

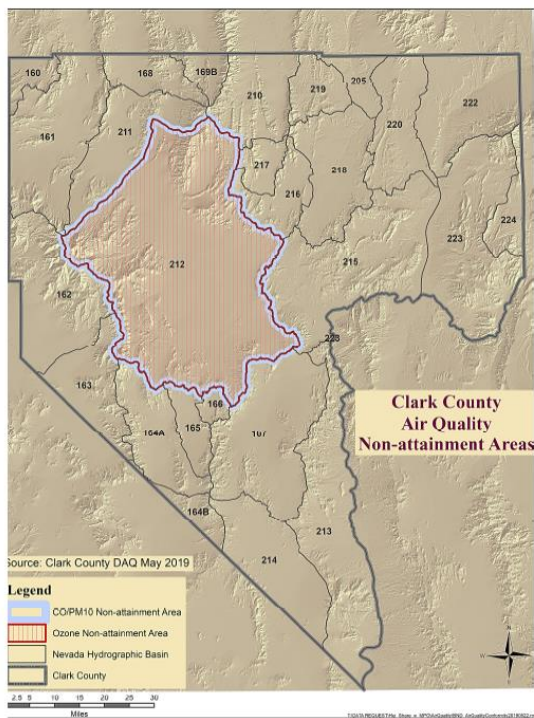
Ozone Determination for 2017-2040 Regional Transportation Plan Amendment Clark 19-12

Background

On June 13, 2019, The RTC SNV Board of Commissioners approved 2017- 2040 Regional Transportation Plan Amendment Clark 19-12 (Hereafter called the Plan Amendment). The Plan Amendment includes Maryland Pkwy BRT project. Conformity Determination for PM10 and CO were made and approved along with the Plan Amendment. This document demonstrates further that the determination for Ozone has also been performed for the Plan Amendment.

EPA made nonattainment designations for the 2015 ozone NAAQS on June 4, 2018 for many areas. Las Vegas region is one of these areas. See Figure 2 below for the newly designated ozone nonattainment area.

Figure 2 shows the ozone nonattainment area boundary and the whole Clark County.



Source: Regional Transportation commission based on DAQ provided information.

EPA's nonattainment area designations for the 2015 ozone NAAQS were effective August 3, 2018 and transportation conformity for the 2015 ozone NAAQS applies one year after the effective date of the designations, on August 3, 2019. As of August 3, 2019, 2015 ozone NAAQS nonattainment areas with an MPO must have a transportation plan and TIP in place that has been demonstrated for conform for the 2015 ozone NAAQS. RTC is now acting on the ozone conformity determination to fulfill the requirements by performing the ozone emission test and adding the ozone conformity determination for the Plan Amendment.

CO and PM10 Determination

Table 29 below is copied from and is identical to Table 29 in 2017- 2040 Regional Transportation Plan Amendment Clark 19-12 to summarize the PM10 and CO Conformity Determinations. For easy reference and comparison with the original RTP and previous RTP Amendments, this document uses the same numbering systems for section titles, section numbers and table numbers as those in the original technical document for

2017-2040 RTP and RTP Amendments. Everything in 2017- 2040 Regional Transportation Plan Amendment Clark 19-12 remains unchanged.

Table 29. 2017-2040 RTP CO and PM10 Conformity Test Summary (Plan Amendment approved in June 2019)

| Year | CO (tons/day) | | | PM10 (tons/day) | | |
|------|---------------|-----------------|------------------------|-----------------|-----------------|------------------------|
| | Emissions | Emission Budget | Conformity Requirement | Emissions | Emission Budget | Conformity Requirement |
| 2015 | 273 | 686 | <i>Satisfied</i> | 41.04 | 141.41 | <i>Satisfied</i> |
| 2020 | 212.53 | 704 | <i>Satisfied</i> | 48.83 | 141.41 | <i>Satisfied</i> |
| 2023 | | | | 51.74 | 141.41 | <i>Satisfied</i> |
| 2030 | 136.54 | 704 | <i>Satisfied</i> | 58.52 | 141.41 | <i>Satisfied</i> |
| 2040 | 98.49 | 704 | <i>Satisfied</i> | 59.74 | 141.41 | <i>Satisfied</i> |

Source: Regional Transportation Commission staff. March 2019, TIP Amendment

Ozone Determination

This section relating to ozone conformity is an additional Conformity Determination to the Plan Amendment. On October 23, 2018, Department of Air Quality, Clark County (DAQ) submitted Revision to Motor Vehicle Emissions Budgets in Ozone Redesignation Request and Maintenance Plan to EPA for approval. In the revision, DAQ established new Ozone budgets for the whole Clark County. These budgets are defined for the two precursors of Ozone, Volatile Organic Compounds (VOC) and the Oxides of Nitrogen (NO_x), as set out in Table 30 A.

NEW Table 30 A. NO_x and VOC MVEBs for Clark County - Revision to Motor Vehicle Emissions Budgets in Ozone Redesignation Request and Maintenance Plan

| Year | NO _x MVEBs (tpd) | VOC MVEBs (tpd) |
|--------------------|-----------------------------|-----------------|
| 2008 - attainment | 89.5 | 42.46 |
| 2015 - interim | 90.92 | 53.94 |
| 2022 - maintenance | 86.74 | 52.96 |

Source: Revision to Motor Vehicle Emissions Budgets in Ozone Redesignation Request and Maintenance Plan Clark County Department of Air Quality, October 2018

On July 11, 2019 The Environmental Protection Agency (EPA) is proposing to conditionally approve a revision to the State of Nevada’s State Implementation Plan (SIP) for Clark County. The revision consists of an update to certain elements of the maintenance plan for the Clark County air quality planning area for the 1997 8-hour ozone national ambient air quality standards (NAAQS or “standards”), including the emissions inventories, maintenance demonstration, and motor vehicle emissions budgets. The EPA is proposing to conditionally approve the SIP revision because the Clark County ozone SIP, as revised, continues to provide for maintenance of the 1997 ozone NAAQS and, upon fulfillment of certain commitments, will not interfere with attainment or reasonable further progress of the other NAAQS, and the budgets meet the applicable transportation conformity requirements. The proposed approval is conditional because it is based on commitments to submit a SIP revision to reduce the safety margin allocations for the budgets within one year of final conditional approval.

Using the ozone budgets in conditional approval of revision of maintenance plan, the ozone determination for this Plan Amendment has been performed.

The Ozone Conformity analysis has been performed by using air emission model MOVES. All input files and assumptions, including the Travel Demand Model output VMTs by facility and by speed, are the same as that used for tests for CO. The MOVES model was run for month of July to get highest ozone emission estimates.

Since the ozone budgets are for the whole Clark County, the ozone conformity analysis should include the emissions for the whole Clark County, not only the transportation model area. Therefore, the MOVES emissions for the Transportation modeling area are factored to get the county total emissions. A factor of 1.077 is calculated by using the information of County Total HPMS and percent HPMS for Clark County areas that are outside Transportation model areas. The county total NOx and VOC emissions for all horizon years are all below the budget levels. Table 30 B. demonstrates that ozone conformity tests satisfied the ozone conformity requirements.

NEW Table 30 B. 2017-2040 RTP Ozone Conformity Test Summary (July 2019)

| Year | NOx (tons/day) | | Conformity Requirement | VOC (tons/day) | | Conformity Requirement |
|------|----------------|------------------|------------------------|----------------|------------------|------------------------|
| | Emissions | Emissions Budget | | Emissions | Emissions Budget | |
| 2015 | 69.01 | 90.92 | <i>Satisfied</i> | 35.00 | 53.94 | <i>Satisfied</i> |
| 2020 | 37.69 | 90.92 | <i>Satisfied</i> | 24.67 | 53.94 | <i>Satisfied</i> |
| 2022 | 32.00 | 86.74 | <i>Satisfied</i> | 21.88 | 52.96 | <i>Satisfied</i> |
| 2030 | 18.78 | 86.74 | <i>Satisfied</i> | 15.54 | 52.96 | <i>Satisfied</i> |
| 2040 | 13.32 | 86.74 | <i>Satisfied</i> | 11.78 | 52.96 | <i>Satisfied</i> |

Source: Regional Transportation Commission staff. July 2019

In conclusion, Table 29 and Table 30B in this document along with the approved 2017- 2040 Regional Transportation Plan Amendment Clark 19-12 show that the current RTP and TIP have been demonstrated conformity for all three pollutants, PM₁₀, CO and Ozone.