



July 3, 2018

Dr. Philip Fine
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Via e-mail at: pfine@aqmd.gov

Re: WSPA Comments on RECLAIM Transition Project Rules

- ***Proposed Amended Rule 1135 (NO_x Emissions from Electric Power Generating Systems)***
- ***Proposed Amended Rule 1134 (NO_x Emissions from Stationary Gas Turbines)***
- ***Proposed Rule 1109.1 (Refinery Equipment)***

Dear Dr. Fine:

Western States Petroleum Association (WSPA) appreciates this opportunity to provide feedback on the transition of the Regional Clean Air Incentives Market (RECLAIM) program to a command-and-control regulatory structure (RECLAIM Transition Project). WSPA is a non-profit trade association representing companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in five western states including California. WSPA has been an active participant in air quality planning issues for over 30 years. WSPA-member companies operate petroleum refineries and other facilities in the South Coast Air Basin that are within the purview of the RECLAIM program administered by the South Coast Air Quality Management District (District or SCAQMD) and they will be impacted by the RECLAIM Transition Project. We have several comments concerning pending rulemakings to implement new Best Available Retrofit Control Technology (BARCT) requirements.

WSPA and its members are active participants in the working groups related to the RECLAIM Transition Project. We respectfully offer the following comments on Proposed Amended Rule (PAR) 1135, NO_x Emissions from Electric Power Generating Systems, PAR 1134, NO_x Emissions from Stationary Gas Turbines, and Proposed Rule (PR) 1109.1, Refinery Equipment.

- 1. BARCT must be established, for each class and category of equipment. BARCT determinations for one class may be different than another class. Caution should be exercised when referencing or applying BARCT determinations from other classes within a category.**

The California Health and Safety Code (CHSC) defines BARCT as follows:

“Best available retrofit control technology means an emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source.”¹ [Emphasis added]

Under District BARCT rules, an equipment category may consist of multiple classes. These classes may be defined by different design criteria or operational factors. Examples might include throughput ratings, duty cycles, or usage level (e.g., low v. high use). Such classifications within a category are necessary to establish what is technologically feasible and cost effective as required in the determination of BARCT.

The District is presently considering BARCT rules for a number of equipment types within the RECLAIM Transition Project. Due to their inclusion in the RECLAIM program, many of these equipment types have not undergone an evaluation for command-and-control BARCT since the RECLAIM program’s launch in 1993, at least with respect to equipment situated at RECLAIM facilities. In many cases, an equipment category is comprised of several different classes and therefore addressed under several different rules. Some notable examples include:

- Stationary gas turbines, which will be covered under a number of different classes pursuant to PAR 1134, PAR 1135 and PR 1109.1.
- Process heaters and boilers, which will be addressed under a number of different classes pursuant to PAR 1146, PAR 1146.1, PAR 1146.2, and PR 1109.1.

Despite similarities within the broader categories, BARCT determinations must be conducted specific to each class of equipment within a category. Take for example a stationary gas turbine; a given make/model of turbine might be deployed in a refinery cogeneration system, or an electric generating facility (EGF). However, operational design differences would place this equipment in different classes. That classification could be defined based on differences in fuel type (e.g., refinery fuel gas and/or utility quality natural gas), or duty (e.g., baseload vs. demand response, etc.).

We appreciate that the District is in the process of conducting a thorough BARCT analysis for these sources across the different proposed rules including PR 1109.1. Such BARCT analyses for refinery sources must be specific to refinery applications and BARCT determinations for similar types of equipment in non-refinery application may not be relevant because what is technologically feasible and cost effective in one application may not be in another application. For this reason, caution should be exercised when referencing or applying BARCT determinations from other classes within a category.

- 2. If a technically feasible endpoint is not cost effective, it cannot be considered BARCT since cost effectiveness is a fundamental requirement of BARCT. Some**

¹ CHSC §40406.

endpoints presented by SCAQMD Staff to recent RECLAIM landing rule working groups exceed the District's \$50,000 per ton NO_x reduced cost effectiveness threshold.²

In establishing BARCT, a district must do all of the following:³

- 1) Identify one or more potential control options which achieves the emission reduction objectives for the regulation.
- 2) Review the information developed to assess the cost-effectiveness of the potential control option. For purposes of this paragraph, "cost-effectiveness" means the cost, in dollars, of the potential control option divided by emission reduction potential, in tons, of the potential control option.
- 3) Calculate the incremental cost-effectiveness for the potential control options. To determine the incremental cost-effectiveness under this paragraph, the district shall calculate the difference in the dollar costs divided by the difference in the emission reduction potentials between each progressively more stringent potential control option as compared to the next less expensive control option.
- 4) Consider the effectiveness of the proposed control option, the cost-effectiveness of each potential control option, and the incremental cost-effectiveness between the potential control options.

In short, BARCT must represent an emission limitation which is both technologically feasible and cost effective.

We note that District Staff recently presented at least one preliminary BARCT recommendation which Staff's (preliminary) analysis indicated was not cost effective. Staff presented the PAR 1135 Working Group with a "BARCT Recommendation" for "Combined-Cycle Turbines" as 2 ppm NO_x, despite data suggesting that every affected unit in the class would exceed the District's cost effectiveness threshold.⁴ Given that data, BARCT cannot be 2 ppm NO_x for the class/category and the District's BARCT recommendation would require revision.

3. BARCT must be established at a class/category level. Device-level limitations are not appropriate unless the source class/category is classified to include a single device.

As noted above, BARCT must represent an emission limitation which is both technologically feasible and cost effective for each class/category of source.⁵ In one instance, the District Staff presented a working group with a preliminary BARCT recommendation that would effectively establish device-level throughput limits as part of the BARCT rule.⁶ The District Staff's analysis for the category (i.e., EGF Utility Boilers) clearly indicated that the Staff's proposed BARCT level was not cost effective for the class/category. As part of that (preliminary) determination, Staff proposed "low use

² SCAQMD presentation to Proposed Amended Rule 1135 Working Group Meeting, 13 June 2018. Slides 30-46

³ CHSC §40920.6.

⁴ SCAQMD presentation to Proposed Amended Rule 1135 Working Group Meeting, 13 June 2018. Slides 27 and 30

⁵ CHSC §40406.

⁶ SCAQMD presentation to Proposed Amended Rule 1135 Working Group Meeting, 13 June 2018. Slides 40-43.

exemptions” would be imposed in the form of new operating limits for each of the individual devices to be calculated as a function of cost effectiveness. Such device-level limitations are not appropriate for a BARCT determination when the class/category consists of multiple devices. If the District wishes to establish a low-use exemption, it must set a class/category threshold above which the BARCT recommendation would be cost effective for the class/category.

4. Requirements which effectively force retirement of basic equipment must be accounted for in the cost effectiveness analysis for the proposed rule. Such a requirement would also need to be accounted for in the District’s socioeconomic analysis for the Proposed Rule.

In the recent working group meetings for PAR 1135 and PAR 1134, District Staff indicated they are considering a “replacement requirement” for older equipment.^{7,8} In both cases, the concept of a replacement requirement appeared to be driven by Staff’s desire to impose a control level that was not demonstrated to be cost effective. BARCT is by definition a retrofit standard that applies to existing sources. The requirement that BARCT standards be both technologically achievable and cost effective is an acknowledgement that it may not be possible to achieve the same level of control on an existing source as might be possible with a new source. If there are no more stringent controls that are cost effective for a class or category of source, then that source is at BARCT and the analysis is concluded. To instead require replacement of that source (perhaps without any regard to the technological feasibility or cost effectiveness) with a new source (presumably equipped with best available control technology) renders the technological feasibility and cost effectiveness limitations in the BARCT definition meaningless. The Health and Safety Code grants the District authority to impose best available control technology (BACT) on new and modified sources and BARCT on existing sources.⁹ We are not aware of any authority that allows the District to compel replacement of an existing source when it finds that there are no cost effective retrofit controls. We do, however, support measures that would make it easier for a facility to replace aging equipment if it elects to do so on a voluntary basis, including streamlined new source review and available sources of emission offsets.

5. The timetable for transition to command-and-control BARCT could materially affect what is achievable, and whether it is cost effective.

Under RECLAIM’s market-based design, covered facilities have successfully reduced aggregate program emissions for NOx and SOx in accordance with the program’s declining RTC caps. Facilities have implemented custom compliance strategies to meet these caps, which included installing emissions controls on equipment where it was cost effective and using the compliance market where physical changes were not cost effective. The District is now planning to transition RECLAIM facilities to command-and-control (under various directives).

Due to program design, RECLAIM facilities within a given sector may have pursued widely varied strategies and now find themselves in widely varied situations with respect

⁷ SCAQMD presentation to Proposed Amended Rule 1135 Working Group Meeting, 13 June 2018. Slide 48.

⁸ SCAQMD presentation to Proposed Amended Rule 1134 Working Group Meeting, 13 June 2018. Slide 42.

⁹ CHSC §40440(b)(1).

to their basic equipment and currently installed emissions controls. The investments and construction needed to achieve command-and-control BARCT limits have not yet been defined. Given these varied starting points, the implementation schedule for command-and-control BARCT rules could be an important factor in defining what is achievable or cost effective as BARCT. We recommend that BARCT discussions need to include consideration of both what will be required (i.e., the emission limit) and when (i.e., the schedule). This is especially true for refinery sector facilities where such investments must be coordinated with turnaround schedules and capital projects that require long planning and engineering timetables.

Thank you for considering these comments. We look forward to continuing to work with you and your Staff on these rulemakings which are critically important to stakeholders as well as the regional economy.

If you have any questions, please contact me at (310) 808-2146 or by email at bmccann@wspa.org.

Sincerely,



cc: Wayne Nastri, SCAQMD
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