

Mojave Desert AQMD AB 617 BARCT Implementation Schedule (H&SC §40920.6(c)(1))

Assembly Bill 617 of 2017 (Health & Safety Code §40920.6) includes a specific requirement for each district that is a nonattainment area for one or more air pollutants to adopt an expedited schedule for the implementation of best available retrofit control technology (BARCT), by the earliest feasible date, but in any event not later than December 31, 2023, for each industrial source that, as of January 1, 2017, was subject to a market-based compliance mechanism adopted by the state board pursuant to subdivision (c) of Section 38562.

AB 617 BARCT Applicability

The MDAQMD is a nonattainment area for California ozone and respirable particulate matter standards and includes four sources that were subject to a market-based state board compliance mechanism as of January 1, 2017.¹

ARBID	FacilityName	Facility Address	Sector	Air District
100011	Searles Valley Minerals Inc.	Trona	Other Combustion Source	Mojave Desert AQMD
100013	CalPortland Company Oro Grande Plant	Oro Grande	Cement Plant	Mojave Desert AQMD
101010	Mitsubishi Cement 2000	Lucerne Valley	Cement Plant	Mojave Desert AQMD
101476	Cemex Construction Materials Pacific LLC - Victorville Plant	Apple Valley	Cement Plant	Mojave Desert AQMD

These four sources fall into two categories: Portland cement plants and large industrial boilers.

Portland Cement Kiln BARCT

The MDAQMD has a source specific rule for Portland cement kilns: Rule 1161 - *Portland Cement Kilns*, most recently amended on January 22, 2018. During that amendment process the MDAQMD identified all potential control options for Portland cement kilns (selective catalytic reduction, selective non-catalytic reduction, calciner upgrade, bio-solids injection (BSI) and tire-derived fuel (TDF)), reviewed the cost-effectiveness of all potential control options for Portland cement kilns, and reviewed those findings at a public meeting prior to the adoption hearing.² The MDAQMD determined that a limit of 2.8 pounds of NOx per ton of clinker, resulting from the use of BSI and TDF in existing kilns, was cost effective for all Portland cement kilns. As this limit applies to all three Portland cement kiln sources subject to the AB 617 BARCT requirement and this limit was adopted through an amendment process that complies with

¹ The market-based compliance mechanism cited in H&S Code §40920.6(c) is the California Air Resources Board's Cap-and-Trade Program (Program). AB 617 does not expressly define the term "industrial source" the Program includes particular provisions for covered entities that refer to "industrial sectors", "industrial covered entities", "industry assistance", and "industrial facilities." These provisions relate the term "industrial" to certain covered entities or facilities that are eligible for free allowance allocation under the Program. The list provided includes any covered entity that is eligible for free allowance allocation in accordance with the Program requirements based on its engagement in an activity within a particular North American Industrial Code System (NAICS) Code listed in Table 8-1 of the Program. The list excludes opt-in covered entities, and any industrial sources that became subject to the Program after January 1, 2017.

² MDAQMD, "Final Staff Report Amendments to Rule 1161 – *Portland Cement Kilns*, Amended on January 22, 2018"

the specific AB 617 BARCT consideration and review requirements, the MDAQMD hereby determines that recently amended Rule 1161 meets the AB 617 BARCT requirement for this source category.

Large Industrial Boiler BARCT

Four large industrial boilers are included in the other listed source, Searles Valley Minerals in Trona, California (see below).

C#	F#	Facility	City	P#	Permit Description
9	2	SVM - Trona Plant	Trona	M000483	BOILER NO. 22
9	7	SVM - West End Plant	Trona	B009992	BOILER (NO. 5)
879	1735	SVMU - Utilities Argus Facility	Trona	B000555, C000557, C000558	BOILER, FOSSIL FUEL FIRED (NO. 25)
879	1735	SVMU - Utilities Argus Facility	Trona	B000554, C000559, C000561	BOILER, FOSSIL FUEL FIRED (NO. 26)

For these large industrial boilers, the MDAQMD will identify one or more potential control options, review the cost-effectiveness of each potential control option, calculate the incremental cost-effectiveness of each potential control option, and then consider and review that information at a public meeting. The MDAQMD will complete this process during calendar year 2019, 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.

Other Sources

Each of the four identified sources is a complex industrial facility. The above discussed kilns and boilers produce the emissions that made each facility subject to the California Air Resources Board’s Cap and Trade Program and therefore AB 617 BARCT. Any other control options considered for these sources will be analyzed in accordance with all applicable requirements, including AB 617 mandatory considerations.

Mandatory Considerations

Public Meeting (H&SC §40920.6(d))

This expedited implementation schedule, and the results of the various control option and cost-effectiveness 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. The Portland cement kiln BARCT requirements adopted in Rule 1161 represented a maximum 56% reduction in oxides of nitrogen emissions with a commensurate significant clean air benefit.

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

The MDAQMD evaluates every rule proposal for cost effectiveness, and will do so for the large industrial boiler rule. The Portland cement kiln BARCT requirements adopted in Rule 1161 were found to be cost-effective at \$1,281 per ton of oxides of nitrogen reduced (2017 dollars).

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

The MDAQMD is overwhelmingly impacted by transported air pollution from upwind, primarily originating in the South Coast Air Basin (SCAB). This transported air pollution results in the air monitoring stations closest to the SCAB boundary having the worst air quality (Phelan and Hesperia), and those furthest from the SCAB boundary having the best air quality (Barstow and Trona). The air monitoring stations with the worst air quality are the attainment design value locations, dictating the attainment process for the entire region. As the four AB 617 BARCT sources are downwind of Phelan and Hesperia and do not affect their air quality, AB 617 BARCT implementation within the MDAQMD will result in local air quality benefits but no attainment benefit.

Please contact Alan De Salvio, Deputy Director – Mojave Operations, at adesalvio@mdaqmd.ca.gov or 760-245-1661 x6726 if you need further information on this document.