFR §154.2105(d)(2) | <p>Revise this citation to read "Have an inerting, enriching, or diluting system that satisfies the requirements of 33 CFR §154.2107, or a detonation arrestor located as close as practicable to the facility vapor connection and a detonation arrestor located as close as practicable to the facility vapor destruction unit. The requirement, as written, is unnecessary because detonation arresters located at the facility vapor connection and vapor destruction unit will protect the barge, the facility, and the vapor destruction unit against back flashes and will therefore be as effective as enriching or inerting the entire facility vapor pipeline. Furthermore, requiring inerting and enriching will not solve the issue of eliminating an explosive atmosphere. An explosive atmosphere will still be present within the barge, the length of pipeline between the facility vapor connection and the first detonation arrestor, and the air / gas mixing point at the vapor destruction unit. Therefore the requirement of inerting and enriching is pointless because an explosive atmosphere will still exist within the process and will ultimately cause similar damage if uncontrolled ignition is realized during operations.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 33 CFR §154.2107       | <p>The distance of 72.2 feet (22 meters) for injection seems arbitrary and does not appear to improve personnel safety or equipment integrity. This distance does not decrease the likelihood of an explosive atmosphere occurring where the concentration is not maintained above the upper explosive limit (i.e. the barge, the length of pipeline between the facility vapor connection and the first detonation arrestor, and the air / gas mixing point at the vapor destruction unit). Additionally, certain facilities are required to take vapor samples which are representative of that which comes off of the barge. This requirement conflicts with state air permit requirements and existing monitoring equipment used to determine compliance. Flexibility for existing methods of operation, such as a system equipped with detonation arresters at the facility vapor connection and vapor destruction unit, should be provided. Further, injection near the facility connection will require excessive amounts of enrichment gas which will ultimately increase total emissions and waste natural resources. Allowances should be made for barge cleaning facilities because the ultimate goal of barge cleaning is to reduce the concentration in the barge below acceptable limits so that the remaining quantity of vapors can be degassed to the atmosphere. This is unlike that of loading operations in which a rich atmosphere is constantly available and excessive amounts of support gas are not required. During barge cleaning operations, the calorific value of the waste gas decreases with time which ultimately results in excessive use of support gas. The enrichment requirement will compound the problem of using excessive amounts of support gas.</p> |

| Citation            | Comment on Proposed Rule Language                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| 33 CFR §154.2107(b) | <p>Please remove the injection distance requirement or revise this citation to read “The total pipe length between the arrangement and the facility vapor connection must not exceed 300 meters (984.3 feet).” The requirement of inerting and enriching is pointless because an explosive atmosphere will still exist within the process and will ultimately cause similar damage if uncontrolled ignition is realized during operations. Allowances should be made for barge cleaning facilities because the ultimate goal of barge cleaning is to reduce the concentration in the barge below acceptable limits so that the remaining quantity of vapors can be degassed to the atmosphere. This is unlike that of loading operations in which a rich atmosphere is constantly available and excessive amounts of support gas are not required. During barge cleaning operations, the calorific value of the waste gas decreases with time which ultimately results in excessive use of support gas. The enrichment requirement will compound the problem of using excessive amounts of support gas.</p> |
| 33 CFR §154.2107(d) | <p>Calorimeters should be added to the list of approved devices.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 33 CFR §154.2110    | <p>Specific distances for placement of the detonation arrestor do not improve personnel safety or equipment integrity. The requirement should be revised to eliminate the distance specification.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 33 CFR §154.2113    | <p>This section unnecessarily imposes restrictions on vapor control systems used to process vapors from barges containing a wide variety of cargos. Alkylene oxides should not be segregated as there are no additional personnel safety or equipment integrity issues that need to be addressed. A segregated vapor collection and control system requirement will force some facilities to shutdown, others to perform expensive retrofits or even more expensive construction, and it will not improve the reliability or safety of systems in use today. . Pressure cargoes should not be included in these regulations. Further, alkylene oxides should not be required to obtain certification from a certifying entity, as the certification will not improve the safety of existing facilities which have been operating without incident for a statistically significant period of time.</p>                                                                                                                                                                                                       |
| 33 CFR §154.2150(g) | <p>Some facilities do not have an accurate means to determine initial cargo liquid transfer rates. The section should be revised to state that the initial flow rate and subsequent rates must be determined by instrumentation.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 33 CFR §154.2150(i) | <p>Compressed air should not be used to clear flammable liquid cargo lines. The process should be restated to indicate “inert gas such as nitrogen”. Further clarification to the term “gas” is required, as it is not clear whether cargo vapor or natural gas are allowable alternatives.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

| Citation                        | Comment on Proposed Rule Language                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| 33 CFR §154.2203(g)             | Tank barges are constructed such that each cargo tank vents into a common vapor system. The vapor system is equipped with a pressure gauge that is both easily accessible and visible to the crew performing the cargo tank cleaning. Individual cargo tank pressure sensing devices are not needed as one pressure sensing device can detect pressure of the entire barge via the common vapor system. The single pressure sensing device is installed on the common vapor header during the vapor control process and serves to protect each and every tank on the entire barge via the common vapor system.                                                                                                                                                                                                                                                                                                                                    |
| 33 CFR §154.2204                | Kirby's previous comments on detonation arrestors and distance limits for existing facilities apply here as well.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 46 CFR §35.35-5                 | Please provide clarification to state that ship-to-barge and barge-to-barge transfers are not included.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 46 CFR §39.1017(c)              | Barge tank liquid cargo stripping operations are a separate function from the cleaning facility vapor or gas freeing operations. At barge cleaning facilities, the cargo tank liquid heels are removed by positive displacement pumps, diaphragm pumps, or vacuum systems through small diameter piping. The cargo pump rating (stripping) is significantly less than the maximum flow rate for the pressure/vacuum relief valve and cannot affect the structural integrity of the barge. Furthermore, cargo hatches and/or the vent stack are opened during stripping and degassing operations to allow sufficient flow into the barge, and the barge cleaning facilities are all equipped to handle inadvertent hatch or valve closings through facility vacuum breakers, pressure/vacuum sensors, and alarms. Requiring additional COI calculations and certifications for a cargo tank heel stripping operation is excessive and unnecessary. |
| 46 CFR §39.1019(b)(1)-(2)       | Stripping systems have already been approved by USCG and are in use today. There is no need for the redundancy of additional approvals for existing equipment, particularly for equipment that has been proven to be safe and effective.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 46 CFR §39.2009(a)(2)(ii)-(iii) | These alarm time criteria will require accurate flow rate instrumentation that is not available on unmanned tank barges. Furthermore, some facilities do not have calibrated instrument flow rate determination during their cargo transfer to vessels.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 46 CFR §39.2014(b)              | Additional annual internal inspections of pressure valves is not needed. Pressure valves are already checked for proper operation on a more frequent basis, and the test lever is a sufficient means to determine proper operation without requiring dismantling and disassembly for internal inspection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 46 CFR §39.2015                 | "The indicating device must measure the pressure vacuum in the main vapor collection line and have a pressure indicator located where the cargo transfer is controlled" Does this statement require multiple pressure indicating devices on tank barges? If the pressure-indicating device is installed as close as practical to the vessel vapor collection system, this will not be typically where the cargo transfer is controlled. The cargo transfer is controlled on unmanned tank barges at the cargo tank valves which can be at six or more locations.                                                                                                                                                                                                                                                                                                                                                                                  |

| Citation              | Comment on Proposed Rule Language                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| 46 CFR §39.3000(g)    | The requirement needs to include a statement that accurate flow rate instrumentation must be provided at facilities or manned tank vessels.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 46 CFR §39.5001(a)    | “Each barge must be owned and operated by the same entity” is not relevant to the safe operation of a marine vapor control system. Barges can be operated by a different entity than the barge owner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 46 CFR §39.5001(b)(3) | 25 feet as the maximum limit for a barge vapor crossover hose appears to be arbitrarily set. Hoses greater than 25 feet are not subject to any additional risk of failure, nor do they impact the performance of shoreside vapor control systems when the pressure drop is considered before the cargo transfer.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 46 CFR §39.5001(e)    | The notification to the Commandant of specific facilities where doubled-up barge cargo transfers will be performed is not needed. The facilities are already required to have a USCG approved procedure to conduct these types of transfers. The barge owner/operator and barge tankerman PIC cannot sign a DOI without an approved facility VCS procedure, and if USCG believes additional safety precautions are needed, it is suggested this requirement be made part of the DOI.                                                                                                                                                                                                                                              |
| 46 CFR §39.6001(c)    | The requirement to label each stripping line is unnecessary. The stripping lines are already identified in the barge piping diagram. Labeling every stripping line is a costly requirement which must be continually maintained. Barge tank stripping systems have been in safe use many years without deck labeling.                                                                                                                                                                                                                                                                                                                                                                                                             |
| 46 CFR §39.6003(b)    | Tank barges are constructed such that each cargo tank vents into a common vapor system. There are no vapor piping block valves installed each individual cargo tank for the large majority of tank barges. The vapor system is equipped with a pressure gauge that is both easily accessible and visible to the crew performing the cargo tank cleaning. Individual cargo tank pressure sensing devices are not needed as one pressure sensing device can detect pressure of the entire barge via the common vapor system. The single pressure sensing device is installed on the common vapor header during the vapor control process and serves to protect each and every tank on the entire barge via the common vapor system. |