

# **SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT**

## **FINAL DRAFT STAFF REPORT**

### **PROPOSED AMENDMENTS TO RULE 2020 (EXEMPTIONS)**

November 18, 2014

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#### **I. SUMMARY**

The San Joaquin Valley Unified Air Pollution Control District (District) is proposing to amend District Rule 2020 (Exemptions) to align its permitting program with the California Air Resources Board (ARB) Portable Equipment Registration Program (PERP) and with the requirements of District Rule 4623 (Storage of Organic Liquids).

The proposed rule amendments would bring into line the District's exemption rule with the statewide PERP program by allowing certain registered portable engines to be used at stationary sources during unforeseen interruptions of electrical power from the serving utility, maintenance or repair, and short-term electrical upgrade operations. Amendments to Rule 2020 would also exempt currently permitted heavy oil tanks at small producers (which are also exempt from Rule 4623 controls) and maintain the current internal combustion engine exemption levels in response to recently adopted NSPS and NESHAP requirements for engines smaller than 50 brake horsepower (bhp). Additionally these amendments would update and consolidate various sections of the rule that discuss source test methods to allow for flexibility in using alternative test methods with written approval from the United States Environmental Protection Agency (EPA) and the District.

**II. BACKGROUND AND DISCUSSION OF PROPOSED AMENDMENTS**

**A. Rule 2020 (Exemptions)**

Equipment or processes that may emit air pollution or are used for controlling air pollution are subject to permit requirements through the District's permitting program. Certain equipment with low emissions are exempt from permitting requirements and the purpose of Rule 2020 is to itemize these types of exempt sources. Rule 2020 also requires recordkeeping to verify or maintain the exemptions that are based on throughput or emissions limitation.

**B. Statewide Portable Equipment Registration Program (PERP)**

Portable equipment is designed and capable of being carried or moved from one location to another. The California Air Resources Board established a statewide program for the voluntary registration of portable engines and equipment units in California, in response to industry's need for an alternative to permitting portable equipment at each location at which it operates, as is required under air districts' stationary source permitting regulations. Once registered under this voluntary program, portable engines and equipment units may operate throughout the State without having to obtain stationary source permits from the local air pollution control and air quality management districts. This program provides industry with the flexibility to operate portable engines and equipment units under a uniform statewide registration program, while also ensuring that emissions from such equipment are minimized and reduced over time.

Pursuant to the California Code of Regulation Title 13, Division 3, Chapter 9, Article 5, specifically section 2451(c)(3), a portable equipment registration is not valid when the emissions unit is operated in a way that it becomes part of a stationary source or if it operates in one location more than 12 months. Some of the indications that a piece of equipment qualifies as portable include wheels, skids, carrying handles, dolly, trailer, or platform.

Under current District regulations, there are instances where a portable emission unit is determined to be part of a stationary source and must be permitted by the District. District Rule 2201 (New and Modified Stationary Source Review Rule) Section 3.37, defines stationary source, which includes all equipment with emissions that are under common control, part of the same industrial process, and located on contiguous or adjacent properties. Per Rule 2201, emission units replacing or supplementing an ongoing function of a facility becomes part of that stationary source.

Proposed Rule 2020 amendments would bring the District's exemption rule in line with ARB's Statewide Portable Equipment Registration Program provisions under ARB PERP regulations 2451(c)(9). Proposed amendments to Rule 2020

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

---

would allow the use of PERP engines operating to provide primary or supplemental power as generators, during unforeseen interruptions of electrical power from the serving utility, maintenance or repair, and electrical upgrade operations including startup, shutdown, and testing, that do not exceed 60 calendar days.

Emergency IC engines greater than 50 braking horsepower are generally permitted by the District. Emergency IC engines provide continued electrical power during unscheduled electrical power outages caused by sudden and unforeseen events beyond the control of the facility. For those sources that do not have a dedicated permitted emergency IC engine, there may be instances where power is needed during an unforeseen interruption of electrical power from the serving utility. Therefore, section 6.16.2.1 aligns the District's permitting program with the state PERP regulations, by clarifying that permits are not required for the purposes of addressing such emergency conditions.

Upgrading electrical systems generally requires disconnecting the user of the electricity from utility power. The state PERP regulation allows the use of registered portable equipment to generate power during electrical upgrades, including startup, shutdown and testing of the equipment. Section 6.16.2.1 adds these PERP provisions and the associated 60 calendar day limitation in District Rule 2020.

Generators under District permit at a stationary source, such as one powered by an IC engine, generally undergo maintenance or repair from time to time and are not be able to provide power when taken offline. For a facility that needs to have a continuous electrical system in place, a replacement portable generator may be brought on site, usually through a third-party rental company, to act as a temporary replacement while the permitted unit is being repaired. Amendments to 2020 would allow this type of portable engine to be used as intended by the PERP regulation with the caveat that the portable engine must qualify as a Temporary Replacement Emissions Unit (TREU) under Rule 2201 (New and Modified Stationary Source Review Rule). TREUs must have no greater emissions than the unit replaced, must be used for the identical purpose and cannot be used for more than 180 days in any 12 month period. Therefore, Section 6.16.2.2 was added to exempt from permits the temporary use of registered portable equipment as a TREU if it directly replaces a district permitted generator that undergoes maintenance or repair.

These amendments are intended to coordinate and align District Rule 2020 with the statewide PERP requirements, and relieve PERP engines from layered regulatory burden without impacting air quality.

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

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### **C. District Rule 2280 (Portable Equipment Registration)**

Portable equipment operators are allowed to register their units through either the statewide PERP or District Rule 2280.

There are approximately 428 portable equipment units in the valley that are registered through District Rule 2280, and there are 27,000+ engines statewide that choose to be registered through PERP. As with statewide PERP, portable engines registered through the District's Rule 2280 and used at stationary sources during unforeseen interruptions of electrical power from the serving utility, maintenance or repair of a District permitted generator, and short-term electrical upgrade operations will be exempt from permit.

### **D. Heavy Oil Tanks at Small Producers**

Heavy oil is viscous petroleum that the District defines as a crude oil that has an American Petroleum Institute (API) gravity of 20 degrees or less. Heavy oil tanks have minimal volatile organic compounds (VOC) emissions as heavy oil has a lower vapor pressure and does not volatilize as readily as light oil.

The small producer is typically a 'mom and pop' operation that has limited production capacity. As defined in Rule 4623 (Storage of Organic Liquids), Section 3.29, a Small Producer operates in the business of crude oil production that produces an average of less than 6,000 barrels per day of crude oil from all operations within the county; and does not engage in refining, transportation, or marketing of refined petroleum products.

Rule 4623 limits VOC emissions from the storage of organic liquids and applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored. Rule 4623 section 4.3 states that a small producer's tank with a throughput of 50 barrels of crude oil per day or less is exempt from the control requirements of this rule.

The District has analyzed expected emissions from Small Producer tanks and has found that while light oil tanks may have significant emissions, heavy oil tanks with low throughputs have minimal emissions.

For instance, average emissions from a heavy oil small producer tank with no pressure relief valve is 47 pounds of VOC per tank, ranging from 21 lb/year at a wash tank to 73 lb/year at a stock tank. The daily emissions from these tanks are under 0.2 pounds of VOC and therefore under the BACT threshold of 2 lb/day. In addition, such insignificant emissions do not trigger offsets as further discussed in Section III., below. Because these tanks are exempt from emissions requirements of Rule 4623 (Storage of Organic Liquids) and from any requirements under Rule 2201 (New and Modified Stationary Source Review

Rule), this rule amendment does not cause any emissions increases or avoid any air pollution control requirements.

Because requiring permits for heavy oil tanks at small producers that have a throughput of 50 barrels per day or less provides no air quality benefit, the District is proposing amendments to Rule 2020 to exempt such tanks from District permitting requirements.

**E. National Emission Standards for Hazardous Air Pollutants (NESHAP) and New Source Performance Standards (NSPS)**

EPA promulgates NSPS standards in 40 CFR Part 60, and Maximum Achievable Control Technology (MACT) standards, also known as NESHAP regulations, in 40 CFR Part 63. Generally, the District implements and enforces the MACT standards through District Rule 4002 (National Emission Standards for Hazardous Air Pollutants) and NSPS standards through Rule 4001 (New Source Performance Standards). Historically, NESHAPs and NSPS have applied to major sources of air contaminants. Accordingly, District permitting regulations have generally required permits of sources subject to a NESHAP or NSPS. However, EPA has recently promulgated NESHAPs and NSPS applicable to area sources which are considered small sources of emissions, individually, but when considered in conjunction with emissions from all similar equipment the cumulative emissions may be large.

For example, NSPS Subpart JJJJ and NESHAP Subpart ZZZZ regulate IC engines smaller than 50 brake horse power (bhp). Because Federal permitting requirements only apply to major sources, EPA designed these area source standards to be enforceable without permitting. The District considers IC engines equal to or smaller than 50 bhp as insignificant emission sources and exempt from permitting under Rule 2020, section 6.12.2. The District proposes to keep the permit exemption level of IC engines at 50 bhp.

Therefore, the definitions of HAP Source (section 3.6) and NSPS Source (section 3.12) will be revised to specifically exclude IC engines rated at 50 bhp or less, thus clarifying that such engines remain exempt from permits.

The definition of HAP Source was further modified to exclude IC engines operated in conformity to Rule 2020, Section 6.16, Portable Emissions Units. The reason for this change is apparent as one follows the logic of the current rule. Under Rule 2020, an emission unit that is a HAP Source is not eligible for a permit exemption. An emissions unit that is subject to an Air Toxic Control Measure (ATCM) is a HAP Source by definition. Thus, any emission unit that is subject to an ATCM is a HAP Source and not eligible for a permit exemption under Rule 2020. Since 2005, portable diesel engines have been subject to an ATCM for Diesel Particulate Matter from Portable Engines Rated at 50

Horsepower and Greater, which means that any portable diesel engine that is subject to this ATCM would require a permit. However, the District has never interpreted Rule 2020 to require permits for portable diesel engines solely because they were a HAP Source. The proposed change merely adjusts the internal logic of the rule to be consistent with historical District permitting practice and the state's PERP regulation.

## **F. Source Test Methods**

Source test methods are updated from time to time, and Rule 2020 is being amended to eliminate specification of the version of the stated test methods to be used, allowing for sources and source test companies to use the latest methods without needing to amend the Rule in the future.

Two test methods with prior EPA and District approval were added to the rule. Test method ASTM D5504 (Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence) was added to Section 6.1.1.5, as one of the approved methods for determining the fuel sulfur content. ASTM D5504 is listed among the test methods incorporated by reference in 40 CFR 60.17 (76). The title of the test method was included to be consistent with the other test methods specified in this section.

Test method ASTM D287, Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method), was added to Sections 6.6.2, 6.6.3, 6.6.6, 6.6.7, 6.7.1.1.2, and 6.7.1.2.2. ASTM D287 is already listed as an approved test method for API Gravity in District Rules 4623 (Section 6.4.2) Storage of Organic Liquids, and 4409 (Section 6.3.5) Components at Light Crude Oil Production Facilities, Natural Gas Production Facilities, and Natural Gas Processing Facilities. The title of the test method was not included to be consistent with the other test methods specified in these sections.

Additionally, rule language allowing the use of alternative test methods, as long as the alternative test methods are approved in writing by EPA and the District, has been consolidated (see Section 8.2 of Rule 2020). This administrative amendment was recommended by the District's Permit Stakeholders group. The District had developed an alternative source test approval process, by which industry and stakeholders can request alternative test methods for District and EPA approval. Currently, the District is working with EPA on requests for alternative test methods and will publish any future District and EPA approved alternate methods on the District's website. This process will significantly streamline the approval of alternative test methods in the future.

## G. Proposed Rule Amendments

The sections in Draft Rule 2020 that are proposed to be amended are outlined below:

- Section 3.3: Added a new definition for Electrical Upgrade relating to the use of portable engines. The PERP regulation defines electrical upgrades allowed under ARB's registration program. The portable engine needs to meet the ARB definition for electrical upgrade for it to be registered through ARB's PERP program.
- Section 3.6: Modified the definition of HAP Source, to exclude IC engines 50 hp or less, to maintain current exemption levels in response to recent MACT Standards.
- Per workshop comments, the definition of HAP Source was further modified to exclude portable registered engines that operate in conformity with Section 6.16 (see Section IV. B. and Appendix A of this report).
- Section 3.7: Added heavy oil as defined in 2201, having an API gravity of 20 degrees or less as determined by ASTM method D 287.
- Section 3.12: Modified the definition of NSPS Source, to exclude IC engines 50 hp or less, to maintain current exemption levels in response to recent NSPS Standards.
- Section 3.17: Added small producer as defined in Rule 4623
- Sections 6.1.1.6 and 6.7.5: These sections allow for use of alternative test methods, other than specified in the rule, if the alternative methods are approved in writing by EPA and the District APCO. These two sections were moved under the general Administrative Requirements in section 8.2.
- Sections 6.6.2, 6.6.3, 6.6.6, 6.6.7, 6.7.1.2.2, 6.7.3, and 6.9.2: Removed the year-version designation from the specified source test methods, to allow for sources to use the most recent, improved versions without needing to continually amend this Rule to add them.
- Section 6.6.12 adds the Permit to Operate and Authority to Construct exemption for heavy oil tanks with an individual throughput of less than 50 bbl/day at small producers.
- Sections 6.16.2: This section was added to state that portable engines are allowed to operate as long as they don't become a part of a stationary source. Emission units operated in a way that is considered part of a stationary source must obtain a District permit.
- Section 6.16.2 was moved to new section 6.16.3 and applies to the entire portable emission unit category.
- Section 6.16.2.1: Portable engines operated less than 60 calendar days at a stationary source under the state of California PERP program or District Rule 2280 will not be required to obtain a district permit if they meet the provisions outlined in sections 6.16.2.1 and 6.16.2.3.

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

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- Per workshop comments, the scenario of “maintenance or repair” was added to 6.16.2.1 (see Section IV. B. and Appendix A of this report).
- Section 6.16.2.2: This section was added to exempt engines used as Temporary Replacement Emissions Units (as defined in Rule 2201, Section 3.41) and meet the provisions outlined in section 6.16.2.3.
- Section 8.2: The allowance for alternative test methods was moved here and applies to test methods found throughout the rule.

### III. PROTECT CALIFORNIA AIR ACT OF 2003 - SENATE BILL 288

California Health and Safety Code sections 42500 through 42507 (SB 288) mandates that a District’s New Source Review (NSR) rules cannot be made less stringent, in a variety of specified areas, than the NSR rules that existed on December 30, 2002. This legislation was adopted specifically to prevent Districts from implementing any Federal NSR reforms that would have relaxed California’s stringent NSR requirements.

ARB considers permit exemption rules to be a part of a district’s New Source Review rules and so the following demonstrates that the proposed amendments to Rule 2020 are permissible under SB288.

ARB has provided guidance on the implementation of SB 288 (California Air Resources Board Guidance, *New Source Review and Senate Bill 288* (August 2004, as amended April 2006)), and has concluded that there are four components of NSR that are affected:

1. NSR applicability determinations.
2. The definitions of “modification”, “major modification”, “routine maintenance”, and “maintenance or repair”.
3. The calculation methodology, thresholds, or other procedures of new source review. ARB interprets this to apply to baseline determinations, calculating emissions changes, and major source and major modification thresholds.
4. The definitions and requirements of NSR regulations, both substantive and procedural. This includes the requirement to apply Best Available Control Technology (BACT), to perform an air quality impact analysis, and to obtain offsets<sup>1</sup>.

Per the ARB Guidance, each of these four components apply on both an individual source basis, as well as on a programmatic basis.

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<sup>1</sup> While the District believes that this final component, relating to the requirement to obtain offsets, is an overly broad legal interpretation of the legislation, and inconsistent with the development and intent of the legislation, the District believes the proposed amendments are complying with ARB’s interpretation on this issue. However, the District will reserve its right to challenge ARB on this issue at a later date, or if ARB uses this interpretation to contravene any of the District’s proposed amendments.

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

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As Rules 2201 and 2410 are not being amended, there is no change to NSR applicability determinations, definitions, or calculation methods, thresholds or other procedures of NSR; and therefore, there is no effect on the first three listed components. For the fourth component, each of the proposed amendments to Rule 2020 will be evaluated to determine if there could be a relaxation of the NSR requirements for BACT, offsets and public notice.

### A. Registered Portable Emissions Units

Rule 2020 Section 6.16.2 is being added as the District has consistently received questions about whether portable equipment can be used as part of a stationary source, as defined in Rule 2201.

- **Section 6.16.2.1 clarifies permit exemption for portable engines operating as allowed by ARB's PERP regulation:**

Under the ARB PERP regulations, engines do not qualify to receive registration if they would be considered to be part of a stationary source, except for the specific cases contained in 2451(c)(9):

*(c) The following are not eligible for registration under this program:  
...(9) generators used to provide primary or supplemental power to a building, facility, stationary source, or stationary equipment, except during unforeseen interruptions of electrical power from the serving utility, ...and electrical upgrade operations including startup, shutdown, and testing that do not exceed 60 calendar days.*

This section is open to interpretation, resulting in inconsistency in its application. In fact, ARB, the California Air Pollution Control Officers Association (CAPCOA), and industry worked together to develop guidance on implementing the PERP regulation, and in March of 2014 CAPCOA published the work product of this group (as published on ARB's website at: [http://www.arb.ca.gov/portable/perp/capcoa\\_document\\_3-12-14.pdf](http://www.arb.ca.gov/portable/perp/capcoa_document_3-12-14.pdf)).

Included in this work product was a conclusion that permits were not required for engines operated under (c)(9). In order to clarify that such equipment is exempt from permits, provided it is appropriately registered and operated under the State's PERP regulation, proposed Rule 2020 Section 6.16.2.1 will be added.

As this clarification does not change current permitting requirements, it is not a relaxation under SB288.

- **Section 6.16.2.2 provides permit exemption for engines used in repair and maintenance operations and qualify as Temporary Replacement Emissions Units (TREU):**

Rule 2020, Section 7.3 allows repair and maintenance activities to occur without triggering permitting requirements. In addition, ARB PERP regulations allow registered engines to provide power to a source as part of repair and maintenance functions:

*(c) The following are not eligible for registration under this program:  
...(9) generators used to provide primary or supplemental power to a building, facility, stationary source, or stationary equipment, except ...maintenance and repair operations...*

Per Rule 2201, Section 3.41, TREU's are not allowed to have any increase in emissions over the unit it temporarily replaces, and are exempt from BACT and offsets per Sections 4.2.5 and 4.6.5. As TREU's are not subject to any requirements under NSR, there is no reason to require permits. Rule 2020 Section 6.16.2.2 will allow engines that qualify as TREU's under Rule 2201, Section 3.41 to operate under their registration, without requiring permitting, and such exemption is not a relaxation under SB288.

## **B. Heavy Oil Tanks at Small Producers**

Section 6.6.12 would add a permit exemption for heavy oil tanks operated by small producers and limited to throughputs of less than 50 barrels of heavy crude oil/day.

Small Producer tanks used in heavy oil production have minimal emissions due to the low volatility of heavy oil (having an API gravity of less than 20 degrees), and low limited throughput. The proposed exemption allows a throughput up to 50 barrels of oil per day and per tank. For instance, average emissions from a heavy oil small producer tank with no pressure relief valve is 47 pounds of VOC per tank, ranging from 21 lb/year at a wash tank to 73 lb/year at a stock tank. The daily emissions from these tanks are under 0.2 pounds of VOC. Annual VOC emissions from all 769 such tanks in the San Joaquin Valley are under 0.05 tons per day. Please note that these emissions do not take in consideration the use of a pressure relief valve. However, it is now standard practice to equip new tanks in this category with pressure relief valves to protect the tanks from corrosion.

The following is an analysis of SB288 implications of this proposed change:

1. BACT: Rule 2201, Section 4.1 requires BACT for any increase over 2.0 lb/day and for any SB 288 Major Modification or Federal Major Modification.

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

---

These Small Producer tanks have minimal emissions due to the low volatility of the oil and low throughput. The daily emissions from these tanks are well under 2 lb/day of VOC, and are therefore exempt from BACT.

2. Offsets: Rule 2201, Section 4.5 requires emission offsets to mitigate new or increased emissions above specific thresholds and any emission increase for stationary sources which already exceed the offset thresholds.

The insignificant emissions from these Small Producer tanks, coupled with existing District policy setting daily average emissions less than 0.5 lb/day to zero for NSR purposes, will not exceed the offset thresholds. Therefore, these Small Producer tanks are not subject to offset requirements under NSR.

3. Public Notice: Public Noticing is required for significant new or modified sources of emissions. Rule 2201, Section 5.4 lists the five thresholds which a project would trigger a public notification if exceeded.

Tanks exempted by proposed Rule 2020, Section 6.6.12 have insignificant emissions and do not trigger public notification requirements.

Therefore, no project will avoid NSR requirements that would be otherwise applicable, and therefore, the proposed amendments are not prohibited under SB288.

### **C. NSPS/NESHAP Provisions**

There are no changes expected from the current practice of permitting sources subject to NSPS or NESHAP requirements. The proposed amendments to Rule 2020 are to allow currently exempt IC engines rated 50 bhp or less that are subject to newer NSPS/NESHAP requirements, to remain exempt from permit requirements. Therefore, no project will avoid NSR requirements that would be otherwise applicable, and therefore, the proposed amendments are not prohibited under SB288.

### **D. Source Test Methods**

The proposed amendments to source test methods specified in Rule 2020 do not alter any requirements subject to SB 288 review. The source tests outlined in the rule are used to demonstrate compliance with applicable requirements and the proposed modifications merely remove the year-reference from the test number, so that updated source tests can be used.

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

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As shown above, engines and tanks affected by the proposed amendments do not trigger NSR requirements for BACT, offsets, and public noticing. Although the District does not believe Rule 2020 is part of the NSR rules addressed under SB 288 mandates, none of the proposed amendments to Rule 2020 violate the requirements of SB288.

Most importantly, as demonstrated above, the proposed changes do not result in emissions increases that would impact air quality and the proposed amendments result in the elimination of unnecessary regulatory burden to both the operators and the District.

### **IV. RULE DEVELOPMENT PROCESS**

#### **A. Public Workshop**

The District held a public workshop on October 21, 2014 and the draft version of the rule was presented at this workshop. The focus of the public workshop was to present the goals for the project and to solicit public feedback. At the public workshop, District staff presented the objectives of the rule-amending project, explained the District's rule development process for this project, solicited feedback from affected stakeholders, and informed all interested parties of the comment period and project milestones.

The Draft Staff Report and Draft Rules were made available on the District's website prior to the public workshop, and a two week comment period followed the public workshop. Comments were received during the public workshop and the two week comment period. The comments and District responses are presented in Appendix A.

#### **B. Changes to the Rule and Staff Report Due to Comments Received**

The following changes to the rule and staff report were made as a result of comments received:

The definition of HAP Source (Section 3.6) was further modified to exclude IC engines operated in conformity to Section 6.16, Portable Emissions Units. The proposed change merely adjusts the internal logic of the rule consistent with historical practice and the PERP regulation. See section II.E above for further explanation.

The words "for maintenance or repair" were added to draft Section 6.16.2.1 to match the language used in the State PERP Regulation (California Code of Regulation Title 13, Division 3, Chapter 9, Article 5, section 2451(c)(3)). The purpose of Section 6.16.2.1 was to better align Rule 2020 with the State PERP regulation, so this change is consistent with that objective. See section II.B above for further explanation.

Two test method with prior EPA and District approval were added: (1) ASTM D5504 (Standard Test Method for Determination of Sulfur Compounds in Natural Gas and

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

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Gaseous Fuels by Gas Chromatography and Chemiluminescence) was added to Section 6.1.1.5; and (2) ASTM D287, Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method), was added to Sections 6.6.2, 6.6.3, 6.6.6, 6.6.7, 6.7.1.1.2, and 6.7.1.2.2. See section II.F above for further explanation.

### **C. Public Hearing**

In accordance with California Health and Safety Code (CH&SC) Section 40725, the proposed amendments to District Rule 2020 and final draft staff report will be publicly noticed and made available on the District's website prior to the Governing Board public hearing to consider adoption of the proposed rule amendments. The proposed amendments and final draft staff report will be made available for public comment no later than November 18, 2014 with an associated two week public comment period ending at 5:00 PM on December 2, 2014. The public is also invited to provide comments during the public hearing for the adoption of the proposed rule amendments on December 18, 2014.

### **V. COST EFFECTIVENESS AND SOCIOECONOMIC IMPACT ANALYSIS**

Pursuant to CH&SC Section 40920.6(a), the District is required to analyze the cost effectiveness of new rules or rule amendments that implement Best Available Retrofit Control Technology (BARCT). The draft amendments do not add BARCT requirements and therefore are not subject to the cost effectiveness analysis mandate.

Additionally, state law requires the District to analyze the socioeconomic impacts of any proposed rule amendment that significantly affects air quality or strengthens an emission limitation. The draft amendments will have neither effect, and is therefore not subject to the socioeconomic analysis mandate.

### **VI. RULE CONSISTENCY ANALYSIS**

Pursuant to CH&SC Section 40727.2 (g) a rule consistency analysis of the draft rule is not required, because the draft rule does not strengthen emission limits or impose more stringent monitoring, reporting, or recordkeeping requirements.

### **VII. ENVIRONMENTAL ASSESSMENT**

According to the California Environmental Quality Act (CEQA) statutes and pursuant to Section 15061 of the CEQA Guidelines, the District investigated the possible environmental impacts of the amendments to Rule 2020. Based on the lack of evidence to the contrary, the District has concluded that the rule amendments will not have any

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

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significant adverse effects on the environment. As such, the District finds that the rule amendment project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061 (b)(3)). Therefore pursuant to Section 15062 of the CEQA Guidelines, Staff will file a Notice of Exemption upon Governing Board approval of amendments to Rule 2020.

### **VIII. RACT ANALYSIS**

CAA §182(b)(2) requires ozone non-attainment areas to implement RACT for sources that are subject to Control Techniques Guidelines (CTG) documents issued by EPA and for "major sources" of volatile organic compounds (VOCs) and oxides of nitrogen (NOx), which are ozone precursors. Rule 2020 is not a prohibitory rule, therefore a RACT analysis is not required for this rule-amending project.

**Appendix A**

*Comments Received and District Responses*

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

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No written comments were submitted by the federal Environmental Protection Agency or the state Air Resources Board. Minor verbal comments were provided and addressed.

### Comment 1 - Jerry Frost (Vintage Petroleum):

What does “unforeseen” mean in the following proposed section 6.16.2.1:

“...only during unforeseen interruptions of electrical power from the serving utility...”

### Response 1:

Unforeseen in this case means that the loss of power was unpredicted, and should be seen as equivalent to an “emergency” situation, which results from a loss of power. Because we are syncing our rule with the state portable equipment program, we are using their language.

### Comment 2 - Jerry Frost (Vintage Petroleum):

Is there a way to streamline or expedite the approval process of equivalent test methods that require EPA approval?

### Response 2:

The District is working with EPA to fast track approval of alternative source test methods to those specified in the rules. A list of approved alternative source test methods will then be maintained on the District’s website so that they can be used without consultation for future needs.

### Comment 3 - Jerry Frost (Vintage Petroleum):

For new oil wells (or other pilot projects) that do not have electrical power, but have planned electrical power, does this 2020 amendment allow a rental PERP engine to be brought in until the location is electrified?

### Response 3:

The proposed amended rule allows a rental PERP engine to be brought in for up to 60 days. This scenario is defined as an “Electrical Upgrade” under proposed new section 3.3, which states that an electrical upgrade is the replacement or addition of electrical equipment and systems resulting in increased generation, transmission and/or distribution capacity. Electrical upgrades are then identified under proposed section 6.16.2.1, which allows a PERP engine to be utilized for no more than 60 calendar days during the electrical upgrading period.

### Comment 4 - Mark Smith (Engineer’s Oil Company):

What happens to the small producer permits that are now permit-exempt due to this 2020 amendment?

### Response 4:

The District will notify the affected facilities and, upon receipt of a written request from the owner/operator, delete the corresponding permits.

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

---

Comment 5 - Mike Kelly (Vector Environmental), John Haley (Aera), and Jenifer Pitcher (Western States Petroleum Association):

We support these Rule 2020 amendments.

Response 5:

The District thanks you for your comment.

Comment 6 - Kris Rickards (Chevron) and Jenifer Pitcher (Western States Petroleum Association):

Suggest that additional language be adopted to ensure that future 2020 amendments would not be necessary every time an NSPS and/or NESHAP were amended or adopted that included an emissions unit category the District considers an insignificant emission source (e.g. boilers no greater than 5 MMBtu/hr). Allowing the District to specifically identify this class and category of equipment as insignificant would relieve operators of having to apply to get permits in the interim while the rule 2020 amendments ran their course.

Response 6:

The District agrees with the commenter's concept. However, staff was unable to construct language that would be general enough to cover unforeseen future changes to federal regulations, yet specific enough for EPA to approve. For instance, exempting equipment that is considered by the District to be "insignificant" would not provide enough specificity for the public to understand what types of equipment would be exempted and could lead to inconsistency in application. Therefore, the District must address specific federal regulations in the District exemption rule as they are promulgated.

Comment 7 - Kris Rickards (Chevron):

To ensure consistency with CARB PERP regulation and allow continued maintenance and repair operations using these PERP IC engines, CUSA proposes to add "maintenance and repair" to section 6.16.2.1.

Response 7:

The District concurs and has added this language.

Comment 8 - Colby Morrow (Southern California Gas Company):

Can the District remove test methods for other rules as well?

Response 8:

The District agrees with the concept of removing test methods where appropriate, and improving rules in general when possible. The District will look for opportunities to update rules accordingly.

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

---

### Comment 9 - Colby Morrow (Southern California Gas Company):

When an alternate test method is approved, can the District post this approved method online for others to see and utilize?

### Response 9:

The District agrees that this information should be posted online, and will do so.

### Comment 10 - Jason Pausma (Innovative Ag):

Does the 2020 modification allow a PERP engine be installed on a stationary source, like a new irrigation well, for 60-days while the location is being electrified?

### Response 10:

The proposed amended rule allows a PERP engine to be installed for up to 60 days while the location is being electrified. This scenario is defined as an "Electrical Upgrade" under proposed new section 3.3, which states that an electrical upgrade is the replacement or addition of electrical equipment and systems resulting in increased generation, transmission and/or distribution capacity. Electrical upgrades are then identified under proposed section 6.16.2.1, which allows a PERP engine to be utilized for no more than 60 calendar days during the electrical upgrading period.

### Comment 11 - Gary Ma (PG&E):

Spark ignited engines (e.g. Natural gas and propane-fired) cannot utilize the proposed 6.16.2.2 TREU exemption to install a rental engine since it is difficult to rent a spark-ignited engine. Further, the alternative, which is to rent a diesel-fired engine, typically does not meet the TREU definition since the emissions from the diesel may be higher than the spark-ignited engine, at minimum for PM10. I ask the district to consider eliminating the proposed requirement that the PERP unit must meet the definition of TREU when replacing an existing stationary unit under repair/maintenance.

### Response 11:

The District has adjusted proposed section 6.16.2.1 to account for maintenance and repair replacements of spark-ignited engines. This adjustment to section 6.16.2.1 will allow owners and operators of spark ignited engines to utilize a rental PERP diesel engine for 60-days for repair or maintenance purposes. Section 6.16.2.2 will remain as is, which allows replacement engines that qualify as TREUs to operate for up to 180 days.

### Comment 12 - John Haley (Aera):

How does a Temporary Replacement Emission Unit (TREU) work?

### Response 12:

A TREU is defined in Rule 2201, Section 3.41. In summary, the TREU cannot operate more than 180 days in a 12-month period, and it shall replace an existing unit that is shut down for maintenance or repair. Also, the potential emissions from the TREU cannot exceed those from the existing unit.

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

---

### Comment 13 - John Haley (Aera):

District and CARB definitions and regulations should align so there is less confusion.

### Response 13:

The District agrees; as discussed in the staff report, part of this rule making is to align the permit-exemption with CARB's Portable Equipment Registration Program (PERP).

### Comment 14 - John Haley (Aera):

Aera commends the District's proposal to clearly exempt small stationary engines from permitting even though the equipment may be subject to a National Emission Standard for Hazardous Air Pollutants (NESHAPS) or Airborne Toxic Control Measure (ATCM). Creating a large regulatory burden for such a minor source is not warranted. However, the proposal appears to be too limited. The California Air Resources Board has adopted an ATCM for portable engines (see 17 CCR § 93116). Although portable equipment is listed as exempt from permitting in Section 6.16 of Rule 2020, this exemption is undermined by Section 5.0 as these engines are subject to an ATCM. Aera suggests that Section 5.0 of Rule 2020 be revised to read:

#### *5.0 District Permit Exemptions*

*An Authority to Construct or Permit to Operate shall not be required for an emissions unit specified in Sections 6.0 or 7.0, unless*

*5.1 The APCO makes a determination that a permit shall be required because the source may not operate in compliance with any of the following:*

*5.1.1 New Source Performance Standard*

*5.1.2 National Emission Standard for Hazardous Air Pollutants*

*5.1.3 Airborne Toxic Control Measure*

*5.1.4 Any District rule or regulation*

*5.2 The owner specifically requests a Permit to Operate.*

Adopting this approach will also require adjustments or removal of some of the definitions.

### Response 14:

The District agrees that the ATCM category was not addressed by the original amendment. As such, Section 3.5 has been amended to include an exclusion for portable registered engines.

### Comment 15 - John Haley (Aera):

Under Section 6.1.1.5, Please consider including ASTM method D5504, *Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence* as an acceptable test to measure sulfur in gaseous fuels. The addition of the test method will provide more

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

---

options for regulated entities.

### Response 15:

Since this method has previously been approved by the EPA and been incorporated by reference into 40 CFR 60.17 (76), it has been added to Rule 2020 at this time.

### Comment 16 - John Haley (Aera):

Regarding Section 6.6, The District's proposal to remove the reference to the year the ASTM methods were last reviewed will streamline compliance efforts. ASTM methods are routinely reviewed and updated to ensure the methods remain up-to-date with advances in technology. Aera agrees with the District that these improved methods should be used as soon as laboratories are properly equipped and trained. Unless the reference to the year is removed, District rules requiring their use will have to be updated every few years.

### Response 16:

The District agrees, and has removed the dates for those test methods in the draft proposed rule.

### Comment 17 - John Haley (Aera):

Based on discussions with laboratory personnel, it is our understanding that API Method 2547 has been withdrawn. If accurate, Aera suggests that ASTM Method D287, *Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)* and ASTM Method D5002, *Standard Test Method for Density and Relative Density of Crude Oils by Digital Density Analyzer* be added to these sections to offset the loss of the API method. Please note that ASTM Method D287 is already an approved test for API Gravity under Rule 4409.

### Response 17:

The District agrees to add ASTM Method D287 to Rule 2020 (Sections 6.6.2, 6.6.3, 6.6.6, 6.6.7, 6.7.1.1.2, and 6.7.1.2.2) at this time since it is already an approved test for API Gravity in District Rules 4623 (Section 6.4.2) Storage of Organic Liquids, and 4409 (Section 6.3.5) Components at Light Crude Oil Production Facilities, Natural Gas Production Facilities, and Natural Gas Processing Facilities.

Due to the time required for EPA approval of alternative test methods, such as ASTM Method D5002, this proposal is inconsistent with the planned adoption of this rule. However, we added section 8.2 to account for any potential test method to be utilized, upon approval District and EPA approval, and we will initiate the process of that EPA approval immediately.

The proposed removal of API Method 2547 is inconsistent with the planned adoption of this rule since it has not been demonstrated that this method is invalid. However, if this method is not preferred, an alternative test method can be utilized, as allowed by Rule 2020.

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

---

### Comment 18 - John Haley (Aera):

Aera has been required to permit several fixed roof tanks that store hydrochloric acid (e.g. S-1547-1127). These tanks are not subject to any prohibitory rules (except for Rule 4102 *Nuisance*) or Rule 2201 *New and Modified Stationary Source Review*. However, Aera has been informed that a permit is required for these acid storage tanks as the definition of “air contaminant” in Rule 1020 includes the phrase “noxious acids”.

These tanks can be equipped with fume scrubbers to mitigate the potential for odors impacting those working near the tank. The fume scrubber normally only operates when the tank is being filled. In fact, Aera is not aware of any nuisance complaints due to the operation of the acid tanks.

The District is proposing to exempt heavy oil storage tanks operated by small producers from the need to acquire a permit due to the minimal amount of emissions attributed to this equipment. The acid tanks that are currently required to be permitted are not a source of criteria emissions at all. As such, Aera requests that an exemption be added to Rule 2020 for tanks storing caustics and acids.

*6.6.13 The storage of caustic or acid in stationary tanks including any attendant odor abatement device.*

### Response 18:

Section 6.6 applies to storage of organic materials only; therefore, any non-organic materials storage such as aqueous caustic or acid solutions would be evaluated under Section 6.19 (Low Emitting Units). A low emitting unit is an emissions unit with an uncontrolled emissions rate of no more than 2 lb/day or 75 lb/year. Therefore, any aqueous caustic or acid solution storage tank would be permit-exempt if they are low emitting units and will not cause a significant health risk to the public. Other than this limited exemption, we do not agree that tanks holding caustic or acid solutions should be exempt from permits.

### Comment 19 - John Haley (Aera) and Jenifer Pitcher (Western States Petroleum Association):

Regarding Section 6.16.2.1, One of the District’s stated purposes for revising Rule 2020 is “to align its permitting program with the California Air Resources Board (CARB) Portable Equipment Registration Program”. For the most part, the proposed changes to Section 6.16.2.1 of draft Rule 2020 reflect CARB’s regulation recited in 13 CCR § 2451 (c)(9). However, the District failed to include the verbiage “maintenance and repair operations”, which would make the draft revisions wholly consistent with 13 CCR § 2451 (c)(9).

During the October 21, 2014 workshop, District acknowledged this oversight in their opening presentation and stated that the phrase “maintenance and repair operations” will be inserted into Section 6.16.2.1 in the next draft of Rule 2020. Aera believes that,

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

---

whenever possible, all agencies should strive for consistency between the numerous overlapping regulations and, therefore, supports including “maintenance and repair operations” in Section 6.16.2.1.

### Response 19:

The District agrees that a PERP engine should be allowed 60-days for repair or maintenance scenarios. The District has therefore adjusted proposed section 6.16.2.1 to account for maintenance and repair scenarios.

### Comment 20 - John Haley (Aera):

Regarding Section 6.16.2.2, During the October 21, 2014 workshop, District staff clarified that any temporary replacement engine would need to conform to the Permit to Operate issued to the equipment being replaced. An example given was if an emergency engine is being replaced, the replacement engine would have to be operated as an emergency engine consistent with the permit conditions.

Operating as an emergency engine is confusing due in part to the numerous definitions of “emergency” contained in the various regulations. There have been instances where Aera and District staff were not aligned on which definition was applicable. Examples of the varying definitions of “emergency” as used in regulations applicable to engines were provided per Rule 4701, Rule 4702, Portable Equipment Registration Program (13 CCR 2452(j)), the Stationary ATCM (93115) and the Portable ATCM (93116); and also noted that federal regulations have their own definitions as well.

Due to the numerous definitions of “emergency” it is difficult to predict which definition should be applied, which subjects operators of such equipment to uncertainty. As used in the ATCM regulations, the term “emergency” seems to be somewhat consistent. Further, the District considers the ATCM as the most stringent regulation for diesel-fired emergency engines. Therefore, the best option is to alter the District’s use of the term “emergency”. Accordingly, Aera is petitioning the District to be consistent with the ATCMs in regards to using the term “emergency” by making changes to Rule 4702 or by other means.

### Response 20:

The District acknowledges that there are multiple definitions of emergency (EPA, CARB, and District), and that these definitions add layers of complication to an operating scenario. However, this is the result of the normal development and progression of rules and regulations created by separate agencies where each may have different interests. It is generally not good practice to mirror regulations for simplicity purposes since that could result in unintended consequences. In cases where two or more competing definitions apply, the owner/operator is responsible for complying with all applicable requirements.

### Comment 21 - John Haley (Aera):

Regarding Section 6.16.3, Aera is requesting clarification on when temporary portable

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

---

equipment would become “subject to the District’s Title V permitting requirements”. If a temporary replacement emissions unit is brought on-site per Section 6.16.2.2 of draft Rule 2020 and operated in accordance with the Title V permit issued for the emergency engine being replaced, what circumstances would cause the replacement engine to be subject to the Title V permitting requirements? By being exempt from permitting under Rule 2020, is the equipment also exempt from Rule 2520 or are there instances where such a statement would not be correct?

### Response 21:

The District is not proposing to change the existing language in Section 6.16 that identifies registered equipment as exempt from District permits, unless the equipment is subject to Title V requirements. The District will continue to implement that section in the following fashion; equipment identified in an exemption rule is an insignificant source and not subject to Title V. Therefore, portable equipment operated in compliance with Section 6.16 are exempt even if located at a Title V stationary source.

### Comment 22 - Dennis Tristao (JG Boswell):

For new irrigation wells that do not have electrical power, but have planned electrical power, does this 2020 amendment allow a rental PERP engine to be brought in until the location is electrified?

### Response 22:

The proposed amended rule allows the PERP engine for 60 days only. This scenario is defined as an “Electrical Upgrade” under proposed new section 3.3, which states that an electrical upgrade is the replacement or addition of electrical equipment and systems resulting in increased generation, transmission and/or distribution capacity. Electrical upgrades are then identified under proposed section 6.16.2.1, which allows a PERP engine to be utilized for no more than 60 calendar days during the electrical upgrading period.

If generator power may be required for more than 60 days, the District provides additional latitude and expedited permitting during the current drought emergency. Please see the following website <http://valleyair.org/busind/pto/drought-relief-actions.htm> for additional information regarding the drought relief. District FYI-325 (Emergency Measures to Assist with Drought Relief Actions by Water Districts and Farmers) also identifies streamlined processing procedures for drought relief engines.

### Comment 23 - Lee Hallock (GE Oil & Gas):

Within a variety of industry sectors, there is often a need for power at a location where utility power does not currently exist. While the current language allows for registered portable equipment to be used in this scenario, it is extremely difficult for a utility to establish power at a location in less than 60 days. Because of this, we would like changes to the draft language that would allow registered portable equipment to be used in stationary applications for a limited period of time that is consistent with 6 month limitation defined in Rule 2280.

## San Joaquin Valley Unified Air Pollution Control District

Final Draft Staff Report: Rule 2020

November 18, 2014

---

### Response 23:

The proposed amended rule allows the PERP engine for 60 days only. This scenario is defined as an “Electrical Upgrade” under proposed new section 3.3, which states that an electrical upgrade is the replacement or addition of electrical equipment and systems resulting in increased generation, transmission and/or distribution capacity. Electrical upgrades are then identified under proposed section 6.16.2.1, which allows a PERP engine to be utilized for no more than 60 calendar days during the electrical upgrading period.