The San Diego County Air Pollution Control District (District) Assembly Bill 617

Community Air Protection Program:

Industrial Cap-and-Trade Sources

Expedited Best Available Retrofit Control Technology (BARCT)

Expedited BARCT Implementation Schedule

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Prepared by: Jim Swaney, Senior Air Pollution Control Engineer

Approved by: Mohsen Nazemi, Engineering Division Chief

Assembly Bill 617 (C. Garcia, Chapter 136, Statues of 2017), Nonvehicular Air Pollution: Criteria Air Pollutants and Toxic Air Contaminants (AB 617) was passed by the California State Legislature and signed by the Governor in September of 2017.

AB 617 requires local air districts to ensure that industrial sources subject to the state Cap-and-Trade program implement Best Available Retrofit Control Technology (BARCT) for non-attainment pollutants by adopting an expedited schedule for permitted units that do not meet BARCT requirements (California Health and Safety Code subsections 40920.6 (c) and (d)).

The San Diego County Air Basin is currently designated as non-attainment for the federal 8-hour ozone standard, the state 8-hour and 1-hour ozone standards, and the state particulate matter (PM10 and PM2.5) standards. Therefore, the BARCT requirements will apply to equipment that emits Oxides of Nitrogen (NOx, a precursor to both ozone and particulate matter), Volatile Organic Compounds (VOC, a precursor to ozone), and particulate matter.

Based on the mapping tool¹ developed by the California Air Resources Board (CARB), of the 17 sources subject to Cap-and-Trade in San Diego County, only two sources are considered industrial sources: CP Kelco and Solar Turbines – Kearny Mesa.

CP Kelco is located within the Portside Environmental Justice Community, which was selected by CARB as one of the AB 617 communities in 2018. CP Kelco has 24 permitted units that were evaluated under BARCT requirements, including boilers, mills & screens, solvent processing operations, storage tanks, and gas turbine cogen engines. Solar Turbines (Kearny Mesa location), which is not located in the Portside Community, has 39 permitted units, including a boiler, coating operations, emergency engines, thermal oxidizers, and turbine test cells.

The District evaluated all 63 permitted units to ensure compliance with BARCT requirements. Under this evaluation the District identified 6 permitted units that are not subject to BARCT requirements because they are equipped with Best Available Control Technology (BACT) through permitting actions since 2007. BARCT, by virtue of being limited to controls or reductions that can feasibly be applied to existing units and contained within district rules, is equivalent to a BACT analysis. BACT evaluates any potential controls, including those that could not be retrofitted at existing sources (such as alternate basic equipment), and requires the most stringent control that is technologically feasible and cost-effective. Therefore, any permit unit that has implemented BACT through a permit revision since 2007 has also employed BARCT.

The District conducted an initial assessment for the other 57 units, to determine if they met BARCT or BACT requirements. Each operation was evaluated to identify how emissions are produced and how they are controlled or minimized. Then any additional controls that might be feasible were evaluated to determine if they had been found to be cost effective in recent

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¹ CARB Pollution Mapping Tool

BACT analyses. Based on this preliminary assessment, the District determined that these 57 permit met BARCT.

The District held the required public meeting to discuss the Expedited BARCT Schedule on October 10, 2018. Four persons attended the meeting and there were no comments submitted to the District.

Subsequently, in order to supplement the preliminary assessment conducted by the District, a full BARCT evaluation was conducted as follows:

NOx and VOC emissions

In October of 2020 the District adopted the 2020 Reasonably Available Control Technology Demonstration² for the National Ambient Air Quality Standards for Ozone in San Diego County. This demonstration concluded that the District rules that apply to CP Kelco and/or Solar Turbines -Kearny Mesa meet the requirements for Reasonably Available Control Technology (RACT) by: (1) being at least as stringent as federal technology guidelines, or (2) as stringent as what is required by other California air district rules, or (3) determining that more stringent requirements are not cost-effective per the District's cost-effectiveness thresholds.

Particulate Matter (PM) emissions

The District reviewed the permitted units located at CP Kelco and Solar Turbines that emit PM, and determined that all the units meet the most stringent control requirements that would be required under BACT; therefore there units also would meet BARCT as follows:

- The mills/screens, abrasive blasting, and coating operations are controlled by baghouses.
- The boilers and gas turbines are fired on natural gas, both of which meet BACT requirements.
- The diesel emergency engines comply with the California Stationary Air Toxics Control Measure that regulates diesel PM emissions.

The gas turbine test cells were also evaluated and based on the EPA's RACT/BARCT/LAER Clearinghouse, CARB's Technology Clearinghouse, and BACT Guidelines from other Districts (Bay Area Air Quality Management District, San Joaquin Valley Air Pollution Control District and South Coast Air Quality Management District) there are not any PM controls for gas turbine test cells. Additionally, while not required to be used, Solar Turbines does have natural gas-fired thermal oxidizers that are used to control visible emissions from the test cells as needed.

As shown above, the District has determined that the 57 permit units at CP Kelco and Solar Turbines – Kearny Mesa meet BARCT for NOx, VOC and PM emissions, as required by AB 617.

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² RACT Analysis (sdapcd.org)