

**PROPOSED AMENDMENT OF  
RULE 213, GASOLINE TRANSFER INTO STATIONARY STORAGE CONTAINERS  
STAFF REPORT**

**Executive Summary**

Control of gasoline emissions from the fueling infrastructure in California is a major program area of the California Air Resources Board (ARB). State concerns with gasoline vapor emissions are twofold; health risk from breathing benzene which is a component of gasoline, and the release of Reactive Organic Compounds which contribute to ozone formation in the atmosphere. ARB is continually promulgating new and revised regulations which set the design and operating specifications for equipment used in the gasoline fueling infrastructure in the state. This equipment is then rigorously tested by ARB to confirm compliance with the specifications. Once equipment passes the testing, ARB issues what are called Executive Orders which certifies the equipment for use in California. ARB also promulgates timelines regulating when the new equipment must be added to, or replace older equipment.

Rule 213, Gasoline Transfer into Stationary Storage Containers, is the District rule that applies to the transfer of gasoline into stationary storage containers (the gasoline tanks at service stations). This rule is in need of amendment to comply with a recent new regulation from ARB. Specifically, the new controls on aboveground tanks called Standing Loss Vapor Recovery Control. The Standing Loss regulation requires the use of specific white, sun reflective paint on the external surface of aboveground tanks; and the use of new pressure and vacuum relief valves. The purpose of this regulation is to reduce the venting of gasoline vapors from tanks due to heating by the sun which evaporates gasoline inside the tanks and is then released to the atmosphere through the pressure relief valve.

**Background**

There are two District rules which deal with gasoline dispensing facilities (GDF); Rule 213 which deals with the storage tank part of the GDF and Rule 214, Transfer of Gasoline into Vehicle Fuel Tanks, which deals with the dispensing part of the facility. ARB regulations have historically been divided into Phase I which deals with the storage tank, and Phase II which deals with the dispensing of gasoline. District Rule 213 requires that equipment be ARB certified as Phase I equipment, and District Rule 214 requires this equipment be Phase II certified.

The Standing Loss regulation is neither Phase I nor Phase II, but a third class of regulation. Current District rules do not mention this Standing Loss class of regulation. This amendment of Rule 213 will add the Standing Loss requirements.

**Discussion of Proposed Rule 213 Significant Changes**

Discussed below are descriptions of the significant changes in Rule 213. In addition to these significant changes, the format of the rule is modified to be consistent with the current District format for rules. Some definitions, references, and wording are updated without altering the original meaning. Added a definition for CARB CERTIFIED.

A strikeout version of the amended rule is included as Attachment A to this staff report.

Requirement for Standing Loss Certified Equipment

Section 301.8 is added to the Standards section of the rule which requires:

*Transfer is made to an aboveground storage container equipped for Standing Loss Vapor Recovery Control as certified by the California Air Resources Board after April 1, 2013.*

ARB certifies equipment for installation of new aboveground storage tanks in Executive Order (EO) VR-302 and for upgrading existing aboveground tanks in VR-301. The timeline for Standing Loss compliant new tank installations was April 1, 2009. This means that new tanks installed after this date needed to comply with the regulation.

The bigger issue is that existing aboveground tanks will need to be upgraded to be Standing Loss compliant by April 1, 2013. The EO for upgrading existing tanks is VR-301.

Most of the popular manufacturers of protected aboveground tanks (SuperVault, Fireguard, ConVault, Hoover Vault, and Jensen Armor Cast) have been supplying white painted tanks for years that are now certified for Standing Loss.

The other requirement of Standing Loss is using the Husky Model 5885 Pressure Vacuum Vent Valve (PV Valve). Many existing tanks already utilize this valve due to the fact that PV valves often fail and are replaced with the Husky valve. The cost of a new Husky valve is about \$500.

Tanks that are not certified due to not being manufactured by one of the listed manufacturers, or are painted some other color than white, will need to be repainted with one of the four certified white paints.

There are currently approximately 85 aboveground tanks permitted in the District that will be subject to the Standing Loss regulation.

#### Exemption

Most of the aboveground tanks permitted in the District are small; 1,000 gallons capacity or less. Most of these tanks as manufactured are already certified for the paint. There are a few facilities that employ multiple large vertical tanks that are not certified and would need to be painted. The District desires to exempt these tanks from the painting provision of Standing Loss. The exemption reads:

*102.2 The white paint provision of Standing Loss Vapor Recovery Control shall not apply to vertical, cylindrical, aboveground storage tanks over 15,000 gallons in capacity that use a combustion type vapor processor.*

Combustion type vapor processors function by burning gasoline vapors as part of the pressure management system for these large tanks. The vapors are released through a burner where approximately 99% of the gasoline is burned. Allowing an exemption from using the specified paint will possibly lead to additional vapor generation in the tank due to solar heating, but this additional vapor will be 99% controlled through the vapor processor.

There are three existing facilities in Placer County that utilize multiple tanks of approximately 20,000 gallons capacity each. Two facilities have two gasoline tanks each, while the third facility employs three of these tanks. Two facilities have the tanks painted white, but not with the certified paint type. The third facility has the three tanks painted white, but has a mural painted on the sides, so the tanks are not entirely white.

Certified paint is rather expensive. The District has reports that painting a 1,000 gallon tank costs about \$1,000, consisting of \$500 for the paint and \$500 for application of the paint. Painting of multiple 20,000 gallon tanks will likely cost tens of thousands of dollars. The emissions reduction benefit of the painting will be minimal because the vapor processors are already controlling the gasoline emissions.

#### Prohibition of Sale

A provision is added to the rule that makes equipment manufacturers responsible for supplying only CARB certified equipment. Without this new provision, the District would have no enforcement authority over the manufacturers of the equipment. New section 302 reads:

## Rule 213, GASOLINE TRANSFER INTO STATIONARY STORAGE CONTAINERS

Staff Report

Board Date: February 14, 2013

3 of 4

302 *A person shall not supply, offer for sale, sell, install or allow the installation of any new or rebuilt vapor recovery system or any of its components, unless the system and component are CARB certified. Each vapor recovery system and its components shall be clearly and permanently marked with the qualified manufacturer's name and model number as certified by CARB. In addition, any qualified manufacturer who rebuilds a component shall also clearly and permanently mark the corresponding information on the component.*

### **Fiscal Impact**

The amendment of Rule 213 will have a fiscal impact on aboveground tank GDF permit holders as compared with business under the current rule. The rule amendment adds the Standing Loss requirement on aboveground tank systems. This modification of existing tanks is required according to the CARB timeline of April 1, 2013. However, Standing Loss compatibility would eventually be required under District rules when the Phase I EVR upgrade to existing aboveground tanks is required by the CARB timeline of July 1, 2014. The EOs for Phase I EVR equipment all require that Standing Loss is installed. The addition of Standing Loss to Rule 213 accelerates the deadline by 15 months.

The cost of complying with the Standing Loss requirement is estimated at \$500 if the PV valve is not already installed and \$1,000 if the tank needs to be painted with a complying white paint. This would apply to tanks up to 1,000 gallons in size.

The exemption from painting large vertical tanks would save owners/operators of those tanks tens of thousands of dollars.

### **Outreach**

The public was notified of the proposed amendment of Rule 213 through a newspaper notice and direct mailer of a notice to each permitted gasoline dispensing facility in the District. The notice specified the time and place of the public hearing to adopt the amended rule, and referenced the District website where the rule and staff report could be reviewed.

The draft rule amendments and staff report were sent to EPA and ARB for comment. ARB responded with no comment. EPA responded with one comment. EPA commented that the rule section on test procedures should list the applicable test procedures instead of only saying that test methods for compliance testing shall be in accordance with CARB vapor recovery test procedures. Staff responded by explaining that CARB is currently reviewing the compliance test procedures and is attempting to eliminate some procedures and combine others in a single procedure. This effort will likely make a current listing of procedures inaccurate and require a subsequent amendment of Rule 213. The wording of the section was modified to be more explicit:

402 *Test methods for compliance testing for this rule shall be methods adopted by the Air Resources Board pursuant to California Health and Safety Code Section 41954(h), and are those test methods listed in the Executive Order(s) for the specific Air Resources Board certified equipment installed.*

### **Analysis and Findings**

The following Analysis and the subsequent Findings are intended to address the requirements set forth in the Health and Safety Code relating to adoption of a new or amended District Rule, as well as other State statutes referenced herein.

### Cost-Effectiveness of a Control Measure

California Health & Safety Code (H&S) Section 40703 requires a District to consider and make public “the cost-effectiveness of a control measure”. The cost-effectiveness of the Standing Loss requirement has been addressed by CARB when the Standing Loss regulation was originally promulgated.

### Socioeconomic Impact

H&S Section 40728, in relevant part, requires the Board to consider the socioeconomic impact of any new rule if air quality or emission limits are significantly affected. However, Districts with a population of less than 500,000 persons are exempted from the socioeconomic analysis. In 2011, the population of Placer County was approximately 352,000 persons. Therefore, the District is not required to consider the socioeconomic impacts of the proposed rule amendment.

### California Environmental Quality Act (CEQA)

Proposed amended Rule 213 is not an activity that may cause a direct or reasonably foreseeable indirect physical effect in the environment therefore not considered a “project”, as defined by Section 21065 of the California Public Resource Code and Section 15378(b)(4)&(5) of the CEQA guidelines.

According to the above conclusion, Staff finds that the proposed rule is exempt from the California Environmental Quality Act (CEQA) because 1) it can be seen with certainty that there is no possibility that the activity in question may have a significant adverse effect on the environment (CEQA Guidelines §15061(b) (3)) and 2) it is an action by a regulatory agency for protection of the environment (Class 8 Categorical Exemption, CEQA Guidelines §15308). A CEQA analysis is therefore not necessary.

### Findings

- A. **Necessity** – The amendment of Rule 213 is necessary in order to incorporate updated California Air Resources Board (CARB) requirements for gasoline dispensing facilities. This rule amendment will provide the District with enforcement authority for CARB Standing Loss regulations.
- B. **Authority** – California Health and Safety Code, Sections 40702, 41511, and 42303 are provisions of law that provide the District with the authority to adopt this amended Rule.
- C. **Clarity** – There is no indication, at this time, that the proposed Rule is written in such a manner that persons affected by the Rule cannot easily understand them.
- D. **Consistency** – The regulation is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.
- E. **Non-duplication** – The regulation does not impose the same requirements as an existing state or federal regulation.
- F. **Reference** – All statutes, court decisions, and other provisions of law used by PCAPCD in interpreting this regulation is incorporated into this analysis and this finding by reference.

# RULE 213 GASOLINE TRANSFER INTO STATIONARY STORAGE CONTAINERS

Adopted 06-19-79  
(Amended 04-21-81, 05-20-85, 09-25-90, 10-19-93, [2-14-13](#))

## CONTENTS

### **10.0 GENERAL**

10.1 APPLICABILITY  
102 [EXEMPTIONS](#)

### **20.0 DEFINITIONS**

20.1 AVERAGE MONTHLY THROUGHPUT  
202 [CARB CERTIFIED](#)  
20.23 GASOLINE  
20.34 GASOLINE BULK PLANT  
20.45 GASOLINE VAPORS  
20.56 LEAK FREE  
20.67 REID VAPOR PRESSURE  
20.78 SUBMERGED FILL PIPE  
20.89 VAPOR TIGHT  
20.910 VAPOR TIGHT GASOLINE CARGO TANK

### **30.0 STANDARDS**

30.1 TRANSFER PROVISIONS  
302 [PROHIBITION OF SALE](#)  
3.2 [EXEMPTIONS](#)  
3.3 [TEST METHODS](#)

### **4.00 ADMINISTRATIVE [REQUIREMENTS](#)**

40.1 [COMPLIANCE SCHEDULE](#)  
40.21 RECORDKEEPING  
402 [TEST METHODS](#)

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## 10.0 GENERAL

### 10.1 APPLICABILITY

10.1.1 The provisions of this rule shall apply to the transfer of gasoline into any stationary storage containers, except as provided in Section ~~3-2102~~ of this rule.

### 102 EXEMPTIONS

102.1 The provisions of this Rule shall not apply to the transfer of gasoline into any stationary storage container:

102.1.1 Which has a capacity of less than 550 gallons and is used exclusively for the fueling of implements of husbandry as such vehicles are defined in Division 16 (Section 36000 et seq.) of the California Vehicle Code, if such container is equipped with a permanent submerged fill pipe.

102.1.2 With a capacity of 2,000 gallons or less and installed before January 1, 1979, if such container is equipped with a permanent submerged fill pipe.

102.2 The white paint provision of Standing Loss Vapor Recovery Control shall not apply to vertical, cylindrical, aboveground storage tanks over 15,000 gallons in capacity that use a combustion type vapor processor.

## 20.0 DEFINITIONS

**20.1 AVERAGE MONTHLY THROUGHPUT:** ~~- is defined as -~~ The total gasoline unloaded and dispensed in the most recent full calendar year from the facility's storage tanks divided by twelve.

**202 CARB CERTIFIED:** A vapor recovery system, equipment, or any component thereof, for which the CARB has evaluated its performance and issued a valid Executive Order pursuant to California Health and Safety Code Section 41954. Each component of a system that is a separate CARB certified item cannot be replaced with a non-certified item or other items that are not certified for use with the particular system. Except for qualified repairs, a CARB certified component shall be as supplied by the qualified manufacturer. A rebuilt component shall not be deemed as CARB certified unless the person who rebuilds the component is authorized by CARB to rebuild the designated CARB certified component.

**20.3 GASOLINE:** ~~- is defined as Petroleum~~ Any petroleum distillates used as motor fuel with having a Reid vapor pressure ~~greater than 4.0 pounds~~ of four pounds or greater.

**20.4 GASOLINE BULK PLANT:** ~~- is defined as a~~ distributing facility, with a throughput less than or equal to 20,000 gallons a day, which receives gasoline, stores it in stationary tanks, and loads it into tank trucks for delivery to service stations or other distribution points.

**20.5 GASOLINE VAPORS:** ~~- are defined as -~~ The displaced vapors including any entrained liquid gasoline.

**20.6 LEAK FREE:** ~~- is defined as a~~ liquid leak of less than three drops per minute excluding losses which occur upon disconnecting transfer fittings, provided such disconnect losses do not exceed 10 milliliters (0.34 fluid ounces) per disconnect, averaged over three disconnects.

**20.7 REID VAPOR PRESSURE:** ~~- is defined as t~~The absolute vapor pressure of volatile ~~crude oil and volatile non-viscous~~ petroleum liquids, except liquefied petroleum gases, ~~and as determined by in accordance with~~ ASTM-323-~~5889~~.

**20.8 SUBMERGED FILL PIPE:** ~~- is defined as a~~Any fill pipe, the discharge opening of which is entirely submerged when the liquid level is 6.0 inches above the bottom of the container. "Submerged fill pipe" when applied to a container which is loaded from the side is defined as any fill pipe the discharge opening of which is entirely submerged when the liquid level is 18.0 inches above the bottom of the container.

**20.9 VAPOR TIGHT:** ~~- is defined as t~~The concentration of total hydrocarbons, measured 1 cm from any source, not to exceed 10,000 ppm (expressed as methane) above background, as determined by EPA Reference Method 21.

**201.90 VAPOR TIGHT GASOLINE CARGO TANK:** ~~- is defined as a~~ leak that does not exceed the standards as specified in EPA Reference Test Method 27.

## **30.0 STANDARDS**

### **30.1 TRANSFER PROVISIONS**

**30.1.1** A person shall not transfer or permit the transfer of gasoline from any tank truck or trailer into any stationary storage container with a capacity of more than 250 gallons unless such container is provided with a permanent submerged fill pipe and unless such transfer is made under the following conditions:

**30.1.1.12** The displaced gasoline vapors or gases are processed by a vapor recovery system that shall collect at least 95 percent by weight, as determined by ~~CARB Test Method 2-3~~Procedure TP-201.1A, of the hydrocarbon vapors vented during filling of the stationary storage container and the system ~~has been certified for installation by the California Air Resources Board~~ CARB certified.

**30.1.1.23** Transfer is made to a storage container equipped as required in RULE 212, STORAGE OF ORGANIC LIQUIDS.

**30.1.42** Loading shall be accomplished in such a manner that all displaced vapor and air will be vented only to the vapor recovery system. Measures shall be taken to ensure that the loading device is leak free when it is not in use and to accomplish complete drainage before the loading device is disconnected.

**30.1.53** The vapor recovery system shall be maintained and operated so that it does not cause the pressure in a gasoline delivery vessel to exceed 18 inches water gauge or the vacuum to exceed 6 inches water gauge.

**30.1.64** All vapor recovery equipment and gasoline loading equipment shall be maintained in good working order and shall be leak free and vapor tight.

**30.1.75** In no instance shall the gasoline loading operations exceed the capacity of the vapor processing unit.

**30.1.86** No person shall store gasoline in or otherwise use or operate any gasoline delivery vessel unless such vessel is designed and maintained to be leak free and vapor tight. Any delivery vessel into which gasoline vapors have been transferred, shall be refilled only at a gasoline bulk plant or terminal that is

equipped with a system that prevents at least 95 percent by weight of the gasoline vapors displaced from entering the atmosphere.

30-1.97 A person shall not operate any gasoline loading facility which is not subject to the provisions of RULE 215, TRANSFER OF GASOLINE INTO TANK TRUCKS, TRAILERS AND RAILROAD TANK CARS AT LOADING FACILITIES unless:

~~30.1.7.110~~ ~~The~~ the facility is equipped and operated with a system or systems to prevent the release to the atmosphere of at least 95 percent by weight, as determined by the applicable CARB Test Method 2-3 Procedures, of the gasoline vapors displaced during the filling of the facility's stationary storage containers; and.

~~30.1.11 7.2~~ ~~The facility is equipped and operated with a CARB pressure-vacuum relief valve on the above-ground stationary storage containers with a minimum pressure valve setting of 90 percent of the maximum safe pressure and vacuum ratings of the containers, provided that such setting will not exceed the container's maximum pressure rating.~~

301.428 After April 1, 2013, transfer is made to an aboveground storage container equipped for Standing Loss Vapor Recovery Control as certified by the California Air Resources Board pursuant to Certification Procedure CP-206.

**302** **PROHIBITION OF SALE:** A person shall not supply, offer for sale, sell, install or allow the installation of any new or rebuilt vapor recovery system or any of its components, unless the system and component are CARB certified. Each vapor recovery system and its components shall be clearly and permanently marked with the qualified manufacturer's name and model number as certified by CARB. In addition, any qualified manufacturer who rebuilds a component shall also clearly and permanently mark the corresponding information on the component.

### **3.2** **EXEMPTIONS**

~~3.2.1~~ ~~The provisions of this Rule shall not apply to the transfer of gasoline into any stationary storage container:~~

~~3.2.2~~ ~~Which has a capacity of less than 550 gallons and is used exclusively for the fueling of implements of husbandry as such vehicles are defined in Division 16 (Section 3600 et seq.) of the California Vehicle Code, if such container is equipped with a permanent submerged fill pipe.~~

~~3.2.3~~ ~~With a capacity of 2,000 gallons or less and installed before January 1, 1979, if such container is equipped with a permanent submerged fill pipe.~~

### **3.3** **TEST METHODS**

~~3.3.1~~ ~~Reference methods for compliance testing for this rule are specified in 40 CFR 60.503.~~

~~3.3.2~~ ~~EPA Reference Method 21 shall be used to test for vapor tight condition or liquid leaks.~~

## **40.0** **ADMINISTRATIVE REQUIREMENTS**

### **40.1** **COMPLIANCE SCHEDULE**

~~40.1.1 Any source of emission subject to this Rule, installed on or after January 1, 1979, shall comply with the provisions of this Rule no later than six months from the date of adoption.~~

#### **40-21 RECORDKEEPING**

40-21.1 The owner or operator of any facility subject to the provisions of this rule shall prepare a daily log of the throughput and a summary of the throughput for the calendar year to date of the liquid compounds subject to the provisions of this rule. Such records shall be maintained at the facility for at least 2 years and shall be made available to the APCO upon request.

40-21.2 Records shall include the number of gasoline storage tanks serviced and their respective capacities in gallons.

40-21.3 In addition to the recordkeeping requirements specified herein, all provisions of ~~Regulation IV,~~ RULE 410, RECORDKEEPING FOR VOLATILE ORGANIC COMPOUND EMISSION when applicable, must still be adhered to.

**402 TEST METHODS:** Test methods for compliance testing for this rule shall be methods adopted by the Air Resources Board pursuant to California Health and Safety Code Section 41954(h), and are those test methods listed in the Executive Order(s) for the specific Air Resources Board certified equipment installed.