California Environmental Protection Agency

Air Resources Board

Vapor Recovery Certification Procedure

CP - 204

CERTIFICATION PROCEDURE FOR VAPOR RECOVERY SYSTEMS OF CARGO TANKS

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CP-204
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California Environmental Protection Agency
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CP-204

Certification Procedure for Vapor Recovery Systems of Cargo Tanks

1 GENERAL INFORMATION AND APPLICABILITY

This document describes a procedure for certifying equipment which recovers vapors emitted in association with gasoline marketing operations involving cargo tanks.

Other vapor recovery certification procedures provide instructions for determining performance standards, performance specifications, and test procedures for equipment which recovers vapors emitted in association with gasoline marketing operations involving: dispensing facilities (CP-201); bulk plants and cargo tanks (CP-202); and supply lines, terminals, delivery lines, and cargo tanks (CP-203). For novel facilities or systems to which CP-201 through 204 do not apply, CP-205 provides instructions for determining performance standards, performance specifications, and test procedures for equipment which recovers vapors emitted in association with gasoline marketing operations.

This procedure is applicable to tank trucks and trailers that are equipped for the transport of gasoline and that must be equipped for gasoline vapor recovery in accordance with air pollution control district rules.

Only a vapor recovery system of a design that is certified by the ARB Executive Officer may be installed on a cargo tank.

No person shall operate, or allow the operation of, a cargo tank unless the cargo tank is certified and maintained in accordance with these procedures. Certifications shall be issued on an annual basis and shall expire on the last day of the month one year following the month of issuance of the certification.

The owner or operator of any cargo tank shall:

(1) annually test such tank(s) in accordance with the provisions of § 4 and

(2) annually apply for certification of such tank(s) in accordance with this procedure.

Tests shall be conducted by the owner of the cargo tank, or a consultant, at the expense of the

owner. Prior to testing, the owner shall notify the Executive Officer, or his or her designate(s), of the date, time, and location of the testing. The Executive Officer or designate(s) may observe or conduct tests.

A set of definitions common to all certification and test procedures is in:

D-200 Definitions for Certification Procedures and Test Procedures for Vapor Recovery Systems

1.1 Legislative and Regulatory Requirements of Other California State Agencies

As required, the ARB Executive Officer shall coordinate this certification procedure with:

(1) Department of Food and Agriculture, Division of Measurement Standards (DMS)

(2) State Fire Marshal (SFM)

(3) Department of Industrial Relations, Division of Occupational Safety and Health (DOSH)

1.2 Legislative and Regulatory Requirements of Other Agencies

In addition to California's local Districts, other federal, state, or local agencies may have legal jurisdiction regarding vapor recovery systems. The applicant is solely responsible for:

(1) compatibility of the applicant’s equipment with the application of any other agency's test procedures;

(2) testing of the applicant’s equipment with such test procedures; and

(3) compliance with performance standards and performance specifications in any other agency's regulations referencing such test procedures.

The ARB Executive Officer is not responsible for items (1) through (3) above.

2 SUMMARY OF CERTIFICATION PROCESS

2.1 Summary of Requirements of Certification Procedure

This certification procedure has five interacting components which may be applied iteratively in complex cases. For example, review of evaluation and testing may yield additional specifications. The five components are:

2.1.1 Application for Certification (See § 3).

The applicant must submit all required application information. The ARB Executive Officer shall consult with the applicant, shall review the information, may require revisions or more information, and shall approve the application after it is determined to be complete.

2.1.2 Standards, Specifications, and Test Procedures (See § 4.)

The ARB Executive Officer shall specify performance standards, performance specifications, and test procedures for vapor recovery equipment in response to a completed application for certification.

2.1.3 Evaluation and Testing of Vapor Recovery Equipment (See § 5.)

The vapor recovery equipment shall be subjected to evaluation and testing according to the performance standards, performance specifications, and test procedures at the applicant's expense. The ARB Executive Officer shall conduct all evaluation and testing unless the ARB Executive Officer determines that the equipment owner or operator shall contract for or conduct specified evaluation and testing on a case-by-case basis.

2.1.4 Documentation for Certification (See § 6.)

A Certification Report shall be prepared, at the applicant's expense, documenting the preceding components:

(1) Application for Certification;
(2) Standards, Specifications, and Procedures; and
(3) Evaluation and Testing of Vapor Recovery Equipment.

The ARB Executive Officer shall consult with the applicant, shall review the report, may require additional work on the components, and shall approve and sign the Certification Report after it is determined that:

(1) The Certification Report is complete; and
(2) the Certification Report documents successful performance of the subject vapor recovery equipment according to the required performance standards, performance

specifications, and test procedures.

2.1.5 Certification (See § 7.)

Evidence of certification shall be an ARB Executive Order (which shall reference the Certification Report) signed by the ARB Executive Officer.

2.2 Summary of Time Periods for Review and Processing

The following definitions of ARB Executive Officer Actions and Time Periods shall apply to all applications subject to this procedure per CCR, Title 17, § 60030 (in some cases, another enforcing agency shall perform actions):

"ARB Executive Officer Interim Action #1"

means that the ARB Executive Officer determines that application is deficient per § 3, § 4, § 5, or § 6 and communicates specific deficiencies to the Applicant in writing.

"ARB Executive Officer Interim Action #2"

means that the ARB Executive Officer determines that application is complete per § 3, § 4, § 5, and § 6 and accepted for filing and communicates such determination to Applicant in writing.

"ARB Executive Officer Final Action"

means that the ARB Executive Officer acts to disapprove or approve the application per § 3, § 4, § 5, § 6, and § 7 and communicates such determination to the Applicant in writing.

"Time Periods"

are defined in the table below:

FROM: ACTION BELOW	TIME PERIOD	TO: ACTION BELOW
Applicant files an initial application for certification.	within 30 days	ARB Executive Officer Interim Action #1 or #2
Applicant files an amended application for certification.	within 15 days	ARB Executive Officer Interim Action #1 or #2
ARB Executive Officer Interim Action #2	within 90 days	ARB Executive Officer Final Action

The time periods specified above may be extended by the ARB Executive Officer for good cause per CCR, Title 17, § 60030 (d).

3 APPLICATION FOR CERTIFICATION

Warning: All of the information specified in all of the following subsections must be submitted to the ARB Executive Officer for an application to be considered complete.

Applications which do not completely satisfy the requirements of this section shall be returned to the applicant with an indication of deficiencies.

3.1 Application for Approval of a Vapor Recovery System Design

The applicant shall submit a set of engineering drawings and specifications including but not limited to piping configuration and dimensions, types of seals, and types of couplers for delivery hoses. Data which demonstrate that the cargo tank vapor recovery piping system will work in conjunction with the appropriate underground storage tank vapor recovery system for controlling the gasoline vapors displaced during the filling of underground storage tanks shall also be submitted.
The ARB Executive Officer, upon review of the drawings and specifications of a system design, and upon finding that the system complies with the requirements of § 4.2.1.1, shall issue a System Design Approval Number.

3.2 Application for Certification of an Individual Cargo Tank

The application for certification of individual cargo tanks shall be submitted to the ARB Executive Officer, and shall contain the following information:

(1) Name, address, and telephone number of owner or operator, and company name (if applicable).

(2) The sizes and number of compartments of the cargo tank.

(3) The cargo tank's California Highway Patrol cargo tank identification number.

(4) The air pollution control district in which the cargo tank's base of operation is located.

(5) A statement that the tank has been tested according to the test procedures in TP-204.1 and complies with the performance standards in § 4.1.

(6) The test data acquired in (5) above.

(7) A declaration under penalty of perjury by the person conducting the test that the information contained in items (5) and (6) is true and correct.

(8) A declaration under penalty of perjury by the applicant setting forth his or her relationship to the cargo tank and stating that all information is true and correct.

3.3 Information Required by the ARB Executive Officer

3.3.1 Evidence of Corporate and Financial Responsibility

The requirements of this section shall apply with equal stringency both to original manufacturers and to rebuilders of vapor recovery equipment.

3.3.1.1 The ARB Executive Officer, to cover the cost of approving system designs may charge a fee not to exceed the actual cost incurred.

3.3.1.2 The ARB Executive Officer, to cover the cost of certifying cargo tanks, may charge a fee not to exceed the actual cost of certification.

3.3.2 Design

3.3.2.1 Engineering Drawings

The applicant shall submit engineering drawings for:

(1) each prototype vapor recovery system and

(2) all equipment components of each prototype system.

For any component, in lieu of a component drawing, the applicant can submit an affidavit declaring:

(1) the manufacturer's model number for the component and

(2) the applicant's commitment to maintain, on file, engineering drawings for such component.

3.3.2.2 List of Components by Manufacturer and Model Number

The applicant shall submit a list of components by manufacturer and model number for the vapor recovery system.

3.3.3 Installation, Operation, and Maintenance

For approval of a vapor recovery system design, a system manual which specifies required installation, operation, and maintenance procedures for the vapor recovery system shall be submitted with the application. A required field training program for maintenance personnel shall be specified in the system manual, including performance specifications for personnel and maintenance procedures.

3.3.4 Compatibility

This section specifies vapor recovery system compatibility requirements which, although not specified in terms of vapor recovery effectiveness, form an indispensable basis for proceeding with the application of the appropriate certification and test procedures.

The installation, operation, and maintenance of vapor recovery equipment must be compatible with:

(1) the application of performance standards, performance specifications, and test procedures and

(2) the installation, operation, and maintenance of any other equipment associated with such vapor recovery equipment.

The design of the vapor recovery system of the cargo tank shall be such that when the

cargo tank is connected to an approved underground storage tank vapor recovery system or a vapor recovery system at a bulk plant or terminal it shall not prevent such systems from achieving the required vapor recovery efficiencies. The connectors of the cargo tank shall be compatible with the fittings on the fill-pipes at the service stations and gasoline terminals which the cargo tank will service. Such compatibility may be achieved by the use of adapters.

4 PERFORMANCE STANDARDS, PERFORMANCE SPECIFICATIONS, AND TEST PROCEDURES

Warning: The installation, operation, maintenance, and inspection of a vapor recovery system must be compatible with:

(1) the application of specified performance standards, performance specifications, and test procedures and

(2) the installation, operation, maintenance, and inspection of any other equipment associated with such system.

4.1 Performance Standards and Test Procedures

4.1.1 Static Pressure

4.1.1.1 Five Minute Performance Standard (Yearly)

The yearly performance standard is expressed as the maximum allowable pressure change in five minutes for a cargo tank which has been either:

(1) pressurized to +18 inches water column (gauge) or

(2) evacuated to -6 inches water column (gauge).

Pressure Change per Cargo Tank or Compartment Tested

Allowed Pressure Change in Five Minutes (inches water column, gauge)	Cargo Tank or Compartment Capacity (gallons)
0.50	2500 or more
0.75	2499 to 1500
1.00	1499 to 1000
1.25	999 or less

4.1.1.2 Test Procedures

Compliance with and violation of the annual certification criterion shall be determined by:

TP-204.1

4.1.2 Static Pressure

4.1.2.1 Performance Standards (Daily)

Two equivalent performance standards are specified below. It is a permanent condition of certification that cargo tank performance comply with both of these standards.

The five minute performance standard is specified and tested similarly to the yearly standard, but is based on pressure change from +18 inches water column (gauge) only and is less stringent.

The one minute performance standard is dependent on the headspace volume after loading, which can vary from one loading to the next.

(1) **Five Minute Performance Standard (Daily)**

Pressure Change per Cargo Tank or Compartment Tested per TP-204.1	
Allowed Pressure Change in Five Minutes (inches water column, gauge)	Cargo Tank or Compartment Capacity (gallons)
2.5	2500 or more
3.0	2499 to 1500
3.5	1499 to 1000
4.0	999 or less

(2) **One Minute Performance Standard (Daily)**

Pressure Change per Cargo Tank or Compartment Tested per TP-204.2
The appropriate one minute performance standard is determined by application of TP-204.2.

4.1.2.2 Test Procedures

Compliance with and violation of the static pressure performance standards shall be determined by:

TP-204.1

TP-204.2

4.1.3 Internal Vapor Valve

4.1.3.1 Performance Standard

Every cargo tank shall have an internal vapor valve. A check valve or cap is not an acceptable alternative.

The opening pressure for any pneumatic internal vapor valve shall be listed in the Executive Order certifying a cargo tank with such a valve. A pressure gauge (0 to 100 psig) shall be installed on any such cargo tank, maintained in good working order, and observed by the operator during as large a fraction of the duration of each delivery as practicable. The operator shall terminate delivery and return for maintenance and repairs if the pressure gauge indicates a pressure below the opening pressure of such a cargo tank's pneumatic internal vapor valve.

Two equivalent performance standards are specified below. It is a permanent condition of certification that cargo tank performance comply with both of these standards.

(1) **Five Minute Performance Standard (~~Daily~~ Yearly)**

Pressure Change per Cargo Tank or Compartment Tested per TP-204.1	
Allowed Pressure Change in Five Minutes (inches water column, gauge)	Cargo Tank or Compartment Capacity (gallons)
5.0	all

(2) **One Minute Performance Standard (Daily)**

Pressure Change per Cargo Tank or Compartment Tested per TP-204.2
The appropriate one minute performance standard is determined by application of TP-204.2.

4.1.3.2 Test Procedures

Compliance with and violation of the internal vapor valve performance standards shall be determined by:

TP-204.1

TP-204.2

4.1.4 Vapor and Liquid Leaks

NOTE: A cargo tank shall not be required to comply with any leak criteria or performance standards except those that relate directly to the cargo tank; such leaks are "cargo tank leaks"; examples of leaks which are not cargo tank leaks are:

(1) leaks involving bulk plant or terminal equipment including

(2) leaks from couplings between cargo tank equipment and bulk plant or terminal equipment, unless the coupling was brought into the bulk plant or terminal facility on the cargo tank vehicle..

Leaks of types (1) and (2) are not evidence of non-compliance of the cargo tank per this procedure.

4.1.4.1 Performance Standards

The performance standards for leak(s) from any cargo tank is that no vapor leak or liquid leak shall occur from any cargo tank according to the following definitions:

(1) **Vapor Leak**

A vapor leak is defined to be any source of gasoline vapors which causes a combustible gas detector meter reading exceeding 100 percent of the LEL when measured at a distance of one inch (2.5 cm). A marginal vapor leak may be verified by conducting a pressure/vacuum leak test. A vapor leak does not include any vapor resulting from liquid spitback, spillage, or leakage.

(a) Probe Distance

The detector probe inlet shall be 2.5 cm from the potential leak source. The distance can be maintained during monitoring by putting a 2.5 cm extension on the probe tip.

(b) Probe Movement

Move the probe slowly (approximately 4 cm/sec). If there is any meter deflection at a potential leak source, move the probe to locate the point of highest meter response.

(c) Probe Position

As much as possible, the probe inlet shall be positioned in the path of the vapor flow from a leak so as to maximize the measured concentration.

(2) **Liquid Leak**

A liquid leak is defined to be the dripping of liquid organic compounds at a rate in excess of three (3) drops per minute from any single leak source other than the liquid fill line and vapor line disconnect operations. A liquid leak from liquid fill line and vapor line disconnect operations is defined to be:

(1) more than two (2) milliliters liquid drainage per disconnect from a top loading operation; or
(2) more than ten (10) milliliters liquid drainage from a bottom loading operation.

Such liquid drainage for disconnect operations shall be determined by computing the average drainage from three consecutive disconnects at any one permit unit.

4.1.4.2 Test Procedures

Compliance with and violation of the leak performance standards shall be determined using:

TP-204.3 Determination of Leaks

4.2 Performance Specifications and Test Procedures

Performance specifications may be specified by the applicant in the required application information for each component or configuration of components of the vapor recovery system. Such performance specifications shall be the basis for any testing performed on any component or configuration of components when isolated from the rest of the system.

Other performance specifications shall be added, as appropriate after review of system information by the ARB Executive Officer.

Per Section 41962 (h) of the Health and Safety Code, Districts shall neither establish more stringent performance specifications nor adopt test procedures for cargo tanks.

4.3 Performance Standards and Performance Specifications for Novel Systems

For novel systems, on a case-by-case basis, additional performance standards and performance specifications shall be required based on evaluation by the ARB Executive Officer and a determination of necessity.

4.4 Test Procedures for Novel Systems

Novel test procedures shall be required for novel systems based on evaluation by the ARB Executive Officer and a determination of necessity.

4.4.1 Technical Identification of Need

The equipment related to any application for certification shall be subject to an engineering evaluation.

The engineering evaluation may result in a technical identification of need for development of special test procedures for novel systems, components, or applications.

4.4.2 Administrative Requirement for Development

Following any such technical identification of need, the applicant shall be responsible for developing test procedures for the applicant's equipment to demonstrate that such equipment can meet any applicable performance standards or specifications.

4.4.3 Evaluation and Approval

Any test procedures identified and developed by the applicant shall be subject to an engineering evaluation which must result in approval by the ARB Executive Officer to meet the requirements of this section.

5 EVALUATION AND TESTING OF VAPOR RECOVERY EQUIPMENT

5.1 General Evaluation and Testing

Vapor recovery systems shall be subjected to evaluation and testing according to the specified performance standards, performance specifications, and test procedures at the applicant's expense.

NOTE: To avoid the certification of a performance standard or performance specification which can not reasonably be met by all anticipated installations of a certified system, the applicant may specify (a) challenge mode(s) for system testing, subject to approval by the ARB Executive Officer. The ARB Executive Officer shall evaluate each system to determine the need for failure mode testing; and if such need is positively determined the ARB Executive Officer shall specify (a) failure mode(s) for system testing.

"Challenge mode testing" is testing conducted with a system installation intentionally modified so that the performance standard is more difficult to meet. The purpose of challenge mode testing is to provide a basis for determining performance specifications which reasonably can be met by all anticipated installations of a certified system.

"Failure mode testing" is testing conducted with a system installation intentionally modified so that it fails to meet its performance standard. The purpose of failure mode testing is to provide a basis for determining performance specifications which, when met, provide reasonable assurance that an installation of the system is not in the related failure mode.

(1) The ARB Executive Officer shall conduct all evaluation and testing unless the ARB Executive Officer determines that the equipment owner or operator shall contract for or conduct specified evaluation and testing on a case-by-case basis.

(2) All test personnel, regardless of their primary employer, shall be responsible solely to the ARB Executive Officer for the conduct of all testing activities required by this certification procedure. Such testing activities include, but are not limited to:

(a) collection of data

(b) calculation of results

(c) reporting of results

(3) The ARB Executive Officer shall be present to monitor all testing and clarify the application of the procedures in novel circumstances; test data, calculations, and reported results shall be subsequently reviewed and evaluated by the ARB Executive Officer to determine their validity for inclusion in the Certification Report.

5.2 Alternative Evaluation and Testing

Certification procedures, other than specified above, shall only be used if prior written approval is obtained from the ARB Executive Officer. In order to secure the ARB Executive Officer's approval of an alternative certification procedure, the applicant is responsible for demonstrating to the ARB Executive Officer's satisfaction that the alternative certification procedure is equivalent to this certification procedure.

(1) Such approval shall be granted on a case-by-case basis only. Because of the evolving nature of technology and procedures for vapor recovery systems, such approval shall not be granted in subsequent cases without a new request for approval and a new demonstration of equivalency.

(2) Documentation of any such approvals, demonstrations, and approvals shall be maintained in the ARB Executive Officer's files and shall be made available upon request.

5.3 Preliminary Evaluation

A preliminary engineering evaluation shall be performed on each subject vapor recovery system to determine the conditions under which field testing, bench testing, and further engineering evaluation shall be performed.

Field testing, bench testing and engineering evaluation of subject vapor recovery systems and components shall be conducted in a manner, determined by the ARB Executive Officer, which shows consideration of the difficulties of actual in-use circumstances in which the systems and components are expected to be employed:

(1) The ARB Executive Officer shall determine any challenge and failure modes necessary to reflect the matrix of actual in-use circumstances expected for all installations of such systems. If such modes are determined, they shall be specified in writing to the applicant.

(2) Field testing, bench testing and engineering evaluation shall include any challenge and failure modes for such systems as determined in (1) to provide for performance standards and performance specifications which can be met by the actual use of all installations of such systems.

5.4 Field Testing

The ARB Executive Officer shall require field testing for any performance standard or performance specification if, after its evaluation, field testing is the only acceptable alternative.

5.5 Bench Testing

The ARB Executive Officer shall require bench testing for any performance standard or performance specification if, after its evaluation, bench testing is necessary and a non-testing evaluation alternative is inadequate.

5.6 Evaluation

The ARB Executive Officer shall evaluate the results of testing for any performance standard or performance specification.

The ARB Executive Officer shall conduct a non-testing evaluation, after determining that testing is unnecessary, for any performance standard or performance specification.

6 DOCUMENTATION FOR CERTIFICATION

A Certification Report shall be prepared, at the applicant's expense, documenting the preceding components:

(1) Application for Certification

(2) Standards, Specifications, and Test Procedures

(3) Evaluation and Testing of the Vapor Recovery System

NOTE: In addition to other required results, vapor recovery system test results shall be reported in units of pounds of hydrocarbon emitted per thousand gallons of fuel transferred for any results which are expressible in such units.

The ARB Executive Officer shall consult with the applicant, shall review the report, may require revisions or more work on the components, and shall approve and sign the Certification Report after it is determined that:

(1) The Certification Report is complete.

(2) The Certification Report documents successful performance of the subject vapor recovery system according to the performance standards, performance specifications, and test procedures.

7 CERTIFICATION

The ARB Executive Officer shall not certify any system until after the system's Certification Report is approved and signed.

Evidence of certification shall be an ARB Executive Order (which shall reference the

Certification Report) signed by the ARB Executive Officer.

After approval and signature of the ARB Executive Order, Certification Reports shall be maintained in the ARB Executive Officer's files and shall be made available upon request.

7.1 Variance from Certification Requirements

7.1.1 Any person who cannot comply with the requirements set forth in § 4 because of unreasonable economic hardship, unavailability of equipment or lack of technological feasibility may apply to the ARB Executive Officer for a variance. The application shall set forth:

(1) the specific grounds upon which the variance is sought;
(2) the proposed date(s) by which compliance with the requirements of § 4 will be achieved; and
(3) a plan reasonably detailing the method by which compliance will be achieved.

7.1.2 Upon receipt of an application for a variance, the ARB Executive Officer shall hold a hearing to determine whether, and under what conditions and to what extent, a variance from the requirements established by § 4 is necessary and will be permitted. Notice of the time and place of the hearing shall be sent to the applicant by certified mail not less than 30 days prior to the hearing. Notice of the hearing shall also be published in at least one newspaper of general circulation and shall be sent to every person who requests such notice, not less than 30 days prior to the hearing.

7.1.3 At least 30 days prior to the hearing the application for the variance shall be made available to the public for inspection. Interested members of the public shall be allowed a reasonable opportunity to testify at the hearing and their testimony shall be considered.

7.1.4 No variance shall be granted unless all of the following findings are made:

(1) that the applicant for the variance is, or will be, in violation of the requirements established by § 4;

(2) that due to unreasonable economic hardship, unavailability of equipment or lack of technological feasibility beyond the reasonable control of the applicant, requiring compliance would result in either:

(a) an arbitrary or unreasonable taking of property, or
(b) the practical closing and elimination of a lawful business; and

(3) that such taking or closing would be without a corresponding benefit in reducing air contaminants.

7.1.5 Any variance order shall include the date(s) by which compliance with the requirements of § 4 will be achieved and any other condition(s) including, where appropriate, increments of progress, that the ARB Executive Officer, as a result of the testimony received at the hearing, find necessary.

7.1.6 If the ARB Executive Officer determines that, due to conditions beyond the reasonable control of the applicant, the applicant needs an immediate variance from the requirements established by § 4, the ARB Executive Officer may hold a hearing without complying with the provisions of § 7.1.2 or § 7.1.3 above.

No variance granted under the provisions of this subparagraph may extend for a period of more than 45 days. The ARB Executive Officer shall maintain a list of persons who in writing have informed the ARB Executive Officer of their desire to be notified by telephone in advance of any hearing held pursuant to this section, and shall provide advance telephone notice to any such person.

7.1.7 Upon the application of any person, the ARB Executive Officer may review and for good cause modify or revoke any variance from the requirements of § 4 after holding a hearing in accordance with the provisions of this section.

7.2 Requirements for Keeping Documents with Cargo Tank

The ARB Executive Officer, upon review of the application of certification of an individual cargo tank and any other pertinent data, and upon finding that the cargo tank complies with the requirements of § 4, shall return a copy of the application to the applicant with stamped acknowledgment of receipt thereon, or other appropriate documentation of certification. The stamped copy of the application or other documentation of certification shall be kept with the cargo tank at all times.

7.3 Requirements for Determinations of Compliance and Violation

The specifications of this section are primarily adopted pursuant to H&SC §§ 41962 and 41974. In particular, H&SC § 41974 provides that the penalty provisions of Article 3 (commencing with Section 42400) of Chapter 4, Division 26 of the H&SC shall apply to gasoline cargo tank vapor recovery system violations.

7.3.1 General Requirements

It is a general requirement that any certified vapor recovery system shall comply with the specifications of certification which result from the application of this procedure to such vapor recovery system. Failure of such vapor recovery system to comply is a violation of such vapor recovery system's specifications of certification.

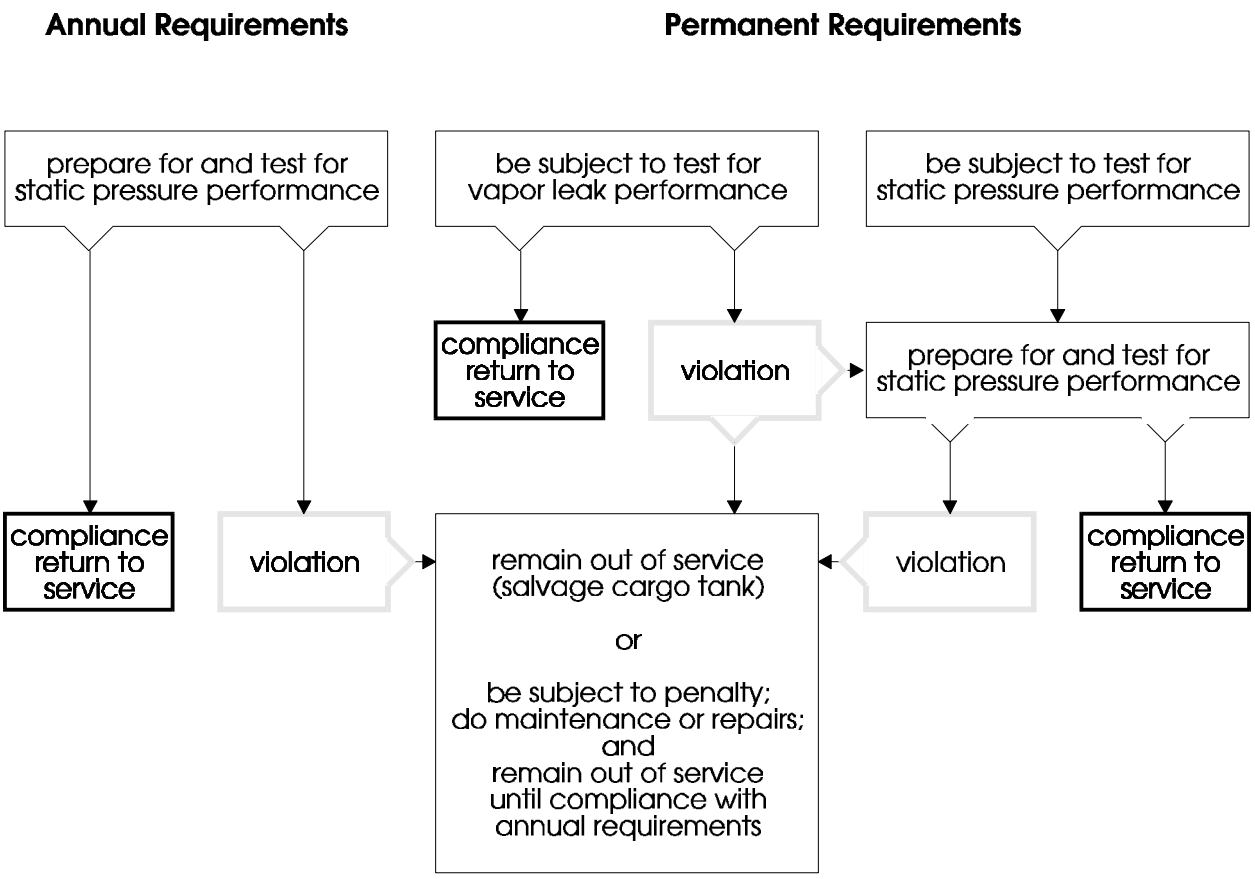
7.3.2 Specific Requirements

It shall be a specification of certification that each cargo tank shall comply with the compliance requirements listed below; failure of a cargo tank to comply with these requirements shall be a violation of that cargo tank's specification of certification.

The flowchart on the next page is only a general guide to specific requirements. See §§ 7.3.2.1 through 7.3.2.4 for the specific requirements.

FLOWCHART

Requirements for Determinations of Compliance and Violation



7.3.2.1 Yearly Requirements

(1) On a yearly basis, each cargo tank shall prepare for pressure testing to determine if that cargo tank complies with the yearly standard according to the appropriate test procedure (§ 4).

(2) Any such cargo tank which fails to demonstrate such compliance shall be subject to a penalty set by the ARB Executive Officer. (See H&SC Section 41974.)

(3) Any such cargo tank which fails to demonstrate compliance shall be taken out of service until such cargo tank is repaired, tested, and determined to comply.

7.3.2.2 Permanent Requirements

(1) On a permanent basis, any cargo tank shall be subject to leak testing to determine if any such cargo tank complies with the performance standards for leaks (§ 4).

Any such cargo tank which fails to demonstrate such compliance shall prepare for pressure testing pending one of the following outcomes:

(a) If no maintenance has been performed on such cargo tank while preparing for testing, such cargo tank may be tested to determine if such cargo tank complies with a static pressure performance standard according to the appropriate test procedure (§ 4).

(i) If such cargo tank complies, such cargo tank may be placed back in service with no penalty.

(ii) If such cargo tank does not comply, such cargo tank shall be subject to a penalty set by the ARB Executive Officer (see H&SC Section 41974) and shall remain out of service until such cargo tank is repaired, tested, and determined to comply with a static pressure performance standard according to the appropriate test procedure (§ 4).

(b) If maintenance has been performed on such cargo tank while preparing for testing, such cargo tank shall be permanently removed from service (salvaged) or shall be tested to determine if such cargo tank complies with the yearly standard according to the appropriate test procedure (§ 4).

(i) If such cargo tank complies, such cargo tank may be placed back in service and shall be subject to a penalty set by the ARB Executive Officer. (See H&SC Section 41974.)

(ii) If such cargo tank does not comply, such cargo tank shall be subject to

a penalty set by the ARB Executive Officer (see H&SC Section 41974) and shall remain out of service until such cargo tank is repaired, tested, and determined to comply with the yearly standard according to the appropriate test procedure (§ 4).

(c) If the cargo tank is taken out of service permanently, such cargo tank shall be subject to a penalty set by the ARB Executive Officer. (See H&SC Section 41974.)

(2) On a permanent basis, any cargo tank may be placed in preparation for pressure testing and shall be subject to static pressure performance testing to determine if any such cargo tank complies with a static pressure performance standard (§ 4).

(a) Any such cargo tank which fails to demonstrate such compliance shall be subject to a penalty set by the ARB Executive Officer (see H&SC Section 41974) and shall be taken out of service.

(b) Such cargo tank may be repaired and re-tested to determine if such cargo tank complies with the annual certification standard according to the appropriate test procedure (§ 4).

(i) If such cargo tank complies, the cargo tank may be placed back in service.

(ii) If such cargo tank does not comply, the cargo tank shall remain out of service until the cargo tank is repaired, tested, and determined to comply with the yearly according to the appropriate test procedure (§ 4).

7.3.2.3 Requirements in Preparation for Pressure Testing

The requirement for an internal vapor valve must be met in preparation for pressure testing.

Any cargo tank which is in preparation for pressure testing as required by § 7.3.2.1 (1), § 7.3.2.2 (1), or § 7.3.2.2 (2), shall prepare in one of the following ways:

Warning: Under no circumstances shall the vapors in any cargo tank be purged or vented directly to the atmosphere. The only exception to this shall be for airport refuelers, which may purge or vent directly to the atmosphere, so long as no safety or fire regulations are violated.

"Airport refueler" is defined as a cargo tank which: has a total capacity no greater than 5,000 gallons; exclusively transports avgas and jet fuel; and is not licensed for public highway use.

The airport refueler exception terminates when there are two CARB-certified degassing vapor control systems which are appropriate for degassing airport refuelers.

(1) Five Minute Pressure Testing (TP-204.1)

(a) If such cargo tank contains product for delivery, such cargo tank shall deliver until empty; then

(b) Such cargo tank shall purge by a method not in violation of any regulations, including but not limited to:

(i) purging with air to an incinerator certified by the ARB or permitted by a District;
(ii) purging with water to an ARB certified vapor recovery system at a bulk plant or terminal which shall recover the purge water in conformity with all applicable regulations;
(iii) purging with a liquid with a vapor pressure of less than four pounds Reid (<4 psi RVP) to an ARB certified vapor recovery system at a bulk plant of terminal; then

(c) Such cargo tank shall be empty.

(d) Such cargo tank shall adhere to the PRE-TEST PROTOCOL of (TP-204.1).

(2) One Minute Pressure Testing (TP-204.2)

Such cargo tank shall adhere to the PRE-TEST PROTOCOL of (TP-204.2).

7.3.2.4 Requirements at Conclusion of Pressure Testing

The entire cargo tank, including tank, domes, dome vents, piping hose connections, adaptors, couplings, hoses and delivery elbows shall be inspected for evidence of wear, damage, or misadjustment that could be a potential leak source. Any part found to be defective shall be adjusted, repaired or replaced as necessary.