

TECHNICAL SUPPORT DOCUMENT FOR A NEW AIR QUALITY REGULATION SECTION 120, “REASONABLY AVAILABLE CONTROL TECHNOLOGY DEMONSTRATION AND DETERMINATION REQUIREMENTS FOR MAJOR STATIONARY SOURCES IN OZONE NONATTAINMENT AREAS”

Background

On October 26, 2015, the U.S. Environmental Protection Agency (EPA) revised the primary and secondary 8-hour National Ambient Air Quality Standard (NAAQS) for ozone from 0.075 parts per million (ppm) to 0.070 ppm. On January 5, 2023, EPA issued a final rule reclassifying Hydrographic Area (HA) 212 (the Las Vegas Valley) as a moderate nonattainment area for the 2015 ozone NAAQS (88 FR 775) and requiring HA 212 to achieve attainment by August 3, 2024.

Sections 182(b)(2), (c), and (f) of the Clean Air Act (Act) require ozone nonattainment areas to implement reasonably available control technology (RACT) emission standards for the major sources of ozone precursors: nitrogen oxides (NO_x) and volatile organic compounds (VOC). Section 182(c) of the Act requires ozone nonattainment areas classified as moderate or higher to submit a state implementation plan (SIP) that includes a RACT analysis for major stationary sources. In August 2022, the Department of Environment and Sustainability, Division of Air Quality (DAQ) requested that eight major sources within Clark County voluntarily submit RACT demonstrations for a moderate nonattainment area ozone SIP.

In preparation of EPA reclassifying HA 212 as serious nonattainment for ozone, DAQ drafted Clark County Air Quality Regulation (AQR) Section 120, “Reasonably Available Control Technology Demonstration and Determination Requirements for Major Stationary Sources in Ozone Nonattainment Areas,” which codifies the requirement for all major stationary sources of NO_x and/or VOC in an ozone nonattainment area to submit major source RACT demonstrations when the EPA Administrator classifies or reclassifies the area as being in moderate, serious, severe, or extreme nonattainment for ozone.

AQR 120

Applicability

AQR 120 will apply to owners or operators of existing stationary sources that meet the definition in AQR 12.3.2 of a major source for NO_x and/or VOC and are located in an ozone nonattainment area in Clark County, Nevada, when EPA either designates or reclassifies that area as moderate or higher. The rule will also apply to owners or operators previously subject to a RACT determination when the ozone nonattainment area is designated or reclassified as moderate or higher. The rule will not exempt owners or operators subject to AQR 120 from other control technology requirements or obligations in other AQRs.

EPA’s reclassification of HA 212 as a moderate ozone nonattainment area triggered RACT determinations and requirements for some major stationary sources. These sources must submit

another RACT demonstration when/if EPA reclassifies HA 212 as a serious ozone nonattainment area because that will lower the major source threshold for NO_x and VOC from 100 tons per year (tpy) to 50 tpy. DAQ anticipates such a reclassification, and AQR 120 is part of its preparation for additional sources of NO_x and/or VOC to be recategorized as “major” after the thresholds are lowered. AQR 120 will provide DAQ with the regulatory authority to incorporate terms and conditions related to major source RACT into operating permits.

Notification, Application Submittal Deadlines, and Major Source RACT Demonstration Requirements for Stationary Sources

An affected source is a stationary source that is required to comply with major source RACT for NO_x and/or VOC under AQR 120. DAQ will notify owners or operators in writing if theirs is an affected source under AQR 120.2(a). Affected sources must submit major source RACT demonstrations for affected emission units unless the owner or operator chooses one of the options at the end of the paragraph below. Major source RACT demonstrations for all affected units are due no later than 120 days after DAQ notifies an owner or operator they have an affected source.

The RACT demonstration is required as part of an application for a new stationary permit or permit revision, and an application is required even if the proposed demonstration results in no additional RACT requirements. The RACT demonstration must include a description of the available control technologies for each affected source; feasibility and effectiveness of these control technologies; annual and incremental cost-effectiveness; identification of other pollutants associated with use of the control technologies; a discussion of environmental impacts; identification of major source RACT controls for each affected unit; a proposed emission limitation for each affected unit using RACT controls; identification of a schedule for installing or operating RACT controls; and proposals for testing, monitoring, recordkeeping, and reporting. Owners or operators have the choice to permanently shut down an affected unit rather than submit a demonstration or, under certain circumstances, to submit a previous major source RACT determination.

Application Processing, Major Source RACT Determinations, and Permit Content

DAQ will review and process the permit application with the major source RACT demonstration (or proposed shutdown of one or more affected units) in accordance with AQRs 12.4 and/or 12.5, as applicable. DAQ will determine major source RACT for the affected units, taking into consideration the submitted demonstration and adding terms and conditions to the permit based on it. Each of these permits will include a condition specifying that the major source RACT requirements do not expire for the life of the affected unit even if the Part 70 operating permit expires. If an owner or operator chooses to submit a proposal to shut down one or more affected units, DAQ will (1) issue a permit with interim emission limitations and/or a shutdown date proposed by the owner or operator; (2) issue a permit that establishes a different interim emission limitation and/or shutdown date; or (3) deem the permit incomplete and require a major source RACT demonstration that complies with AQR 120.5(a). The major source RACT determination, with associated monitoring, reporting, and recordkeeping requirements to ensure compliance, are enforceable because of incorporation into the applicable permit and the Nevada SIP.

Comments Received and DAQ Response

Comment Received: 9/27/2024, via email with letter attached
Commentor: Elizabeth Becker, IRA Campaign Coordinator for the Progressive Leadership Alliance of Nevada (a member of the Nevada Environmental Justice Coalition).
ebecker@planevada.org
Phone: 702-561-8952

COMMENT: ...the division of [Nevada] into hydrographic basins has allowed for development contributing to ozone to occur in Apex, NV (Hydrographic Basin 216) just outside of Hydrographic Basin 212. The pollution emitted in Apex travels southwest into densely populated areas of Clark County[,] contributing to significant health disparities there. For this reason, our coalition believes that RACT requirements should also apply to Hydrographic Basin 216 as well.

RESPONSE: No changes are proposed. AQR 120 does not, nor is it intended to, regulate attainment areas. HA 216 (Garnett Valley) is designated as attainment for ozone and DAQ has established that it does not contribute to the nonattainment status of HA 212. AQR 120 regulates major stationary sources located within HAs that are designated as nonattainment for ozone and classified as moderate or higher. All sources throughout Clark County must comply with the AQR Section 12 series, which regulate NAAQS pollutants at stationary sources and require RACT at various significance thresholds.

Comment Received: 11/5/2024 (after public comment period ended), via email
Commentor: Russell Harms, Senior Engineer, Broadbent and Associates, Inc.
rharms@broadbentinc.com
Phone: 702-563-0600

COMMENT: There's an aspect of the proposed AQR 120 that I can't figure out and was wondering if you could help interpret. It has to do with changes at a source that may occur after a source that was subject to the rule has submitted the initial required RACT analysis and permit application. Question is in what manner, if any, the rule would/could be applied for the addition of a new emission unit with NO_x emissions at that source if that change requires a 12.4 ATC but that change is less than the minor NSR significance level for NO_x in 12.4? Would a NO_x RACT analysis still be required because of Section 120? And if so, where is that requirement in the rule?

RESPONSE: AQR 120 applies to existing emissions units. Per AQR 120.4(a), new units that are installed after the notification date will only have to comply with the requirements of AQR 12.4 unless the action meets the threshold of a major modification. AQR 12.4 will be revised to reduce the RACT applicability thresholds for NO_x and/or VOC in serious ozone nonattainment areas. AQRs 120 and 12.4 will be harmonized so RACT requirements for existing and new emissions units in serious ozone nonattainment areas are equivalent.

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