

**Revision to the Nevada State Implementation
Plan for the 2015 Ozone NAAQS:
Nonattainment Major NSR Requirements**

**Las Vegas Valley Nonattainment Area
Clark County, Nevada**

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EXECUTIVE SUMMARY

This state implementation plan (SIP) revision is submitted by the Clark County Department of Environment and Sustainability, formerly the Clark County Department of Air Quality, for inclusion in the Nevada SIP for the 2015 8-hour ozone National Ambient Air Quality Standards. The submission satisfies the SIP planning requirements for the Las Vegas Valley nonattainment area for the 2015 8-hour ozone NAAQS with respect to the major New Source Review (NSR) preconstruction permitting requirements.

On October 1, 2015, the U.S. Environmental Protection Agency revised the 8-hour ozone NAAQS, lowering both the primary and secondary standards from 0.075 to 0.070 parts per million. When EPA establishes a new NAAQS or revises an existing one, EPA also must designate areas as meeting (attainment) or not meeting (nonattainment) the NAAQS. EPA designated the Las Vegas Valley as a marginal nonattainment area for the 2015 8-hour ozone NAAQS effective August 3, 2018.

Section 172(b) of the Clean Air Act, and EPA's implementing regulations require states to submit a nonattainment major NSR plan or plan revision no later than 36 months after the effective date of an area's designation. For Clark County, this submission deadline is August 3, 2021. The SIP submission must satisfy the requirements located in 40 CFR §51.165.

This document addresses the nonattainment major NSR reconstruction permitting requirements and certifies that Clark County's existing regulations in Sections 12.3 and 12.7.5 satisfy the minimum requirements for the 2015 8-hour ozone NAAQS NNSR program. The DES certifies that its existing regulations are as least as stringent as the minimum requirements at 40 CFR §51.165 for ozone and its precursors.

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ACRONYMS AND ABBREVIATIONS

Acronyms

| | |
|-------|---|
| AQR | Clark County Air Quality Regulations |
| BCC | Clark County Board of County Commissioners |
| CAA | Clean Air Act |
| CFR | Code of Federal Regulations |
| D.C. | District of Columbia |
| DES | Clark County Department of Environment and Sustainability |
| EPA | U.S. Environmental Protection Agency |
| FR | Federal Register |
| HA | hydrographic area |
| NNSR | nonattainment major New Source Review |
| NAAQS | National Ambient Air Quality Standards |
| SIP | State Implementation Plan |

Abbreviations

| | |
|-------------------|--|
| NO _x | nitrogen oxides |
| PM _{2.5} | particulate matter less than 2.5 micrometers |
| VOC | volatile organic compound |

1.0 INTRODUCTION

The Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) to protect public health from six common air pollutants, including ozone. On October 1, 2015, EPA revised the 8-hour ozone NAAQS, lowering the primary (health-based) and secondary (welfare-based) standards from 0.075 to 0.070 parts per million (80 FR 65292). When EPA establishes a new NAAQS or revises an existing one, EPA must designate areas as meeting or not meeting the standard; each state must then develop a state implementation plan (SIP) that describes how these areas will attain or maintain the standard. SIP requirements depend on the area's designation. EPA designated the Las Vegas Valley as a marginal nonattainment area for the 2015 8-hour ozone NAAQS effective August 3, 2018 (83 FR 25776).

1.1 PURPOSE

The purpose of this SIP submittal is to satisfy specific nonattainment area planning requirements established in the CAA and in the final implementation rule for the 2015 ozone NAAQS (83 FR 62998) related to the nonattainment major NSR (NNSR) preconstruction permitting program. On June 4, 2018, EPA designated the Las Vegas Valley as a marginal nonattainment area for the 2015 ozone NAAQS effective August 3, 2018 (83 FR 25776). Under the final implementation rule, requirements for marginal nonattainment areas include the submittal of a NNSR program that meets the minimum requirements of EPA's regulations at 40 CFR §51.165. *See* 40 CFR § 51.1314. This document meets these SIP submittal requirements.

1.2 EPA's 2015 8-hour Ozone NAAQS Implementation Rule

After EPA's 2015 revision to the 8-hour ozone NAAQS, EPA promulgated an implementation rule setting forth the minimum requirements for nonattainment area SIPs for the new NAAQS (83 FR 62998). With respect to NNSR requirements, EPA declined to make substantive changes to the existing NNSR regulations at 40 CFR §51.165, after finding that the rules, as already promulgated, satisfied CAA requirements. In the final rule, EPA also codified changes to §51.165(a)(11), in response to a reconsideration petition related to interprecursor trading requirements promulgated in the 2008 8-hour ozone NAAQS implementation rule. (See Section 2.3 for additional discussion on these provisions.). These changes in the 2015 8-hour ozone NAAQS implementation rule clarified existing requirements for interprecursor trading and eliminated EPA approval for case-specific trading ratios.

In sum, EPA's final 2015 8-hour ozone NAAQS implementation rule promulgated a requirement that State SIPs meet existing 40 CFR §51.165 requirements. *See* 40 CFR § 51.1314. In the rule, EPA set a deadline to submit a SIP or SIP revision to meet the NNSR requirements within three years after EPA designates an area nonattainment. For Clark County, this submission deadline for the 2015 8-hour ozone NAAQS NNSR submission is August 3, 2021.

1.3 |Clark County Nonattainment Area

Figure 1.3-1 shows the Las Vegas Valley nonattainment area for the 2015 8-hour ozone NAAQS, defined as hydrographic area (HA) 212. HA 212 is the geographic area subject to NNSR program requirements. The area encompasses approximately 1,500 square miles, largely under federal control.

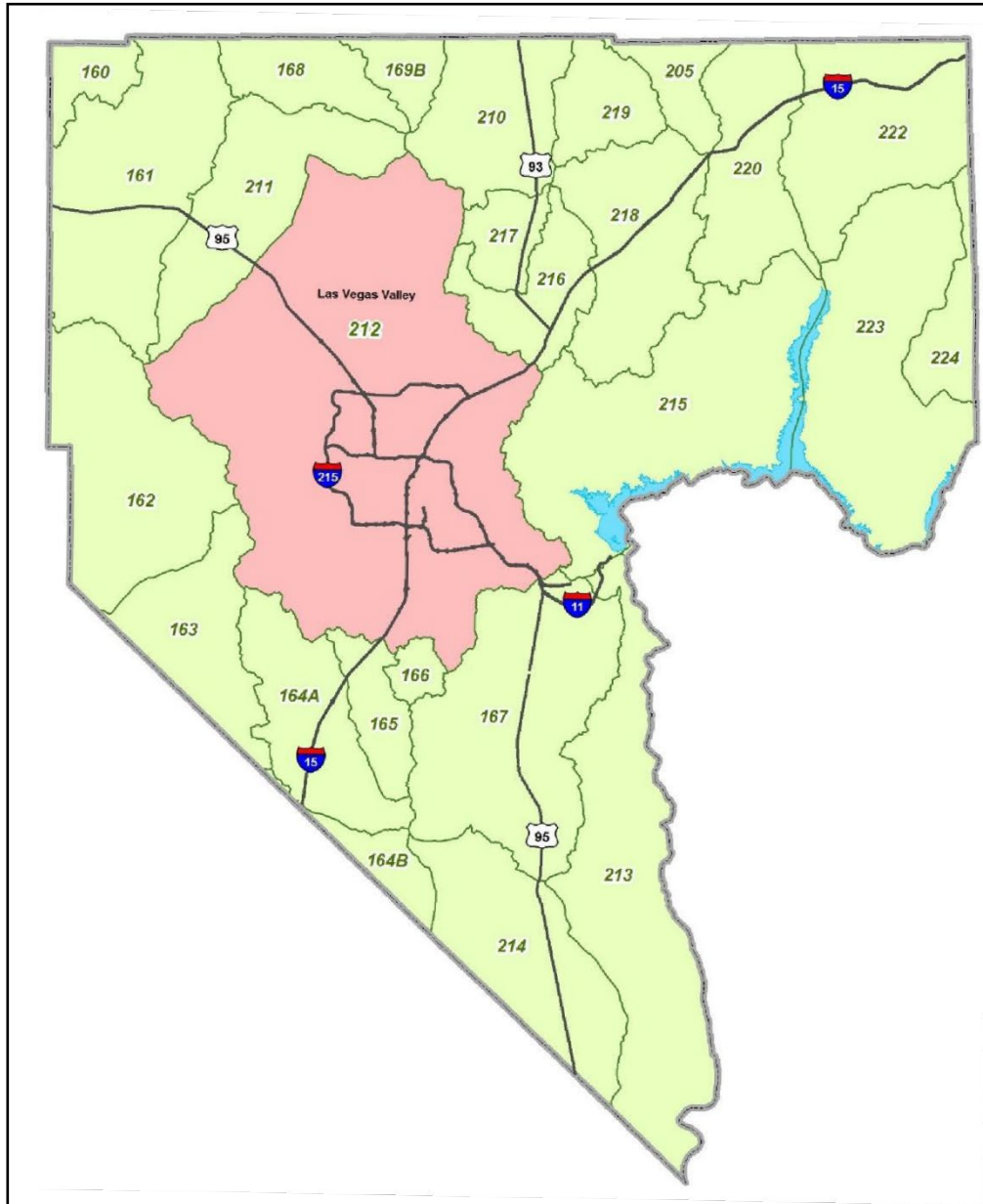


Figure 1-1. Las Vegas Valley Nonattainment Area (HA 212).

2.0 CERTIFICATION OF EXISTING NNSR PROGRAM

The DES certifies that its existing NNSR program is as least as stringent as the requirements at 40 CFR §51.165 for ozone and its precursors and includes all the necessary requirements to meet EPA's minimum requirements for the 2015 8-hour ozone NAAQS NNSR program.

2.1 Clark County's Existing NNSR Rules

Clark County's existing NNSR regulations are in Section 12.3 of the Clark County Air Quality Regulations (AQR). Clark County last revised these regulations on March 18, 2014. EPA approved the rules into the SIP on October 17, 2014 after finding that the regulations were consistent with the CAA and EPA's regulation and guidance (79 FR 62351). At the same time, EPA also approved into the SIP Section 12.7.5, which includes the regulation governing the criteria an emissions reduction must satisfy before the Control Officer may issue an Emission Reduction Credit (ERC). An ERC may be used to satisfy the offset requirements of the Section 12.3 NNSR program.

2.2 Changes to EPA's Rules Since 2014

Since EPA approved the Clark County's Section 12.3 NNSR and Section 12.7.5 ERC provisions as meeting the CAA and EPA's minimum program requirements, EPA promulgated several changes to the 40 CFR §51.165 requirements. These changes include rules addressing:

- 2008 Ozone Implementation (80 FR 12263)
- PM_{2.5} Implementation (81 FR 58009)
- Public Notice Requirements (81 FR 58009)
- Aggregation of Projects (83 FR 57324)
- Project Emissions Accounting (84 FR 39244)
- Error Corrections (84 FR 70092)

These changes are not relevant for implementation of the 2015 8-hour ozone NAAQS because (1) the changes involved other NAAQS pollutants for which Clark County is not in nonattainment, or (2) the EPA did not create minimum SIP requirements for state rules in the action. The Public Notice Requirements Rule added a paragraph to 40 CFR §51.165(i) which re-codified requirements for public participation already required by 40 CFR §51.161 and allowed electronic notice to satisfy these requirements as an alternative to notice in a newspaper. Section 12.3 already satisfies these minimum requirements for public participation in Section 12.3.8 by requiring both electronic and printed notice.

2.3 Recent Court Decision Affecting EPA's Minimum Program Requirements

One provision in EPA's existing 40 CFR §51.165 regulation allows for interprecursor trading to meet the CAA offset requirement. *See* §51.165(a)(11). The offset requirement requires a new major stationary source or major modification to acquire emissions reductions equal to or greater than the amount of a proposed emissions increase. For the ozone NAAQS, the offset requirement applies to emissions increases of the two ozone precursor pollutants: nitrogen oxides (NO_x) and volatile organic compound (VOC). Interprecursor (referred to as "interpollutant" in the existing

Section 12.3 rules) trading allows emissions increases in one precursor to be offset by emissions decreases in another precursor pollutant.

Historically, EPA's guidance and regulations expressly provided for trading precursor emissions reductions to satisfy offsets requirements. *See e.g.* "Improving Air Quality with Economic Incentive Programs" (US EPA, 2001) and EPA's PM_{2.5} Implementation rule (73 FR 28321, May 16, 2008). Clark County's existing SIP-approved NNSR regulation includes provisions for interpollutant emissions offsets in Section 12.3.6.3(b) and (c). EPA approved Clark County's rule as meeting the minimum requirements in EPA's 2014 version of §51.165.

In 2015, after approving Clark County's 2014 rule revisions, EPA reaffirmed state authority for interprecursor trading for purposes of the 2008 8-hour ozone NAAQS implementation rule (80 FR 12264). At that time, however, several parties petitioned the D.C. Circuit Court to review EPA's 2008 NNSR implementation rule. After EPA granted a petition to reconsider the interprecursor trading provisions of that rule, the Court severed the interprecursor trading from other challenges and did not resolve the claim. EPA then included interprecursor trading provisions in its 2015 8-hour ozone NAAQS implementation rule. Petitioners again challenged the provisions. Subsequently, the D.C. Circuit Court ruled that the CAA does not allow for interprecursor trading to satisfy the offset provisions and vacated this aspect of EPA's 2008 and 2015 8-hour ozone NAAQS implementation rules [*Sierra Club v. EPA*, No. 15-1465 (D.C. Cir. 2021)].

EPA has yet to issue guidance on the effect of this vacatur on approved SIPs and certifying compliance for the 2015 ozone NAAQS. The vacatur of this aspect of the 2008 and 2015 regulations means that EPA's regulations revert to the previous version of the regulations - - which continue to provide for interprecursor trading in NNSR SIPs at §51.165(a)(11). EPA's previous approval of Clark County's Section 12.3 regulations was based on this now reinstated version of the rule. In addition, the matter before the Court solely addressed EPA's authority to establish interprecursor trading as part of its 2008 and 2015 ozone implementation regulations, and the Court did not address what flexibility EPA may have to approve alternative rules in SIPs when the program would be more stringent than the requirements of the CAA, or whether EPA has an obligation to revise existing SIPs that provide for interprecursor trading under previous, long-settled regulatory actions.

Notwithstanding the uncertainty with respect to interprecursor trading requirements in SIPs, DES asserts that Clark County's existing SIP-approved NNSR program still meets 40 CFR §51.165 requirements for the 2015 8-hour ozone NAAQS. Sections 12.3.6.3(b) (for ozone) and (c) (for PM_{2.5}) only provide the Control Officer with discretion to allow interpollutant trading; the rules do not provide *carte blanc* rights to stationary sources to use interpollutant trading to satisfy offset requirements. Through this certification, DES commits not to approve interpollutant trades for purposes of satisfying 2015 8-hour ozone NAAQS offset requirements. Moreover, the regulatory provisions further provide that the EPA must approve any use of the trading provisions, which DES is confident the EPA would not approve in contradiction to the *Sierra Club* decision. The effect of DES's commitment and EPA's oversight authority renders the existing Section 12.3.6.3(b) inoperative for the 2015 8-hour ozone NAAQS.

Because Section 12.3.6.3(b) is essentially without effect, these recent developments related to interprecursor trading provisions in 40 CFR §51.165 do not affect DES' certification of its existing regulations as meeting EPA's minimum requirements for approved SIPs, but DES further commits to revise Section 12.3.6.3(b) on the next occasion that it opens the rule for revision.

2.4 How Clark County's Regulations Meet Minimum NNSR SIP Requirements

Table 2-1 provides a detailed explanation of how DES' regulations meet EPA's minimum requirements for an approvable NNSR SIP. Accordingly, DES certifies that its existing NNSR program is as least as stringent as the requirements at 40 CFR §51.165 for ozone and its precursors.

Table 2-1. Compliance Demonstration for Clark County's NNSR Program

| 40 CFR § 51.165 Requirement | | Compliance Demonstration Section 12.3 and Section 12.7.5 of AQR |
|------------------------------------|---|---|
| 1. | (a)(1)(iv)(A)(1)(i)-(iv) and (2): Major source thresholds for ozone – VOC and NOx | Section 12.3.2 (y)(1)(C) definition of "major stationary source" includes the 100 tpy threshold for marginal ozone nonattainment area |
| 2. | (a)(1)(iv)(A)(3): Change constitutes a major source by itself | Section 12.3.2(y)(2) definition of "major stationary source" mirrors EPA's rule: "if the change would constitute a major stationary source by itself" |
| 3. | (a)(1)(v)(E): Significant net emissions increase of NOx is significant for ozone | Section 12.3.2(ii)(3)(A) definition of "regulated pollutant"; Section 12.3.2(aa) definition of "net emissions increase"; Section 12.3.2(mm) definition of "significant" Rules define NOx as an ozone precursor pollutant and set a 40 tpy significant threshold. |
| 4. | (a)(1)(v)(F): Any emissions change of VOC in Extreme area triggers NNSR | Not applicable because no Clark County nonattainment area is or previously has been classified as Extreme. |
| 5. | (a)(1)(x)(A)-(C) and (E): Significant emissions rates for VOC and NOx as ozone precursors | Section 12.3.2(mm)(4) definition of "significant" sets 40 tpy significant emissions rate for NOx and VOC. |
| 6. | (a)(2) Applicability Procedures | Section 12.3.1 Applicability Procedures applies NNSR to the same project emissions increases as the federal program. |
| 7. | (a)(3)(ii)(C)(1)-(2): Provisions for emissions reduction credits | Section 12.3.6.6(a) Emission Reduction Requirements, Section 12.7.5(i) Stationary source shutdowns mirrors EPA's requirements. |
| 8. | (a)(8): Requirements for VOC apply to NOx as ozone precursors | Section 12.3.2 (y)(1)(C) definition of "major stationary source"; Section 12.3.2(ii)(3)(A) definition of "regulated pollutant"; Section 12.3.2(mm)(B) definition of "significant"; Section 12.3.6.5 Quantity Table 12.3-1 Offset Ratios regulates NOx as a regulated NSR pollutant; sets the significant rate at the same level as VOC and requires the same offset ratio as VOC. |
| 9. | (a)(9)(ii)-(iv): Offset ratios for VOC and NOx for ozone nonattainment areas | Section 12.3.6.5 Quantity Table 12.3-1 Offset Ratios establishes offset ratio for marginal ozone nonattainment area. |

| 40 CFR § 51.165 Requirement | | Compliance Demonstration Section 12.3 and Section 12.7.5 of AQR |
|------------------------------------|---|--|
| 10. | (a)(11) – interprecursor trading (partially vacated) | Section 12.3.6.3(b) provisions are inoperative for the 2015 ozone NAAQS, as DES commits to not approving any interpollutant trades, and provides for EPA’s veto of any potential trade. See discussion in Section 2.3. |
| 11. | (a)(12) Anti-backsliding provision(s), where applicable | No other areas in Clark County are designated nonattainment for a previous ozone NAAQS. |
| 12. | (f) Actual PALs | Section 12.3.9 (PAL) essentially mirrors EPA’s PAL provisions. |
| 13. | (i) Public Participation Requirements | Section 12.3.8 Public Participation requires publication in both a newspaper and on the DES website. |

3.0 CONCLUSION

This document certifies that Clark County’s SIP-approved NNSR program in Sections 12.3 and 12.7.5 meet EPA’s minimum SIP requirements for the 2015 8-hour ozone NAAQS NNSR program for the Las Vegas Valley nonattainment area. Having fulfilled the minimum program requirements, DES asks EPA to approve this submission as a revision to the Nevada SIP for the 2015 8-hour ozone NAAQS.

4.0 REFERENCES

84 FR 70092, “Error Corrections to New Source Review,” Dec. 20, 2019.

84 FR 39244, “Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR): Project Emissions Accounting,” Aug. 9, 2019.

83 FR 62998. “Implementation of the 2015 National Ambient Air Quality Standards for Ozone: Nonattainment Area State Implementation Plan Requirements. Final rule,” Dec. 6, 2018.

83 FR 57324, “Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR): Aggregation; Reconsideration,” Nov. 15, 2018.

83 FR 25776, “Additional Air Quality Designations for the 2015 Ozone National Ambient Air Quality Standards,” Jun. 4, 2018.

81 FR 71613, “Revisions to Public Notice Provisions in Clean Air Act Permitting Programs,” Oct. 18, 2016.

81 FR 58009, “Fine Particulate Matter National Ambient Air Quality Standards; State Implementation Plan Requirements,” Aug. 24, 2016.

80 FR 65292, “National Ambient Air Quality Standards for Ozone,” Oct. 26, 2015

80 FR 12264 “Implementation of the 2008 National Ambient Air Quality Standards for Ozone; State Implementation Plan Requirements. Final Rule,” Mar. 6, 2015.

79 FR 62350, “Revision of Air Quality Implementation Plan; Nevada; Clark County; Stationary Source Permits,” Oct. 17, 2014.

72 FR 28321, “Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}). Final Rule,” May 16, 2008.

D.C. Cir. 2021, *Sierra Club v. EPA*, No. 15-1465.

Improving Economic Incentive Programs, EPA-452/R-01-001, U.S. Environmental Protection Agency, Jan. 2001.