(f) The Declaration of Inspection required by §156.150(f) of this chapter;

(g) A record of all repairs made within the last three years involving any component of the facility's vapor control system required by subpart E of this part;

(h) A record of all automatic shut downs of the facility's vapor control system within the last 3 years; and

(i) Plans, calculations, and specifications of the facility's vapor control system certified under §154.804 of this part.

(j) If they are not marked as such, documentation that the portable radio devices in use at the facility under §154.560 of this part are intrinsically safe.

(Approved by the Office of Management and Budget under control number 2115–0096)

[CGD 75–124, 45 FR 7173, Jan. 31, 1980, as amended by CGD 88–102, 55 FR 25429, June 21, 1990; CGD 86–034, 55 FR 36254, Sept. 4, 1990; CGD 93–056, 61 FR 41461, Aug. 8, 1996]

§154.750 Compliance with operations manual.

The facility operator shall require facility personnel to use the procedures in the operations manual prescribed by §154.300 for operations under this part.

[CGD 75–124, 45 FR 7174, Jan. 31, 1980]

Subpart E—Vapor Control Systems

SOURCE: CGD 88–102, 55 FR 25429, June 21, 1990, unless otherwise noted.

§154.800 Applicability.

(a) Except as specified by paragraph (c) of this section, this subpart applies to:

(1) Each facility which collects vapors of crude oil, gasoline blends, or benzene emitted from vessel cargo tanks;

(2) A vessel which is not a tank vessel that has a vapor processing unit located on board for recovery, destruction, or dispersion of crude oil, gasoline blends, or benzene vapors from a tank vessel; and

(3) Certifying entities which review, inspect, test, and certify facility vapor control systems.

(b) A facility which collects vapors of flammable or combustible cargoes other than crude oil, gasoline blends, or benzene, must meet the requirements prescribed by the Commandant (G-MSO).

(c) A facility with an existing Coast Guard approved vapor control system which was operating prior to July 23, 1990 is subject only to §154.850 of this subpart as long as it receives cargo vapor only from the specific vessels for which it was approved.

(d) This subpart does not apply to the collection of vapors of liquefied flammable gases as defined in 46 CFR 30.10–39.

(e) When a facility vapor control system which receives cargo vapor from a vessel is connected to a facility vapor control system that serves tank storage areas and other refinery processes, the specific requirements of this subpart apply between the vessel vapor connection and the point where the vapor control system connects to the facility's main vapor control system.

[CGD 88–102, 55 FR 25429, June 21, 1990, as amended by CGD 96–026, 61 FR 33666, June 28, 1996]

§154.802 Definitions.

As used in this subpart:

Certifying entity means an individual or organization accepted by the Commandant (G-MSO) to review plans and calculations for vapor control system designs, and to conduct initial inspections and witness tests of vapor control system installations.

Existing vapor control system means a vapor control system which was operating prior to July 23, 1990.

Facility vapor connection means the point in a facility's vapor collection system where it connects to a vapor collection hose or the base of a vapor collection arm.

Inerted means the oxygen content of the vapor space in a tank vessel's cargo tank is reduced to 8 percent by volume or less in accordance with the inert gas requirements of 46 CFR 32.53 or 46 CFR 153.500.

Liquid knockout vessel means a device to separate liquid from vapor.

Maximum allowable transfer rate means the maximum volumetric rate at which a vessel may receive cargo or ballast.

New vapor control system means a vapor control system which is not an existing vapor control system.

Vapor balancing means the transfer of vapor displaced by incoming cargo from the tank of a vessel receiving cargo into a tank of the vessel or facility delivering cargo via a vapor collection system.

Vapor collection system means an arrangement of piping and hoses used to collect vapor emitted from a vessel's cargo tanks and transport the vapor to a vapor processing unit.

Vapor control system means an arrangement of piping and equipment used to control vapor emissions collected from a vessel, and includes the vapor collection system and the vapor processing unit.

Vapor destruction unit means a vapor processing unit that destroys cargo vapor by a means such as incineration.

Vapor dispersion system means a vapor processing unit which releases cargo vapor to the atmosphere through a venting system not located on the vessel being loaded or ballasted.

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

Vapor recovery unit means a vapor processing unit that recovers cargo vapor by a non-destructive means such as lean oil absorbtion, carbon bed adsorption, or refrigeration.

Vessel vapor connection means the point in a vessel's fixed vapor collection system where it connects to a vapor collection hose or arm.

[CGD 88–102, 55 FR 25429, June 21, 1990, as amended by CGD 96–026, 61 FR 33666, June 28, 1996]

§ 154.804 Review, certification, and initial inspection.

(a) A new vapor control system installation must be certified by a certifying entity as meeting the requirements of this subpart prior to operating.

(b) [Reserved]

(c) An existing vapor control system installation that has been Coast Guard approved for operation with specific vessels must be certified by a certifying entity prior to receiving vapors from other vessels.

(d) Plans and information submitted to the certifying entity must include a qualitative failure analysis. The analysis must demonstrate the following:

(1) The vapor control system is designed to permit the system to continuously operate safely when receiving cargo vapors from tankships and barges over the full range of transfer rates expected at the facility;

(2) The vapor control system is provided with the proper alarms and automatic control systems to prevent unsafe operation;

(3) The vapor control system is equipped with sufficient automatic or passive devices to minimize damage to personnel, property, and the environment if an accident were to occur; and

(4) If a quantitative failure analysis is also conducted, the level of safety attained is at least one order of magnitude greater than that calculated for operating without a vapor control system.

NOTE: The *American Institute of Chemical Engineers* publication, ''Guidelines for Hazard Evaluation Procedures'' may be used as guidance when preparing a qualitative failure analysis. Military Standard MIL-STD-882B may be used as guidance when preparing a quantitative failure analysis.

(e) The certifying entity must conduct all initial inspections and witness all tests required to demonstrate that the facility:

(1) Conforms to certified plans and specifications;

(2) Meets the requirements of this subpart; and

(3) Is operating properly.

(f) Upon receipt of written certification from the certifying entity that a facility's vapor control system complies with the requirements of this part the COTP shall endorse the letter of adequacy required by § 154.325 of this part to indicate that the facility is acceptable for collecting vapors of crude oil, gasoline blends, benzene, or any other vapors for which it is certified.

(g) Any design or configuration alteration involving a certified vapor control system must be reviewed by a certifying entity. After conducting any inspections and witnessing tests necessary to verify that the modified