Comments in red from July 12 meeting; comments in blue are from Sept. 9 meeting

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Section 46 - Lightering Operations.
??/11/06

a. Applicability.

1. This section applies to the owner or operator of a service vessel that carries out crude oil lightering operations in the waters of the State.

   Mike expressed concern on the change in applicability from VOLs to crude oil only.

   The main reason for concern is the uncertainty as whether lightering of gasoline is regulated by Reg. 24 Sect. 43 (R24S43). R24S43 was reported to not include vapor balancing (VB) as a viable control strategy. Thus, if R24S43 is determined to apply to gasoline lightering, industry wants gasoline included in Reg. 24 Sect. 46 (R24S46), where VB is identified as a viable control strategy.

   Mike additionally noted that depending on the outcome of the above concern, the term crude oil had been used throughout the draft.

2. While carrying out emergency lightering operations, the owner or operator of a service vessel subject to this section is subject only to the requirements of paragraph h. of this section.

   While no changes were identified to paragraph a2 above, **Seth** expressed concern that this draft language would require a lightering operation to obtain pre-approval from the Department prior to their conducting emergency lightering operations. This is not the case.

   But as a result of this and related ensuing discussions, suggested changes were recommended to the definition of "emergency lightering" in paragraph b and to the notification requirements that apply during emergency lightering in paragraph h.

3. The owner or operator of a service vessel subject to this section may be required to obtain, revise, or amend permits issued by the Department pursuant to Regulations 2, 25, and/or 30 of the State of Delaware "Regulations Governing the Control of Air Pollution."

4. The requirements of this section are in addition to all other applicable State and Federal rules and regulations.

5. Nothing in this section shall be construed to require any act or omission that would be in violation of any rules or regulations of the United States Coast Guard or to prevent any act that is necessary to secure the safety of personnel, property, ~~and~~ **or** the environment.

   Tim suggested minor clarification in paragraph a5.

Draft

b. Definitions. As used in this section, all terms not defined herein shall have the meaning given them in Regulation 1 or in Section 2 of this regulation.

"Emergency lightering" means a lightering operation that is necessary to minimize an imminent danger to personnel, property, and the environment.

Following discussions concerning the intent of the proposed newly-revised definition above, **Rick** recommended returning to the original (2001) definition, but added there is a need to include those situations where the USCG may request special lightering operations. **Tim** agreed to draft the appropriate language for this addition.

Following the 7/12 meeting, **Tim** drafted a new definition for emergency lightering. The new definition (below) was discussed and there was general agreement that Tim's definition should be used.

"Emergency lightering" means the transfer of bulk liquid cargo to mitigate or prevent a cargo spill, to stabilize a vessel whose integrity has been compromised, or to comply with the requirements of a Coast Guard Captain of the Port Order issued under the authority of the Ports and Waterways Safety Act, 33 U.S.C. 1221, as implemented by 33 CFR 160.111.

"Existing lightering operation" means any owner or operator that has carried out a lightering operation in the waters of the State prior to the effective date of this section.

"Existing service vessel" means a service vessel that has carried out a lightering operation in the waters of the State prior to the effective date of this section.

"Lighter" or "lightering operation" means the transfer of crude oil from the cargo tank of a ship to be lightered to the cargo tank of a service vessel.

"Liquid leak" means a leak of more than three drops per minute of crude oil.

"Marine tank vessel" means any marine vessel, which is specifically constructed or converted to carry crude oil in tanks.

"New lightering operation" means any owner or operator that has not carried out a lightering operation in the waters of the State prior to the effective date of this section.

"New service vessel" means a service vessel that has not carried out a lightering operation in the waters of the State prior to the effective date of this section.

"Ozone Action Day" means a day that is predicted, based on forecasted weather conditions, to reach unhealthy ozone concentrations. Ozone Action Days are declared prior to 1430 hours for the following day.

Mike expressed concern that the recent changes to the ozone alert classifications could cause confusion with declaration of an OAD and recommended the definition of OAD be modified to insure that the declaration applied to "red days".

"Service vessel" means the marine tank vessel receiving crude oil during a lightering operation.

"Ship to be lightered" means the marine tank vessel delivering crude oil during a lightering operation.

"Vapor balancing" means the transfer of vapors displaced by the incoming crude oil from the tank of a service vessel into a tank of the ship to be lightered via their connected vapor collection systems.

"Vapor collection system" means an arrangement of piping and hoses used to collect vapors emitted from the cargo tanks of a marine tank vessel, and to transport those vapors to a vapor processing unit.

"Vapor control system" means an arrangement of piping and equipment used to control vapor emissions collected from a marine tank vessel. It includes the vapor collection system and the vapor processing unit. For the purposes of this section, it, also, includes vapor balancing.

"Vapor leak" means a gaseous leak that is detectable by sight, sound, or smell.

"Vapor processing unit" means the components of a vapor control system that recovers, destroys, or disperses vapors collected from a marine tank vessel.

"Vapor tight" means a marine tank vessel has successfully demonstrated vapor tightness, as provided in paragraph e.1.ii.D. or e.2.ii.E. of this section, within the preceding twelve months.

"Waters of the State" means those waters within the boundaries of the State, including the 12 mile circle described from New Castle and extended to the low water mark on the eastern side of the Delaware River and extending below the 12 mile circle with the middle of the shipping channel through the Delaware River and Bay and extending to the Atlantic Ocean and including those waters of the territorial sea which are in direct contact with the coast of Delaware, extending from the line of ordinary low water seaward for a distance of 3 geographical miles. This definition shall include any waters beyond the 3-mile mark as authorized by Federal Law.

c. Standards.

1. The owner or operator of a service vessel subject to this section shall comply with either of paragraph c.1.i., c.1.ii., or c.1.iii. while carrying out a lightering operation.

   i. Limit the VOC emissions from the service vessel to 5.7 grams per cubic meter (2 pounds per 1,000 barrels) of crude oil transferred.

   ii. Reduce the VOC emissions from the service vessel by at least 95 percent by weight from uncontrolled conditions.

   iii. ~~**Limit**~~ **Reduce** the VOC emissions from the service vessel by vapor balancing.

   Tim suggested minor clarification in the language of paragraph c1iii.

There was new discussion on the use of both limit and reduce. Limit and reduce seem well suited in there uses in c.1.i and ii, but may not be appropriate for c.1.iii. Suggested alternatives included

- "Capture VOC emissions",
- "Employ (Use) vapor balancing to",
- "Mitigate VOC emissions:,
- "Reduce uncontrolled VOC emissions" and
- Check what CA or EPA used in similar circumstances.

Sub Y uses "shall collect VOC vapors . . . and prevent . . . vapors . . . from passing . . . to the atmosphere . . ."

2. The owner or operator of a service vessel subject to this section shall only lighter crude oil into a vapor tight service vessel.

3. Prior to each lightering operation, the owner or operator of a service vessel subject to this section shall inspect the service vessel and the vapor control system of the service vessel to prevent inadvertent uncontrolled VOC emissions from the service vessel due to improperly positioned valves and hatch covers.

4. During each lightering operation, the owner or operator of a service vessel subject to this section shall inspect the vapor control system of the service vessel for liquid leaks and vapor leaks during the transfer of crude oil to that service vessel. Whenever a leak is detected:

Mike questioned the need for even including liquid leaks in R24S46. It was pointed out that lightering operations are required to report to the USCG any quantity of liquid leaking "upon the deck". Thus, all liquid leaks are contained and repaired immediately, if at all possible. If non-containable or non-repairable during the lightering operation, operations would be shut down.

Mike again indicated that requirements should reflect normal procedure for vapor leaks only, not liquid leaks. It was pointed out that c.4. addressed liquid leaks in the vapor control system (as opposed to all piping) and that the only likely liquid (if any) would be a result of condensation or entrainment. Thus, it is unnecessary to include liquid leaks in the regulation.

Post meeting note: Check with Tim to see if 33 CFR 157.120, especially (p) applies during lightering operations. Also ask for clarification of what the "transfer system" is when vapor balancing is conducted; ie does requirement only apply to the liquid systems.

It was pointed out and discussed that liquid leaks into the water from other sources would be a USCG violation.

i. The leak shall be tagged and recorded.

This is one industry's major concern, as reflected in paragraph c4 above. While there is sufficient information to support their immediate attention to and repair of, when a liquid leak is identified, documentation is minimal with only a short recordkeeping history when a leak is immediately remedied. If immediate repair was not successful, Rick indicated that operations would be suspended and repairs completed before future lightering operations. When leaks are found, they are logged on deckhand's log sheet, but these logs are only kept for 30 days, typically. When repaired immediately, there is only minimal, if any, documentation of the repair. Invoices for materials and services would typically be the documentation for repairs that can't be repaired during the lightering operation.

Nancy suggested reviewing the other LDAR requirements in R24 to see if more appropriate requirements or language exists. Post meeting review: There are 3 sections addressing LDAR in Reg. 24 and all have the same tagging requirements as currently in the R24S46 draft.

As an alternative to the leak tagging and associated recordkeeping requirements, Rick recommended they be allowed to use their **Safety Management System** where any identified non-conformances (definition?) are noted and would be available.

ii. A first attempt at repair shall be made within 5 calendar days.

Rick indicated that this timing is way too long. This could be changed to a first attempt at repair shall be make upon detection.

iii. The leak shall be repaired within 15 calendar days after the leak is detected or prior to the date that the service vessel is loaded again, whichever date is later.

Rick indicated this too is way too long and probably should be before vessel is returned to service.

iv. Following completion of the repair, the service vessel shall be leak tested using the method approved in either paragraph e.1.ii.F. or e.2.ii.G. of this section, whichever is applicable.

5. Beginning July 1, 2006, the owner or operator of a service vessel subject to this section shall only load crude oil into service vessels by using submerged fill.

Mike reported this requirement is unnecessary as all vessels have submerged fill lines. **Tim** agreed to identify the USCG requirement for submerged filling. If USCG regulation is found, this paragraph would be obsolete.

d. Compliance schedule.

1. Vapor control systems – All. The owner or operator of a service vessel carrying out lightering operations in the waters of the State shall comply with the following requirements.

i. Not later than July 1, 2006, the owner or operator of an existing lightering operation shall provide the following information to the Department.

A. The name or identification of existing service vessels that are expected to carry out lightering operations in the waters of the State after 2006.

B. The type of vapor control system that will be installed on each service vessels to comply with paragraph c.1. of this section.

C. The expected date that the vapor control system will be installed on each service vessel.

ii. Not later than six months prior to the initial lightering operation of a new service vessel in the waters of the State, the owner or operator of that service vessel shall provide the following information to the Department.

Rick indicated that a new service vessel could be needed and they could make one available from their Gulf Fleet for service in Delaware waters in less than 30 days, so the six month notification prior to initial operation could be a problem. Rick recommended changing the notification timing to "upon startup".

During the discussions, **Mike** asked why should we even care how many and which service vessels are in use as long as the compliance schedule is being met. This led to the question as whether we really needed to know if a "new lightering operator" was coming in prior to startup or not. For example, should the R24S46 be mute on this notification requirement and utilize the permitting requirements for obtain this information?

Also, **Mike** suggested the Department consider the use of different notification timeframes for existing versus new lightering operations to meet its needs?

A. The name or identification of the new service vessel.

B. The type of vapor control system installed on the new service vessel to comply with paragraph c.1. of this section.

C. The expected date that the new service vessel would commence lightering operations in the waters of the State.

2. Vapor control systems – Vapor balancing.

i. The owner or operator of an existing lightering operation choosing to comply with paragraph c.1.iii. of this section shall comply with the following requirements.

A. With the requirements of paragraphs c.2. through c.5. of this section at all times and, notwithstanding the requirements of d.2.i.C., with the requirements of paragraph c.1.iii. of this section to the greatest extent practicable.

B. A baseline volume of crude oil lightered **for each existing lightering operation** shall be determined by summing the total volume of crude oil lightered during calendar years 2004 and 2005, and dividing that sum by two (2).

Mike indicated that this paragraph could be interpreted to mean that the "baseline volume" referred to the total "Delaware Bay" lightered volume, which would be a concern to the individual lightering operations. As this is not the intention, it was recommended to clarify that each operation had its own baseline volume.

C. Beginning July 1, 2008, the 12-month rolling volume of uncontrolled lightering shall not exceed the baseline volume calculated pursuant to d.2.i.B. multiplied by the percentages listed in Table 46-1.

Table 46-1	
Beginning on	Maximum allowable uncontrolled lightering
July 1, 2008	83 %
July 1, 2010	65 %
July 1, 2012	30 %
July 1, 2017	21 %
July 1, 2022	0 %

Strong and varied concerns were expressed with the phased-in compliance schedule in Table 46-1.

- **The sudden change from requiring controlled operations on a compliance schedule for only the Ozone season to a year-round basis.**

- **The sudden change from 5% in the outermost year to 0% was disturbing and is impossible to achieve. The possibility for re-evaluations does not mitigate this concern. It was recommended that 5% or higher be reinstated and let the future reevaluations dictate if a lower number would be achievable.**

- **The acceleration of the timing for first required "controlled" operations is major issue. Previously the lightering operations would have been given ~36 months (from est. 11/11/01 to 1/1/05) before having to meet a compliance schedule. Now the timing to meet required compliance schedule as been cut in half to 18 months (from est. 1/11/06 to 7/1/07). There was a concern that the scheduled percentage of controlled operations has been also accelerated. Currently, 35% of the lightering volume must be controlled during 24-month period beginning in 3.5 years from the estimated effective date. Whereas, previously only 25% of the lightering volume needed to be controlled during a 36-month period beginning 5 years from the estimated effective date.**

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- **George pointed out that a vessel being outfitted and advertised as having a fitted vapor control system (one of the factors in developing the phase-in schedule) and a vessel capable to conduct VB were two entirely different things.**

- **Mike indicated the appropriate approach would be to have the phase-in schedule apply to the retrofitting of the service vessels and not the volume lightered, as the retrofitting is solely within the responsibility of the lightering operation.**

D. No later than January 1, 2010, and every four years thereafter, if needed, the Department and the owners or operators of existing lightering operations subject to this section shall re-evaluate the feasibility of the compliance schedule in Table 46-1. The re-evaluations will be based, at minimum, on the current Delaware air quality and air quality planning needs, historical records gathered by the Department or the owners or operators of existing lightering operations, national and international standards and other maritime initiatives under development. If re-evaluation is not needed, the terms and conditions of this section remain unchanged. Any changes to the requirements of Table 46-1 shall be made in accordance with the requirements of Title 7 Delaware Code, Chapter 60.

ii. The owner or operator of a new lightering operation choosing to comply with paragraph c.1.iii. of this section shall comply with paragraph c. of this section at all times.

3. <u>Vapor control systems – Non-vapor balancing.</u>

i. The owner or operator of an existing lightering operation choosing to comply with paragraph c.1.i. or c.1.ii. of this section shall comply with the following requirements.

A. With the requirements of paragraphs c.2. through c.5. of this section at all times and, notwithstanding the requirements of d.3.i.C., with the requirements of paragraph c.1.i. or c.1.ii. of this section to the greatest extent practicable.

B. A baseline volume of crude oil lightered **<u>for each existing lightering operation</u>** shall be determined by summing the total volume of crude oil lightered during calendar years 2004 and 2005, and dividing that sum by two (2).

Though not specifically discussed, this paragraph, like in paragraph 2iB, could be construed to mean that the "baseline volume" referred to the total lightering volume, based on comments for the existing vapor balancing lightering operations. As this was not the case, it was recommended to clarify that each operation had its own baseline volume.

C. Beginning July 1, 2008, the 12-month rolling volume of uncontrolled lightering shall not exceed the baseline volume calculated pursuant to d.3.i.B. multiplied by the percentages listed in Table 46-2.

Draft

Table 46-2	
Beginning on	Maximum allowable uncontrolled lightering
July 1, 2008	75 %
July 1, 2010	50 %
July 1, 2012	0 %

As with the discussions on the vapor balancing table, **Mike** indicated that the 0% was disturbing and impossible to achieve. It was recommended that 5% or higher be reinstated and let the future reevaluations dictate if a lower number would be achievable.

ii. The owner or operator of a new lightering operation choosing to comply with paragraph c.1.i. or c.1.ii. of this section shall comply with paragraph c. of this section at all times.

4. Ozone Action Day limitations. Beginning May 1, 2007, uncontrolled lightering operations shall be curtailed as follows on any day that the Department declares an Ozone Action Day.

Again this was highly (probably the most highly) contested and on the top of the list of concerns. Mike presented most all of the previous comments from the regulatory workgroup meetings again. For example, . . .

- **When lightering is suspended as proposed here, shipping becomes backed up and it can be nearly impossible to get caught up.**
- **The slow down in shipping can result in refinery shutdowns due to lack of crude oil. Shut down and restart would emit more VOCs than were saved during the suspended operations.**

New comments and concerns included:

- **Mike expressed his disappointment that no changes had been made as a result comments made during the meetings.**
- **George added that the schedule for arrival of "rated" vessel (VEC-L, which means capable to be VB'd) and, all vessels for that matter, can not be finely control. This adds to the difficulty for managing crude oil delivery up river, when a series of OAD restrictions are faced.**
- **Some suggested alternatives that the lightering industry might advance in lieu of the OAD prohibitions were . . .**
  - **Off-shore lightering, which the USCG is has a high level of concern.**
  - **Developing an "emissions mitigation plan for OAD".**

Mike indicated that rather than expect industry to propose any reasonable alternatives to the draft OAD prohibitions, the Department should conduct a full evaluation of the

environmental and economic impacts that would result from incorporating any such prohibition.

Rick suggested that, as currently written, the language would consider an intended (needed to prevent over pressurization) "venting" during a controlled lightering as a violation of the OAD prohibition. Rick pointed out that in reality there are going to be times when the crude oils can't be fully vapor balanced; some gassy crude oils will require "venting."

George asked if there were any other instances in the Delaware air regulations where the department took the "Never" or "Do not" position on an OAD. Ron noted that the distributive generation does address OAD concerns.

The following alternative was suggested.

> If compatibility of a service vessel and a STBL exists, the lightering operation must attempt to vapor balance or attempt to reschedule the time (not date) of the operation. Failing these, the uncontrolled lightering would be acceptable.

Mike pointed out that there is no definitive reason to believe that prohibiting uncontrolled operations will result in a no ozone exceedances.

Seth suggested limiting the prohibition to one day.

Seth and Mike noted that we should consider retaining only d.4.i.

i. If the day that the Ozone Action Days was declared was not itself an Ozone Action Day, uncontrolled lightering operations shall not be carried out from 0230 hours until 1430 hours of the declared Ozone Action Day. However, if an uncontrolled lightering operation had begun prior to the declaration of the Ozone Action Day, that lightering operation may continue until 0230 hours or until the service vessel is fully loaded, whichever is later.

ii. If the Department declares a second, consecutive Ozone Action Day before 1430 hours of the first curtailment period, uncontrolled lightering shall not be carried out during the 24-hour period ending at 1430 hours on the second consecutive Ozone Action Day.

iii. If the Department declares a third, consecutive Ozone Action Day before 1430 hours of the second curtailment period, uncontrolled lightering may be carried out during the 12-hour period starting at 1430 hours on the second Ozone Action Day and ending at 0230 hours on the third Ozone Action Day. Uncontrolled lightering shall not be carried out from 0230 hours until 1430 hours on the third Ozone Action Day.

iv. If the Department continues to declare Ozone Action Days consecutively after the third Ozone Action Day, the curtailment and permissible uncontrolled lightering pattern used for the third Ozone Action Day shall apply.

e. <u>Compliance Plan.</u>

1. Vapor control systems – Vapor Balancing. By July 1, 2006 or six months prior to startup of a vapor control system, whichever is later, the owner or operator of a service vessel choosing to comply with paragraph c.1.iii. of this section shall submit to the Department for its approval a compliance plan that describes how initial and ongoing compliance will be demonstrated.

   Mike expressed concern with having to submit all of the information required in paragraph e1ii to demonstrate ongoing compliance. After some discussion, it seems that only two of the items truly posed a problem, as seen below.

   i. The owner or operator of a service vessel may provide the Department with a certified copy of the United States Coast Guard's Approval Letter for operation of the service vessel's vapor control system to demonstrate initial compliance.

   ii. The ongoing compliance demonstration shall include, at a minimum, the information specified in paragraphs e.1.ii.A. through e.1.ii.F.

      A. The recommended instrumentation for the continuous measurement and recording of the operating pressure of the service vessel's vapor control system during lightering operations.

      B. The recommended operating and maintenance procedures for the vapor control system.

         Rick indicated he had no problem with making available for inspection, but did not want to submit to Department. Nancy concurred and suggested taking the MACT approach. This would then be moved to the recordkeeping paragraph.

      C. The recommended startup, shutdown, and malfunction plan for the vapor control system.

         Rick indicated he had no problem with making available for inspection, but did not want to submit to Department. Nancy concurred and suggested taking the MACT approach. This would then be moved to the recordkeeping paragraph.

      D. The recommended vapor tightness test method to demonstrate compliance with paragraph c.2. of this section.

         Following the 7/12 meeting, **Rick** had recommended specifically including method 21 of 40 CFR Part 60 Appendix A as being acceptable means of demonstrating compliance. Following some discussion on Rick's recommendation during the 9/9 meeting, another alternative that was suggested was to make reference to the Marine Vessel MACT that provides acceptable alternatives.

         Tim agreed to look for any USCG limitations addressing acceptable vapor tightness testing methods.

Draft

E. The recommended operating procedures to prevent inadvertent uncontrolled VOC emissions to demonstrate compliance with paragraph c.3. of this section.

F. The recommended leak testing procedures to demonstrate compliance with paragraph c.4. of this section.

iii. To the extent practical, the service vessel's standard operating and maintenance manuals and standard log sheets may be used to satisfy the requirements of the compliance plan, provided these manuals and log sheets meet the individual requirements of paragraph e.1.ii.

2. Vapor control systems – Non-vapor balancing. By July 1, 2006 or six months prior to startup of a vapor control system, whichever is later, the owner or operator of a service vessel choosing to comply with paragraph c.1.i. or c.1.ii. of this section shall submit to the Department for its approval a compliance plan that describes how initial and ongoing compliance will be demonstrated.

i. The initial compliance demonstration part of the compliance plan shall include, at a minimum, the information specified in paragraphs e.2.i.A. and e.2.i.B.

A. A description of the selected control technology.

B. The performance test plan necessary to demonstrate initial compliance with the requirements of paragraph c.1.i. or c.1.ii. of this section. The performance test plan shall include, at minimum, the information specified in paragraphs e.2.i.B.I. through e.2.i.B.V.

I. The recommended operating conditions and monitored parameters.

II. The recommended performance test equipment, procedures, and sample logs.

III. The recommended test methods and sampling locations.

IV. The recommended sampling frequencies and number of test runs.

V. Sample data collection logs and calculations necessary to demonstrate initial compliance with the requirements of paragraph c.1.i. or c.1.ii. of this section.

ii. The ongoing compliance demonstration part of the compliance plan shall include, at a minimum, the information specified in paragraphs e.2.ii.A. through e.2.ii.G.

A. The recommended operating parameters to be monitored.

B. The recommended instrumentation for the continuous measurement and recording of the operating parameters for the service vessel's vapor control system during lightering operations.

Draft

C. The recommended operating and maintenance procedures for the vapor control system.

See comments associated with paragraph e1 and e1ii for comparable considerations.

D. The recommended startup, shutdown, and malfunction plan for the vapor control system.

See comments associated with paragraph e1 and e1ii for comparable considerations.

E. The recommended vapor tightness test method to demonstrate compliance with paragraph c.2. of this section.

F. The recommended operating procedures to prevent inadvertent uncontrolled VOC emissions to demonstrate compliance with paragraph c.3. of this section.

G. The recommended leak testing procedures to demonstrate compliance with paragraph c.4. of this section.

iii. To the extent practical, the service vessel's standard operating and maintenance manuals and standard log sheets may be used to satisfy the requirements of the compliance plan, provided these manuals and log sheets meet the individual requirements of paragraph e.2.ii.

f. Performance Testing. The owner or operator of a service vessel choosing to comply with paragraph c.1.i. or c.1.ii. of this section shall conduct a performance test to demonstrate initial compliance.

1. The performance test equipment shall be prepared and installed as specified in the test methods approved by the Department under paragraph e.2.i.B of this section.

2. The performance test of the vapor control system required to comply with paragraph c.1.i. or c.1.ii. of this section shall be conducted within 180 calendar days after the system is first operated.

3. The Department shall be notified at least 60 calendar days prior to the conduct of any performance test.

4. The results of any performance test shall be submitted to the Department within 60 calendar days following the completion of the performance test.

g. Recordkeeping. The owner or operator of a service vessel subject to this section shall keep the records specified in this paragraph in a readily accessible location for at least five years. These records shall be made immediately available to the Department on verbal or written request. For the purposes of this section, the terms "readily accessible location" and "immediately available" may apply to records located on the service vessel.

Draft

1. All lightering operations. Beginning on January 1, 2006 or the effective date of this section, whichever is later, the owner or operator of a service vessel subject to this section shall keep the following information for each lightering operation.

   i. The dates and times that the lightering operation began and ended.

   ii. The lightering location.

   iii. The name or identification of the service vessel involved.

   iv. The name or identification of the ship to be lightered.

   v. The total volume of crude oil lightered.

   vi. The uncontrolled volume of crude oil transferred during the lightering operation.

2. Vapor control systems - All. Upon the initial startup of the vapor control system to comply with paragraph c.1. of this section or the effective date of this section, whichever is later, the owner or operator of a service vessel shall keep the following information.

   i. Vapor tightness documentation for each service vessel used in a lightering operation. The documentation shall include, at a minimum, the information specified in paragraphs g.2.i.A. through g.2.i.G.

      A. The service vessel name or identification.

      B. The name and address of the owner or operator of the service vessel.

      C. The date and location of vapor tightness test.

      D. The vapor tightness test method used.

      E. The test results.

      F. The tester's name and signature.

      G. The United States Coast Guard's Approval Letter may be used to meet the requirements of g.2.i.A through g.2.i.F. for the first year following startup of a service vessel choosing to comply with paragraph c.1.iii. of this section.

   ii. Records of monitoring associated with the service vessel's vapor control system.

   iii. Operating and maintenance logs for the vapor control system and monitoring instrumentation, including records of any repairs made in accordance with paragraph c.4. of this section.

   iv. Records of the occurrence and duration of a malfunction in the vapor control system.

Draft

v. Records of any corrective actions taken, as a result of a malfunction, that were inconsistent with the startup, shutdown, and malfunction plan.

vi. Records or logs of inspections conducted to prevent inadvertent uncontrolled VOC emissions in accordance with paragraph c.3. of this section.

vii. Records or logs of leak test inspections conducted in accordance with paragraph c.4. of this section.

3. Vapor control systems – Vapor balancing. Upon the initial startup of the vapor control system or the effective date of this section, whichever is later, the owner or operator of a service vessel choosing to comply with paragraph c.1.iii. of this section shall keep the following additional information for each lightering operation.

   i. Records identifying whether vapor balancing was or was not conducted.

   ii. If vapor balancing was not conducted, records identifying the reasons that vapor balancing was not attempted.

   iii. If vapor balancing was conducted, records identifying the total volume of crude oil that was lightered and the uncontrolled volume of crude oil that was lightered.

   iv. If vapor balancing was conducted and there was an uncontrolled volume of crude oil lightered, records identifying the reasons the lightering operation was not fully controlled.

   v. For existing lightering operations, the baseline volume calculated pursuant to paragraph d.2.i.B. of this section.

4. Vapor control systems – Non-vapor balancing. Upon the initial startup of the vapor control system or the effective date of this section, whichever is later, the owner or operator of a service vessel choosing to comply with paragraph c.1.i. or c.1.ii. of this section shall keep the following additional information for each lightering operation.

   i. Records of information collected during all performance tests and all calculations used to demonstrate initial compliance with paragraph c.1.i or c.1.ii. of this section, as specified in paragraphs e.2.i. and f. of this section.

   ii. Records of information collected during all lightering operations and all calculations used demonstrate ongoing compliance with paragraph c.1.i or c.1.ii. of this section, as specified in paragraph e.2.ii. of this section.

   iii. All periods of lightering operations where the monitored results exceeded the parameters established in the most recent performance test shall be highlighted.

   iv. For existing lightering operations, the baseline volume calculated pursuant to paragraph d.3.i.B. of this section.

Draft

h. Emergency lightering exemption. The owner or operator of a service vessel shall be exempted from the requirements of this section while carrying out emergency lightering operations, except for the requirements of paragraphs h.1. and h.2.

1. The owner or operator of a service vessel that carries out emergency lightering operations shall submit a written notification to the Department within 24 hours of the receipt of the request for emergency lightering that includes, at minimum, the following information.

   Seth expressed a concern that h1 might be interpreted to require the Department's pre-approval to allow emergency lightering. Thus, paragraph h1 should be amended to avoid this misinterpretation. There was also some discussion on allowing greater latitude on when the notification was to be made to the Department.

   Concern was raised as to when or what was the appropriate time upon when to start the 24 hour clock for notification. Two alternatives were offered versus "the receipt of the request".
   1. Upon agreement to conduct emergency lightering
   2. Upon commencing emergency lightering
   - Rick indicated both are clearer than receipt of request and the first one was probably easier to implement.

   i. The name, organization, and telephone number of the person requesting the emergency lightering operation.

      Rick recommended that i1i be deleted and the needed information be folded in the brief description current i1ii.

   ii. A brief description of the emergency, which may be limited to the name and location of ship to be lightered and the circumstances of concern.

   iii. The name, organization, and telephone number of the person submitting the written notification.

   iv. The written notification may be submitted to the Department by fax or electronic mail.

      Mike express some concern that notification was limited the written form and it was suggested that a phone notification be also permitted. **Nancy** suggest including the use of Department's Environmental Emergency Notification and Complaint Number as an option to include.

2. The owner or operator of a service vessel that carried out emergency lightering operations shall submit a written report to the Department within 30 days following the completion of the emergency lightering operation that includes, at minimum, the following information.

   i. The name, organization, and telephone number of the person originally requesting the emergency lightering operation.

      Rick recommend that i2 be deleted and the needed information be folded in the brief description current i2ii.

ii. A brief description of the emergency, which may be limited to the name and location of ships to be lightered and the circumstances of concern.

iii. The names or identifications of the service vessels involved in the emergency lightering operations.

iv. The dates and times that the emergency lightering operations started and ended.

v. The total volume of crude oil transferred during the emergency lightering operations.

vi. A certification by a responsible official as to the truth, accuracy, and completeness of the written report

vii. The name and signature of the responsible official certifying the written report.

i. Reporting requirements.

1. The owner or operator of a service vessel subject to this section shall submit to the Department an initial compliance certification immediately upon startup of the vapor control system.

i. Vapor control system – Vapor balancing. The initial compliance notification shall provide, at a minimum, the following information.

A. The name, address, and telephone number of the owner or operator of the service vessel.

B. The name or identification of the service vessel.

C. The certified copy of the United States Coast Guard's Approval Letter for the installation of the vapor control system on the service vessel.

ii. Vapor control system – Non-vapor balancing. The initial compliance notification shall provide, at a minimum, the following information.

A. The name, address, and telephone number of the owner or operator of the service vessel.

B. The name or identification of the service vessel.

C. The applicable emission limitation and work practice requirements.

D. A description of the selected control technology.

E. The estimated VOC emissions (pounds per 1,000 barrels lightered) without the vapor control system.

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F. The estimated VOC emissions (pounds per 1,000 barrels lightered) with the vapor control system in use.

G. The design performance efficiency of the vapor control system.

H. Certifications that service vessel and vapor control system are in compliance with the applicable emission limitation and work practice requirements.

2. Reports of excess emissions. The owner or operator of a service vessel subject to this section shall, for each occurrence of excess emissions, submit a report to the Department within 30 calendar days of becoming aware of such occurrence. Excess emissions can includes, but are not limited to, failing to operate the vapor control system, inadvertent or knowingly venting VOCs to atmosphere by bypassing the vapor control system, uncontrolled lightering on an Ozone Action Day during forbidden times, operating the vapor control system outside the established operating parameters, exceeding the percentages in Tables 46-1 or 46-2, failing to tag leaks, failing to repair leaks in a timely manner, etc. The report shall contain the following information, in addition to complying with any other reporting requirements required by the Department.

Mike indicated that many of the items identified may not necessarily result in excess emissions per se and suggested they be treated as deviations instead.

The resulting discussions indicated that excess emissions would apply to the exceedances of paragraph c.1. and that the requirements of c.2. through c.6. should be differentiated as being work practice requirements and not as emission standards.

The question was raised as to how differentiate a required venting of control lightering operation on an OAD from an uncontrolled operation. **After meeting note:** How should this situation be handled on an overall basis with regards to the compliance table?

Again, the resulting discussions indicate that there is a need for clarification in separating the work practice-like requirements from the emission standard. **After meeting need:** Before separating, if that be the path forward, I need Nancy's inputs on which work practice items would have typically required an estimation of the excess emissions associated with a non-compliant incident.

The above discussion on incidents of venting during controlled lightering operations led back to earlier discussion on describing the vapor balancing use in the emission standard in paragraph c.1.iii.; that is, does it eliminate or prevent VOC emissions.

If work practice and emissions standards are to be separated, two different sections should be used.

Mike pointed out that it appeared that reporting requirements for sources that are not using vapor balancing may be incomplete.

i. The name of the owner or operator of the service vessel.

ii. The name or identification of the service vessel.

iii. The date and time of first observation of the excess emissions.

iv. The cause and duration of the excess emissions.

v. The estimated rate of VOC emissions (pounds per lightering operation) and the operating data and calculations used in determining the magnitude of the excess emissions.

vi. The corrective actions taken or the schedule to correct the conditions causing the excess emissions.

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