

REVISIONS TO RULE 26.1 NEW SOURCE REVIEW - DEFINITIONS Biosolids Processing Facilities

BACKGROUND

Rule 26.1 in its current form was adopted on March 14, 2006. The rule contains definitions for terms used in Rule 26 and Rules 26.2 through 26.12. The first new source review (NSR) rule was adopted in September, 1976, as "Denial Of Permits." It was renamed New Source Review in January, 1978.

In January, 1996, an "essential public service account" was created within the community bank for applicable sources with a potential to emit of equal to or greater than 5 tons per year (tpy) and less than 25 tpy of ROC or NOx. Sources included publicly owned sewage treatment plants, jails, police or fire fighting facilities, schools, hospitals, ambulance services, and publicly owned or nonprofit water delivery operations. (Landfill gas control and processing equipment was added to the definition in

1998.) The community bank, created in 1991, was changed to informational tracking only.

In March, 2006, the requirement for informational tracking of the community bank was deleted from Rule 26. The essential public service account became the "essential public service bank."

In this proposed revision, "publicly owned biosolids processing facilities" will be added to the list of applicable essential public services in Rule 26.1.10. Although related, biosolids processing may not always occur at a sewage treatment facility. Activity outside the county has made it likely that one or more biosolids processing facilities will be constructed in Ventura County. Definitions of "biosolids" and "biosolids processing facility" are also proposed and many definitions will be renumbered.

PROPOSED RULE REVISIONS

This proposal involves the addition of "publicly owned biosolids processing facilities" to the list of applicable essential public services in Rule 26.1.10. The first part of this process is to add the following definitions for "biosolids" and "biosolids processing facility" to Rule 26.1, as follows;

4. **"Biosolids": Organic material resulting from the physical, chemical and biological treatment of sewage sludge generated at wastewater treatment facilities.**
5. **"Biosolids Processing Facility": An operation that further treats biosolids generated from wastewater originating exclusively in Ventura County.**

The addition of these definitions makes it necessary to renumber the subsections after Rule 26.1.3.

The definition of "Biosolids Processing Facility" states that wastewater must originate "exclusively" within Ventura County. If material from outside the

county is processed, the facility will cease to be an essential public service. In that case, any essential public service credits awarded to operate the facility will be revoked.

The definition of "Biosolids Processing Facility" was modified two times after the Advisory Committee meeting. See page 7 under *Meetings and Comments* for additional information.

To revise the definition of essential public service, the existing definition will be replaced with a renumbered and reoriented definition, as follows:

10. **"Essential Public Service": Essential public services are the following; publicly owned sewage treatment plants, jails, police or fire fighting facilities, schools, hospitals, ambulance services, landfill gas control or processing equipment, and publicly owned or nonprofit water delivery operations.**

12. "Essential Public Service": Essential public services are the following:

- A. Jails;**
- B. Police or fire fighting facilities;**
- C. Schools;**
- D. Hospitals;**
- E. Ambulance services;**
- F. Landfill gas control or processing equipment;**
- G. Publicly owned biosolids processing facilities;**
- H. Publicly owned sewage (wastewater) treatment facilities;**
- I. Publicly owned or nonprofit water delivery operations.**

Note that the definition of biosolids states that it is derived from "sewage sludge generated at wastewater treatment facilities." For the purpose of this rule, "sewage treatment plants" (as in paragraph 10 above) and "wastewater treatment facilities" are the same thing. To clarify this, "wastewater" is being added to the term "sewage treatment plants" in new Subsection

12.H. In addition, the word "plants" is being replaced with the word "facilities." This is not intended to change the status of sewage treatment plants as essential public services.

Although biosolids are derived from wastewater treatment facilities, biosolids processing frequently occurs at another location. Nevertheless, "biosolids processing" is part of "sewage treatment," which is already considered an essential public service. The proposed revision will enable any publicly owned biosolids processing facility to obtain offsets from the essential public service bank.

Note also that, with the above exceptions, only punctuation has been added to the reoriented list of operations that were considered essential public services prior to this proposed revision. The original list included publicly owned sewage treatment plants, jails, police or fire fighting facilities, schools, hospitals, ambulance services, and publicly owned or nonprofit water delivery operations. Landfill gas control and processing equipment was added to the definition in 1998.

DISCUSSION

The 802,400 residents of Ventura County currently produce approximately 7,000 tons of biosolids every month. Historically, most of this material has been trucked to Kern County for land application and composting. A voter initiative in Kern County to prohibit importation of biosolids was approved in the June, 2006, election. As a result, it is possible that the construction of one or more biosolids processing facilities in Ventura County will be required.

Currently, one biosolids processing facility is being considered for Ventura County by the Ventura Regional Sanitation District (VRSD), a public agency. This facility will be located at the Toland Road Landfill (Toland) at 3500 North Toland Road between the cities of Santa Paula and Fillmore. According to a California Environmental Quality Act (CEQA) initial study published in June, 2006,¹ the project is described as follows:

The Biosolids project includes the construction and operation of LFG [landfill gas] electrical generators and a biosolids drying facility. The site is comprised of approximately 2.44 acres and is located entirely within the existing boundaries of the Conditional Use Permit for Toland. The biosolids drying facility will

import biosolids from local wastewater treatment plants and will use landfill gas to power electrical generators and biosolids dryers to process the biosolids to a level specified by the end-use of the biosolids. Potential beneficial uses of the dried biosolids include alternative cover at Toland and commercial use.

Toland currently employs one 70 kilowatt (kw) Ingersoll-Rand microturbine generator that uses LFG to generate electricity. This power satisfies the landfill's current on-site electricity requirements. The proposed biosolids project would add additional electrical generators that will provide electricity to power the equipment and the heat necessary to process the biosolids. VRSD anticipates additional electrical generators (up to 6 megawatts of electrical generation capability) may be added to the facility for power generation and sale to the power grid (based on the availability of LFG).

Initially, VRSD anticipates that the biosolids operation may use up to two dryers to dry up to 160 tons of biosolids per day. However, up to four dryers may be required to meet Ventura County's biosolids demand. At its maximum of

four dryers, the biosolids operation will dry up to 320 tons per day.

The biosolids will be dried to meet the Environmental Protection Agency (EPA) Class A and/or Class B Standard. Class A biosolids can be utilized for land applications. Class B biosolids can be used as alternative cover at Toland.

SB 288

In September, 2003, the California legislature enacted the *Protect California Air Act of 2003* (SB288 (Sher), Health & Safety Code § 42500 et seq.), which prevents the weakening of NSR rules statewide. Health & Safety Code Section 42504 now states that no air district "may amend or revise its new source review rules or regulations to be less stringent than those that existed on December 20, 2002." The legislation includes a list of qualifications for amendments to new source review rules.

An NSR revision may not "exempt, relax or reduce the obligations of a stationary source" from the following requirements:

1. *The requirement to undergo NSR*
2. *The requirement for BACT*
3. *The requirement for air quality impact analysis*
4. *The requirement for recordkeeping*
5. *The requirement for regulating any air pollutant*
6. *The requirement for public participation*

CARB states that if any NSR elements are modified, it must be done such that none of above six specified NSR requirements are relaxed. A discussion of the six requirements follows, along with the reason why the proposed rule is not a relaxation.

1. *The requirement to undergo NSR.*
The District's requirement for new or modified sources to undergo NSR permits is detailed in Rule 26.2, New Source Review – Requirements, and Rule 26.3, New Source Review – Exemptions. Neither of these rules is being amended; therefore the requirement to undergo NSR remains unchanged.
2. *The requirement for BACT.*
The proposed revisions to Rule 26.1 do not change in any way the BACT triggering requirements established in the version of Rule 26.2 in effect on December 30, 2002. Rule 26.2

is not being amended. Therefore, no relaxation of requirement for BACT will occur.

3. *The requirement for air quality impact analysis.*
Staff is proposing no change to either the requirements or the thresholds for performing an air quality impact analyses as required by the December 30, 2002, version of Rule 26.2.C. Rule 26.2 is not being amended. Therefore, no relaxation to the requirement for an air quality impact analysis will occur.
4. *The requirement for monitoring, recordkeeping, and reporting.*
Rule 29 specifies that permits shall be conditioned such that adequate monitoring, recordkeeping, and reporting is performed to assure the assumptions and calculations of the application and the District's analysis are assured to be enforceable. No changes to Rule 29 are proposed. The proposed revisions to Rule 26.1 do not address this issue and no relaxation will occur.
5. *The requirement for regulating any air pollutant.*
The specific language from Health & Safety Code § 42504(b)(2)(E) is as follows: "Any requirements for regulating any air pollutant covered by new source review rules and regulations." The District interprets this section as prohibiting the removal or relaxation of NSR applicability for any given air pollutant; for example, if NSR no longer applied to NOx emissions. The proposed rule makes no such change. All pollutants that were regulated by the version of Rule 26.2 in effect on December 30, 2002, will remain regulated under the proposed revisions to Rule 26.1.

CARB, on the other hand, has broadly interpreted this section to prohibit the relaxation of any NSR requirement, and has further claimed that this section prohibits the relaxation of any requirement to obtain offsets. The District, along with other local air pollution control districts, does not agree with this interpretation. While the proposed revisions may affect the quantity of offsets required, they are consistent with purpose of Rule 26; to ensure that no net emission increase results from any new or modified permitted source.

Biosolids processing is an extension of the sewage treatment process and can occur at a

sewage treatment facility. If a new biosolids facility were constructed at a sewage treatment plant, EPS credits would be available. The proposed revisions will allow biosolids treatment to occur at an alternate location. Since "biosolids processing" is part of the "sewage treatment" process, it is already considered an essential public service. Therefore, no relaxation of the requirement to regulate any air pollutant will occur.

6. *The requirement for public participation.* Rule 26.7, New Source Review – Notification, is not proposed for revision. The proposed revisions to Rule 26.1 do not address public participation. All existing public participation and notice provisions in Rule 26, remain unchanged.

Emission Offsets

As stated in Rule 26.2, Subsection B.3, essential public services may obtain offsets from the essential public service bank according to the following provisions;

3. **An applicant for an essential public service who is required to provide offsets may use essential public service credits to provide offsets for ROC and NOx if the following provisions are satisfied:**
- a. **The applicant is proposing to provide some or all of the required offsets by using any emission reduction credits held by the applicant.**
 - b. **The potential to emit of the stationary source will not exceed the limits specified in Table B-2 [25 tons per year].**

If no credits are available from the essential public service bank, the applicant shall provide offsets using emission reduction credits. All ROC and NOx emission reduction credits and essential public service credits provided as offsets pursuant to this section shall be provided at a tradeoff ratio of 1.0.

Note that the tradeoff ratio for offsets from the essential public service bank is 1.0. According to Rule 26.2, Subsection B.2.b, offsets for general sources of NOx and ROC between 5 and 25 tons per year must be provided at a tradeoff ratio of 1.1, as follows;

Table 1
Essential Public Service Bank Status
10/22/91 to 12/31/04²

	ROC	NOx
10% Discount (26.4.C.2).....	23.77	18.89
BACT (20%) Discount (26.4.C.1)....	11.06	18.92
Tradeoff Ratio > 1 (26.2.B.2).....	25.77	8.50
Unbanked Shutdown	121.10	41.01
Enforcement Settlements.....	100.00	0.00
Returns to EPS Account.....	0.00	0.00
Total Deposits to EPS Bank.....	281.70	87.32
<i>Total Disbursements</i>	12.01	37.65
EPS Bank Balance.....	269.69	49.67

- b. **For any stationary source where the potential to emit would be less than the limits specified in Table B-2 [25 tons per year], offsets for ROC and NOx shall be provided as follows:**

- 1) **For a stationary source with a pre-project potential to emit of equal to or greater than 5 tons per year of either NOx or ROC, offsets for any emission increase of such pollutant shall be provided at a tradeoff ratio of 1.1.**

By adding publicly owned biosolids processing facilities to the list of essential public services and, therefore, reducing the quantity of emission reduction credits required by changing the tradeoff ratio from 1.1 to 1.0, a slightly smaller quantity of credits will be required from a new or modified biosolids facility. As an example, if (just under) 25 tpy is required from the essential public service bank, then about 27.5 tpy would be required from a non-EPS source. The change enables an applicant to forego acquisition of an additional 2.5 tpy of offsets.

However, as noted in Rule 26.5, Subsection B.3, "the portion of any emission reduction credit which is used as an offset at a tradeoff ratio of greater than 1.0" is deposited into the EPS Bank. As shown in Table 1, the EPS Bank is sufficiently funded at this time. Any credits not deposited into the EPS Bank will not impact the project at hand or the purpose of Rule 26; to ensure that no net emission increase results from any new or modified permitted source. Therefore, the proposed revisions to Rule 26.1 will have no impact on air quality in Ventura County.

EMISSION REDUCTIONS / COST EFFECTIVENESS

The proposed revisions to Rule 26.1 involve the addition of "publicly owned biosolids processing facilities" to the list of applicable essential public services in Rule 26.1, renumbered Section 12. Activity outside the county has made it likely that one or more biosolids processing facilities will be constructed in Ventura County. A preliminary estimate of emissions is available in Reference 1. However, the proposed revisions to Rule 26.1 will not impact the purpose of Rule 26; to ensure that no net emission increase results from any new or modified permitted source with permitted emissions over 5 tons per year of NOx or ROC.

The proposed revisions to Rule 26.1 are not included in an AQMP control measure. Health & Safety Code § 40703 states that the district must consider, and make public, "the cost-effectiveness of a control measure." Therefore, it is not necessary to calculate the cost-effectiveness of the proposed revision. Staff expects no increase in direct costs to either the District or any stakeholder.

In addition, because BACT requirements and feasible control measures are not involved, an incremental cost-effectiveness analysis under Health & Safety Code Section 40920.6 is not required.

SOCIOECONOMIC IMPACT ANALYSIS

Assembly Bill 2061 (Polanco), which went into effect on January 1, 1992, requires that the APCD Board consider the socioeconomic impact of any new rule or amendment to an existing rule if air quality or emission limits are affected. The proposed revisions to Rule 26.1 are not expected to significantly affect air quality in Ventura County. Although the proposal is administrative in nature, it involves the source of emission offsets for the operation of a biosolids processing facility. Therefore, consideration of socioeconomic impact is appropriate.

The Board must evaluate the following socio-economic information on the proposed amendments to Rule 26.1:

- (1) *The type of industries or business, including small business, affected by the rule or regulation.*

The adoption of revisions to Rule 26.1 will directly affect the permitting, construction and operation of biosolids processing facilities in Ventura County. At least one of these facilities is currently in the planning stages.

- (2) *The impact of the rule or regulation on employment and the economy of the region affected by the adoption of the rule or regulation.*

The adoption of revisions to Rule 26.1 is expected to have no impact on employment in and the economy of Ventura County. All new sources are required to have Best Available Control Technology (BACT). The requirement

for offsets will remain; only the source and the quantity of the offsets will change. No other significant impact on employment or the economy is expected.

- (3) *The range of probable costs, including costs to industry or business, including small business, of the rule or regulation.*

As an essential public service, the cost of either the creation of NOx and ROC emission reductions or the cost of NOx and ROC emission offsets will be avoided by any new biosolids facilities.

- (4) *The availability and cost-effectiveness of alternatives to the rule or regulation being proposed or amended.*

The Air Pollution Control Board may reject the proposed revisions. There is no other known alternative to the proposed revised rule.

- (5) *The emission reduction potential of the rule or regulation.*

The proposed revisions to Rule 26.1 are administrative in nature and have no emission reduction potential. With offsets in place, no net emission increase will result from any new or modified facility.

- (6) *The necessity of adopting, amending, or repealing the rule or regulation in order to attain state and federal ambient air standards*

pursuant to Chapter 10 (commencing with Section 40910).

amendments are not needed to attain both the state and federal ozone standard or to carry out any other state requirement.

The proposed revisions to Rule 26.1 are not based on any AQMP control measure. The

ENVIRONMENTAL IMPACTS OF METHODS OF COMPLIANCE / CEQA

Methods of Compliance

California Public Resources Code § 21159 requires the District to perform an environmental analysis of the reasonably foreseeable methods of compliance if the proposed rule requires "the installation of pollution control equipment, or [specifies] a performance standard or treatment requirement..." The proposed revisions to Rule 26.1 are administrative in nature and involve no pollution control equipment. Therefore, an analysis is not required.

CEQA Requirements

Staff has determined that adoption of the proposed revisions to Rule 26.1 are exempt from the requirements of the CEQA under Section 15061(b)(3) of the CEQA Guidelines because it can be seen with certainty that there is no possibility that these changes may have a significant effect on the environment. As an essential public service, any new biosolids processing facility will be required to provide offsets at a tradeoff ratio of 1.0 rather than 1.1. However, with offsets in place, no net emission increase will result from any new or modified biosolids processing facility.

ANALYSIS OF EXISTING FEDERAL AND DISTRICT REGULATIONS

California Health & Safety Code Section 40727.2(a) requires districts to provide a written analysis of existing regulations prior to adopting, amending or repealing a regulation. Section 40727.2(a) states:

In complying with Section 40727, the district shall prepare a written analysis as required by this section. In the analysis, the district shall identify all existing federal air pollution control requirements, including, but not limited to, emission control standards constituting best available control technology for new or modified equipment, that apply to the same equipment or source type as the rule or regulation proposed for adoption or

modification by the district. The analysis shall also identify any of that district's existing or proposed rules and regulations that apply to the same equipment or source type, and all air pollution control requirements and guidelines that apply to the same equipment or source type and of which the district has been informed pursuant to subdivision (b).

The proposed revisions to Rule 26.1 include no emission control standards; therefore, the requirements of Health & Safety Code § 40727.2(a) are satisfied pursuant to Health & Safety Code § 40727.2(g).

MEETINGS AND COMMENTS

Public Workshop July 25, 2006

The workshop was attended by representatives from two wastewater treatment facilities. The public perception of biosolids fertilizer and the possibility of it being used by the public was discussed. Staff noted that privately owned facilities are excluded

from the proposal for SB 288 issues [see page 4]. The proposed rule excludes the processing of biosolids material from outside the county; this issue was discussed. It was noted that biosolids fertilizer is subject to EPA requirements, including metals content, and is tested for quality. The workshop resulted in no change to the proposed rule.

Advisory Committee
October 3, 2006

The Advisory Committee discussed the proposed revisions at length. It was explained that the proposal would enable biosolids processing facilities to obtain emission reduction credits from the essential public service bank at no cost. The alternative is to obtain them on the open market. The proposal does not violate Senate Bill 288 because the rule revision only changes the pathway to obtain emission reduction credit. All emission increases will continue to be fully offset. Since BACT is the same regardless of where offsets are obtained (open market or essential public service bank), offset quantities are equivalent. There was a concern that NOx and ROC emission estimates from a potential biosolids processing facility are not yet available. Due to this, one member felt the Committee was being used as a rubber stamp.

The Committee discussed facilities that treat non-sewage sludge (e.g.; oilfield sludge) or a mixture of sewage and non-sewage sludge. The eligibility of such facilities for essential public service credits was discussed. Staff explained that the proposal would authorize the use of essential public service credits for all types of raw material originating in Ventura County.

The Committee recommended removal of the words "nutrient rich" from the definition of "biosolids" and agreed to allow staff to review and correct the language as necessary. The proposed revisions, with the above change, were approved for recommendation to the Board.

Ventura Regional Sanitation District
October 10, 2006

In a series of telephone conversations, VRSD made one important suggestion for the definition of "biosolids processing facility." Wastewater from the communities of Lake Sherwood, Oak Park and Bell Canyon in eastern Ventura County is handled by the Triunfo Sanitation District. Although originating in Ventura County, the waste is processed at the Tillman Wastewater Treatment Plant operated by the City of Los Angeles. VRSD felt it was important that a future biosolids processing facility be available to process waste from the Triunfo Sanitation District.

The definition of "biosolids processing facility" presented to the Advisory Committee was:

5. "Biosolids Processing Facility": An operation that produces biosolids from raw materials generated exclusively at wastewater treatment facilities in Ventura County.

Because the waste generated in Ventura County is being treated at a facility in Los Angeles County, the above requirement that raw material must be generated "at wastewater treatment facilities in Ventura County" would exclude material from the Triunfo District. To correct this, VRSD suggested the following:

5. "Biosolids Processing Facility": An operation that processes biosolids from raw materials generated exclusively in Ventura County.

With this change, only the wastewater or raw sewage must originate in Ventura County, not the sewage sludge resulting from its initial treatment at a wastewater treatment plant. It is sewage sludge that is processed at a biosolids processing facility.

It was also noted that, in the wastewater treatment business, the terms "biosolids" and "sewage sludge" mean the same thing. For this reason, the word "produces" is being replaced in the above definition with the term "processes." The latter word more accurately reflects the result at a biosolid processing facility; a change in consistency of the biosolids/sludge material rather than the production of a new product.

Ventura Regional Sanitation District
October 16, 2006

VRSD requested further changes to the definition of "biosolids processing facility." The changes involved revisions to a similar proposed definition in SCAQMD proposed amended rule (PAR) 1302. As above, the status of biosolids generated in Ventura County's Triunfo Sanitation District (TSD) were considered. The definition was revised as follows:

5. "Biosolids Processing Facility": An operation that further treats biosolids generated from wastewater originating exclusively in Ventura County.

REFERENCES

1. *Mitigated Negative Declaration / Initial Study Report for the Toland Road Landfill Biosolids Facility and Electric Generation Project*, Ventura Regional Sanitation District, June, 2006. <http://www.vrsd.com/news.htm>
2. Krause, Karl, Manager, Engineering Division, *Ventura County Air Pollution Control District New Source Review Rule Community Bank Annual Report*, March 31, 2005.