

United States Environmental Protection Agency, Region IX

Air Division

Technical Support Document

for

EPA's Notice of Direct Final Rulemaking

for the

Nevada State Implementation Plan

as submitted by the Nevada Division of Environmental Protection

EPA's Analysis of

Washoe County District Health Department's

Rule 050.001, Emergency Episode Plan

April 12, 2007

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**Washoe County District Health Department (WCDHD)
Submitted Rule**

- WCDHD Rule 050.001, Emergency Episode Plan (adopted on March 23, 2006, submitted on May 5, 2006, submittal determined complete by operation of law on November 4, 2006).

Background

Section 110(a)(1) of the Clean Air Act (CAA) requires states to adopt and submit State Implementation Plans (SIPs) for the implementation, maintenance, and enforcement of the National Ambient Air Quality Standards (NAAQS). Section 110(a)(2) establishes specific content requirements for SIPs. Among the required elements, SIPs must provide for authority comparable to that in section 303 of the CAA (i.e., emergency powers) and adequate contingency plans to implement such authority. See CAA section 110(a)(2)(G). EPA has established specific requirements for such “contingency plans,” which are also referred to as “emergency episode plans.” These requirements are currently codified in 40 CFR part 51, subpart H, *Prevention of Air Pollution Emergency Episodes*; section 51.150, *Classification of Regions for Episode Plans*; section 51.151, *Significant Harm Levels*; section 51.152, *Contingency Plans*; and section 51.153, *Reevaluation of Episode Plans*. Under EPA regulations, the specific requirements for emergency episode, or contingency, plans depend upon the priority classification of a given area. Priority I areas must develop more comprehensive emergency episode plans; Priority II areas must also develop plans but are subject to fewer specific requirements; and no such plans are required for Priority III areas. See 40 CFR 51.150–51.152. The purpose of emergency episode plans is to prevent the excessive buildup of air pollutants by recognizing atmospheric conditions conducive to such buildup and initiating effective remedial actions before the concentrations can build to unhealthy levels.

Pursuant to the Act, as amended in 1970, EPA classified air quality control regions (AQCRs) for the purposes of developing emergency episode plans, and EPA classified the region that includes Washoe County as Priority I for particulate matter and as Priority III for the other NAAQS. See 37 FR 10842 (May 31, 1972). See the listing for Northwest Nevada Intrastate AQCR in 40 CFR 52.1471. No change has been made to the priority classifications for Washoe County since that time. On June 12, 1972, the State of Nevada submitted the emergency episode plan for Washoe County as a SIP revision, and EPA approved this submittal on July 27, 1972 (37 FR 15080). At the time, Washoe County’s SIP-approved emergency episode plan consisted of the 12 WCDHD 060-series of air pollution control rules listed below.

SIP Rules

060.005	General
060.010	Emergency Authority to Act
060.015	Sampling Station and Air Sampling
060.020	Reports
060.025	Continuing Program of Voluntary Cooperation
060.030	Declaration of Alerts

060.035	Notification of Alerts
060.040	Alert stages for Toxic Air Pollutant
060.045	First Alert Action
060.050	Second Alert Action
060.055	Third Alert Action
060.060	End of Alert

All SIP rules were submitted on June 12, 1972 and approved into the SIP on July 27, 1972 (37 FR 15080).

The above Washoe County 060-series rules remain in the applicable Nevada SIP to this day (i.e., they have not been superseded by any subsequent SIP revision approvals). NDEP's May 5, 2006 submittal of WCDHD's Regulations Governing Air Quality Management Rule 050.001, Emergency Episode Plan, adopted by the WCDHD on March 23, 2006, is an update to Washoe County's emergency episode plan and would, upon approval by EPA, supersede 8 of the 12 rules in the 060-series in the Washoe County portion of the Nevada SIP. Rules 060.010, 060.015, 060.020, and 060.025 would not be superseded because there are no corresponding provisions in submitted rule 050.001. Thus, WCDHD Air Pollution Control Regulations rules 060.010, 060.015, 060.020, and 060.025 will remain in the applicable SIP regardless of EPA's action on submitted rule 050.001 until such time as Washoe County and NDEP submit a SIP revision of updated provisions or requesting their rescission from the SIP (with the necessary section 110(l) demonstration).

Rule Changes

Submitted rule 050.001 contains substantive and formatting changes relative to the existing SIP rule (i.e., the 8 applicable rules in the 060-series). Notable changes relative to the existing SIP include:

- Submitted rule 050.001 includes new definitions that clarify the meaning of the rule's provisions.
- Submitted rule 050.001 includes substantially more protective episode criteria levels for carbon monoxide (CO) and ozone compared to the existing SIP and includes episode criteria levels for two pollutants, PM₁₀ and PM_{2.5}, for which NAAQS had not yet been established in 1972.
- Submitted rule 050.001 no longer includes episode criteria level for sulfur dioxide, nitrogen dioxide, and hydrocarbons.
- Submitted rule 050.001 updates the list of entities to be notified in the event of an alert.
- Submitted rule 050.001 includes additional control actions to be taken upon declaration of different stages (such as the suspension of operation of any solid fuel burning device upon the declaration of a stage 1 alert for CO, PM₁₀ or PM_{2.5}.)

Evaluation Criteria

The submitted WCDHD Rule 050.001, Emergency Episode Plan, was reviewed for consistency with the requirements of 40 CFR part 51, subpart H, section 150,

Classification of Regions for Episode Plans; section 51.151, Significant Harm Levels; and section 51.152, Contingency Plans.

Rule Evaluation

Washoe County lies within the Northwest Nevada Intrastate AQCR along with Carson City, Douglas County, Lyon County, and Storey County. See 40 CFR 81.115. The Northwest Nevada Intrastate AQCR is classified as a Priority I area for emergency episode plans with respect to particulate matter and as Priority III areas for sulfur oxides, nitrogen dioxide, carbon monoxide, and ozone. See 40 CFR 52.1471. As noted above, the priority classification system is used in 40 CFR part 51, subpart H, to identify areas that must submit emergency episode plans, and to identify specific content requirements for such plans.

Within the Northwest Nevada Intrastate AQCR, there are no nonattainment areas for any of the NAAQS except for Truckee Meadows, which is nonattainment for PM₁₀ and carbon monoxide. Truckee Meadows lies within Washoe County and is home to the cities of Reno and Sparks. Washoe County as a whole had been designated as a nonattainment area for the 1-hour ozone NAAQS, but the 1-hour ozone standard has been replaced by the 8-hour ozone NAAQS. With respect to the 8-hour ozone NAAQS, Washoe County is designated as “unclassifiable/attainment.” Based on the area designations within the Northwest Nevada Intrastate AQCR and monitoring data collected in Washoe County, we find that the Priority III classification for all of the NAAQS excluding PM₁₀ continues to be appropriate for the Northwest Nevada Intrastate AQCR. With respect to PM₁₀, based on the Washoe County monitoring data and the criteria set forth in 40 CFR 51.150(d)(2), the State of Nevada could amend the priority classification for particulate matter within the Northwest Nevada Intrastate AQCR from Priority I to Priority II if it chooses to do so.

As a general matter, our review of submitted rule 050.001 finds that the new rule generally updates and improves the emergency episode plan in the Washoe County portion of the Nevada SIP for CO, ozone, PM₁₀ and PM_{2.5}. Some of specific improvements include those noted above in the “Rule Changes” section of this TSD such as more protective episode criteria levels for CO and ozone, new episode criteria levels for PM₁₀ and PM_{2.5}, updated communication procedures, and more effective control actions. Moreover, the deletion in submitted rule 050.001 of sulfur dioxide, nitrogen dioxide, and hydrocarbons from the emergency episode plan is acceptable because the applicable AQCR is classified as Priority III for sulfur dioxide and nitrogen dioxide (thus, no episode plan is required for them) and because EPA revoked the NAAQS for hydrocarbons more than 20 years ago (see 48 FR 628, January 5, 1983).

Upon a comparison of the submitted rule with the applicable requirements in 40 CFR part 51, subpart H, we find that submitted rule 050.001 generally meets all the necessary requirements for a Priority I region for the pollutants covered by the rule. First, the plan provides for the prevention of the occurrence of a significant harm level of 600 µg/m³, 24-hour average, of PM₁₀ by establishing three episode stages (alert, warning, and emergency) at concentration criteria well below the significant harm level itself. The

episode stages trigger specific remedial actions, which are supplemented by additional actions with the triggering of each successive stage. The plan also establishes three episode stages and identifies remedial measures for CO, PM_{2.5}, and ozone. The plan also provides for public announcement of each successive stage and includes appropriate communication procedures. We find that submitted rule 050.001 meets all applicable requirements related to emergency episode plans.

We also note that certain provisions in submitted rule 050.001 are relied upon by both the PM₁₀ and CO plans for Truckee Meadows. The county has identified residential wood combustion as a significant source of PM₁₀ and CO emissions in the area and has adopted a local rule, WCDHD Rule 040.051, Wood Stove/Fireplace Insert Emissions, to reduce the emissions from that source. Rule 040.051 has been submitted to EPA for approval as a revision to the Washoe County portion of the Nevada SIP. In turn, WCDHD Rule 040.051 relies on submitted rule 050.001 to implement a requirement for curtailment of residential wood combustion if concentration levels reach the stage 1 (alert) episode criteria levels for PM₁₀, CO (or PM_{2.5}). See section E(5) of rule 040.051 and section C(2)(a)(5) of rule 050.001. We find that the submitted rule is consistent with the county's strategy for attainment and maintenance for the PM₁₀ and CO NAAQS within the Truckee Meadows nonattainment area.

EPA Recommendation

- EPA recommends full approval of Rule 050.001, Emergency Episode Plan, adopted by the WCDHD on March 23, 2006 and submitted by NDEP to EPA on May 5, 2006, thus superseding SIP Rules 060.005, 060.030, 060.035, 060.040, 060.045, 060.050, 060.055, and 060.060.

Attachments

1. Submitted WCDHD Rule 050.001.
2. SIP WCDHD 060-series of rules.