Expedited BARCT Implementation Schedule

2018

## **DECEMBER 17**

Tehama County APCD

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## AB 617 BARCT Implementation Schedule

## **Summary**

Assembly Bill 617 (AB 617) was signed into law by the governor on July 26th, 2017. AB 617's goal is to improve air quality in communities most impacted by air pollution. AB 617 amends the health and safety code requiring all air districts designated as nonattainment for one or more air pollutants to adopt by January 1, 2019 an expedited schedule for implementation of Best Available Retrofit Technology (BARCT) by the earliest feasible date, but no later than December 31, 2023. Expedited BARCT implementation applies to industrial facilities subject to the California Greenhouse Gas cap-and-trade requirements. Facility's sources that have implemented BARCT on or after 2007 are not subject to the expedited schedule. Districts are to give the highest priority to those permitted units that have not modified emissions-related permit conditions for the greatest period of time.

#### **Goals**

The Goal of BARCT implementation is to reduce criteria pollutant emissions from sources that currently participate in the Cap and trade system or are subject to the CARB Mandatory greenhouse Gas Reporting Regulation. While the intent of the cap and trade system is to reduce greenhouse gas emissions, criteria pollutants as well as toxic air contaminates (TACs) have been shown to be associated with certain greenhouse emission sources.

## **Background**

The Tehama County APCD does not have any sources identified as participants in the Cap and Trade system. However, the District had five facilities identified as potentially subject to BARCT based on their being subject to CARB's Mandatory Greenhouse Gas Reporting Regulation.

## **Regulatory Context**

Ab 617 requires the following:

- The California Air Resources Board (CARB) to develop a uniform statewide system of annual reporting of emissions of criteria air pollutants and toxic air contaminants (TAC) for use by certain categories of stationary sources. The bill requires those stationary sources to report their emissions annually.
- By October 1, 2018, CARB must prepare a monitoring plan for monitoring criteria pollutants and TACs and the need for any additional community monitoring systems. the state board to select, based on the monitoring plan, the highest priority locations for deployment of community monitoring systems. An air district containing a selected location shall deploy a community monitoring system by July 1, 2019. Fence line

monitoring at stationary sources can also be required in the communities by the air districts. CARB must annually update the plan. The data collected by the monitoring systems must be published on CARB's website.

- By October 1, 2018, and at least every 5 years after, CARB must develop a statewide strategy to reduce emissions of TACs and criteria pollutants in communities affected by a high cumulative exposure burden. CARB must offer grants to those communities for technical assistance and to support community participation. For air districts containing a selected location, within one year of CARB's selection must adopt a community emissions reduction program.
- Air districts that are nonattainment for one or more air pollutants must adopt an
  expedited schedule for the implementation of best available retrofit technology for each
  industrial source that, as of January 1, 2017, was subject to a specified market-based
  compliance mechanism, and give highest priority to those permitted units that have not
  modified emissions-related permit conditions for the greatest period of time.
- CARB must establish and maintain a statewide clearinghouse that identifies the best available control technology, best available retrofit control technology for criteria air pollutants, and related technologies for the control to TACs.
- The maximum generally applicable criminal and civil penalties for violations of air pollution laws from non-vehicular sources was increased to \$5,000, which will now annually adjust based on California Consumer Price Index.

CARB and air districts may be reimbursed for some costs mandated by the bill.

# Preliminary BARCT Evaluation and Identification of Potential Rule Development Projects

The District conducted preliminary BARCT evaluations of facilities subject to AB 32 cap and trade program to determine which sources would be subject to rule development. The Districts process is as follows:

- Identify pollutants of concern
- Screening out sources not subject to the expedited BARCT schedule
- Performed BARCT evaluation
- Prioritizing BARCT evaluations

#### **Nonattainment Pollutants**

The Tehama County APCD, is in attainment with both the National Ambient Air Quality Standards and State Ambient Air Quality Standards for: Nitrogen Dioxide (Nox), Sulfur Dioxide (SOx), Lead. The District was designated as non-attainment for Ozone for the California Ambient Air Quality Standards. The District was designated as unclassified for PM2.5 for the State and Federal Ambient Air Quality Standards.

BARCT review will be conducted for:

- Nitrogen Oxides (NOx)
- Reactive Organic Gases (ROGs)

NOx and ROGs are included as they are precursors to for ozone formation.

#### **Affected Facilities and Sources**

A list of facilities was provided by CARB on June 18, 2018 based on 2016 emissions inventories. The list identified facilities that were subject to the Cap and Trade program on January 1, 2017. The list did not identify which sources that have already implemented BARCT due to permit revisions or new permits issued since 2007.

The list provided to the District identified five facilities subject to the expedited BARCT implementation schedule (Table 1). Of the five facilities there are seven emission sources and two emission source categories, which are four Internal combustion engines and two Glycol Dehydrators and one Production Heater.

Upon review of the seven sources two have had their permits revised since 2007. During the revision process the sources were subject to new source review (District Rule 2:3A). During the new source review of the two sources, it was determined that implementing BACT would not be required based on emissions not exceeding the Districts 25 pound per day BACT threshold. Because these sources went through the Districts new source review process and had their permits revised and because any further controls would not be cost effective, the District determined that these sources are implementing and achieving BARCT and the schedule will not apply to these sources per HSC section 40920.6 (c)(3). The Remaining facilities are identified in Table 2. The five sources are permitted under District Rule 4:34 Internal Combustion engines and District Rule 4:31 Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters Oxides of Nitrogen Control Measure.

Table 1

CEIDARS ID	CEIDARS Facility Name	County	Air Basin	District	
154	VINTAGE PETROLEUM	Tehama	Sacramento Valley	Tehama County APCD	
109	VINTAGE PETROLEUM (MALTON 6-1)	Tehama	Sacramento Valley	Tehama County APCD	
104	VINTAGE PETROLEUM (SAGE)	Tehama	Sacramento Valley	Tehama County APCD	
105	VINTAGE PETROLEUM (T-G 28-1)	Tehama	Sacramento Valley	Tehama County APCD	
107	VINTAGE PETROLEUM (TOLLE 27-1)	Tehama	Sacramento Valley	Tehama County APCD	

Table 2

			TPY	TPY VOC
<b>CEIDARS ID</b>	CEIDARS Facility Name	Source Category(ies)	NOx	
105	VINTAGE PETROLEUM (T-G 28-1)	Production Heater, Internal Combustion Engine	0.034	.001
107	VINTAGE PETROLEUM (TOLLE 27-1)	Glycol Dehydrator	0.034	.001
109	VINTAGE PETROLEUM (MALTON 6-1)	Internal Combustion Engine	1.53	0.17

154	VINTAGE PETROLEUM	Glycol Dehydrator	0.034	.001
		Total	1.632	.173

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For production heaters and Glycol Dehydrators subject to AB 617, the District last reviewed District rule 4:31 in 2002. Staff will evaluate the technological and economic feasibility of current technology to reduce emissions further. The emission limits on the permits for these sources meet the Districts current Best Available Control Technology (BACT) Standards. A BARCT determination for this category is less likely to result in more stringent emission limits, and is the less likely to provide benefits to public health and air quality attainment. The District will complete this process during calendar year 2021, including the adoption of a Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters Oxides of Nitrogen Control Measure rule if necessary, with an expedited implementation schedule with a final compliance date not later than December 31, 2023.

For internal Combustion Engines subject to AB 617, the District last reviewed District rule 4:34 in 2009. Staff will evaluate the technological and economic feasibility of current technology to reduce emissions further. The emission limits on the permits for these sources meet the Districts current Best Available Control Technology (BACT) Standards. A BARCT determination for this category is less likely to result in more stringent emission limits than for the other two categories, and is the least likely to provide benefits to public health and air quality attainment. The District will complete this process during calendar year 2021, including the adoption of a large industrial boiler rule if necessary, with an expedited implementation schedule with a final compliance date not later than December 31, 2023.

Natural gas production equipment at California Resource Production Corporation facilities within the District include natural gas dehydrators, condensate tanks, injection wells, and associated equipment. This equipment is subject to the requirements of the state regulation for Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities, which became effective October 1, 2017 and is considered BARCT for LDAR requirements. Therefore BARCT is currently being implemented and no additional rulemaking is required for VOC emissions from this equipment.

#### Public Meeting (H&SC §40920.6(d))

This expedited implementation schedule, and the results of the various control option and costeffectiveness analyses, will be discussed at public meetings.

#### Local Public Health and Clean Air Benefits (H&SC §40920.6(d)(1))

None of the AB 617 BARCT sources represent a risk to local public health; each is in compliance with all current air quality-related health requirements, including all of criteria, hazardous and toxic air contaminants.

#### Cost Effectiveness (H&SC §40920.6(d)(2))

The District evaluates every rule proposal for cost effectiveness, and will do so for any rule that may be amended and/or adopted for AB 617.

#### Air Quality and Attainment Benefits (H&SC §40920.6(d)(3))

As the five AB 617 BARCT sources meet the Districts current Best Available Control Technology (BACT) Standards, AB 617 BARCT implementation within the District may result in local air quality benefits but no attainment benefit.