

APPENDIX A

Letter from EPA to DAQ approving the J.D. Smith station closure and the proposed Walnut Community Center station, dated August 7, 2017



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, CA 94105-3901

AUG 07 2017

Mr. Phillip Wiker
Manager, Air Quality Monitoring
Clark County Department of Air Quality
4701 West Russell Road, Suite 200
Las Vegas, Nevada 89118

Dear Mr. Wiker:

This letter provides the Environmental Protection Agency's (EPA's) review and approval for the Clark County Department of Air Quality's (DAQ's) discontinuation of the CO, O₃, NO₂, PM₁₀, and PM_{2.5} State or Local Air Monitoring Station (SLAMS) monitors at JD Smith (AQS ID: 32-003-2002), as well as the approval of the proposed CO, O₃, NO₂, PM₁₀, and PM_{2.5} SLAMS monitors at the new Walnut Community Center/Cecile Avenue (Walnut/Cecile). On January 18, 2017, April 18, 2017, and April 25, 2017, DAQ sent letters to EPA describing the proposals to discontinue monitoring at JD Smith. Per 40 CFR 58.14, monitoring agencies are required to obtain EPA approval for the discontinuation of SLAMS monitors.

Discontinuation of the CO monitor was reviewed by EPA against criteria contained in 40 CFR 58.14(c)(1). According to certified data submitted to EPA's Air Quality System (AQS), the JD Smith site was in attainment of the 1971 1-hour CO and 8-hour CO National Ambient Air Quality Standards (NAAQS) from 2011 through 2016. As demonstrated in DAQ's letter and supporting documentation, based on design values from 2011-2015, there is a less than 10 percent probability of exceeding 80 percent of the NAAQS during the next three years at this site. Concentrations available for 2016 and a portion of 2017 are consistent with the historical trend and continue to show low values. This CO monitor is not specifically required by an attainment or maintenance plan, and DAQ will continue to operate three CO monitors in the Las Vegas CO maintenance area. Furthermore, discontinuance of this monitor will not prevent DAQ from meeting 40 CFR 58 Appendix D requirements.

Under 40 CR 58.14(c), requests for site closures may be approved on a case-by-case basis as long as the discontinuance does not compromise data collection for implementation of the NAAQS and the requirements of 40 CFR 58 Appendix D continue to be met. NO₂, O₃, PM₁₀, and PM_{2.5} monitoring at the JD Smith site were reviewed according to these provisions, based on certified data submitted to AQS.

There were 5 NO₂ monitors operating in Clark County at the end of 2016, including 3 area-wide sites, and 2 near-road sites that began operation in 2015 and 2016. In 2017, DAQ also initiated NO₂ monitoring at a sixth site, Jerome Mack (AQS ID: 32-003-0540), which is an area-wide site. The JD Smith site was in attainment of the 1971 annual NO₂ NAAQS from 2011 through 2016. Also, as demonstrated in DAQ's letter and supporting documentation, based on valid design values from 2011-2015, there is a less than 10 percent probability of exceeding 80 percent of the annual NAAQS during the next three years at this site. For the 2010 1-hour NO₂ NAAQS, design values throughout DAQ's network are invalid for 2013-2016 due to low data completeness related to NO_x instrument problems for some quarters in 2013 and 2014, and are slightly higher at JD Smith than at other sites in DAQ's

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network. However, concentrations are well below the NAAQS, and data from 2015-2017 suggest that one of the near-road sites will be the design value site for the county when three complete years of data are available. Finally, 40 CFR 58 Appendix D requires a maximum concentration area-wide NO₂ site, which has historically been met by JD Smith. However, concentrations at Sunrise Acres (AQS ID: 32-003-0561), an RA-40 designated site, are very similar to those at JD Smith and would be sufficient to meet this requirement. Therefore, based on NO₂ monitoring at Sunrise Acres and elsewhere within DAQ's network, discontinuance of the JD Smith NO₂ monitor does not compromise data collection needed for implementation of the NO₂ NAAQS and will not prevent DAQ from meeting 40 CFR 58 Appendix D requirements.

There were 12 O₃ monitors operating in Clark County at the end of 2016. Over the six-year period from 2011 through 2016, design values at JD Smith were consistently lower than at the Joe Neal site (AQS ID: 32-003-0075) and consistently equal to or lower than at Palo Verde (AQS ID: 32-003-0073) and Paul Meyer (AQS ID: 32-003-0043). Preliminary data currently available for a portion of 2017 is also consistent with these longer-term trends. Although JD Smith has a 2016 design value of 0.073 ppm which violates the 2015 8-hour O₃ NAAQS, as noted in DAQ's January 18, 2017 letter and supporting documentation, it is not currently and is unlikely to become the maximum O₃ concentration site for the county, and O₃ concentrations at other sites in DAQ's network are highly correlated with concentrations at JD Smith. Furthermore, discontinuance of this monitor does not compromise data collection needed for implementation of the O₃ NAAQS and will not prevent DAQ from meeting 40 CFR 58 Appendix D requirements.

There were 7 PM_{2.5} monitors operating in Clark County at the end of 2016. In 2017, DAQ also initiated PM_{2.5} monitoring at an eighth site, Paul Meyer. The JD Smith site was in attainment of the 2006 24-hour PM_{2.5} NAAQS and the 2012 annual PM_{2.5} NAAQS for 2015 and 2016; 2011-2014 design values at JD Smith were invalid due to incomplete data in 2010-2012. DAQ removed the PM_{2.5} FRM operating at the site in late 2010 and operated a non-regulatory continuous PM_{2.5} monitor until replacing it with a continuous FEM in late 2012. In 2013-2016, annual averages and annual 98th percentile values based on regulatory data were consistently lower at JD Smith than at Sunrise Acres. A comparison of all continuous data between JD Smith and Sunrise Acres during 2010-2012 shows that JD Smith consistently recorded lower annual averages and annual 98th percentile concentrations than at Sunrise Acres. Daily 24-hour average concentrations during this time period are also generally lower at JD Smith than at Sunrise Acres. Therefore, JD Smith is not and is unlikely to become the maximum PM_{2.5} concentration site for the county, and all annual averages, annual 98th percentile values, and valid and invalid design values for JD Smith during 2011-2016 are below the corresponding NAAQS. Furthermore, discontinuance of this monitor does not compromise data collection needed for implementation of the PM_{2.5} NAAQS and will not prevent DAQ from meeting 40 CFR 58 Appendix D requirements.

There were 10 PM₁₀ monitors operating in Clark County at the end of 2016. The JD Smith site was in attainment of the 1987 24-hour PM₁₀ NAAQS from 2011-2016. JD Smith was also not the design value site in Clark County or the PM₁₀ maintenance area during this period, except during 2013 and 2014. Historically, during 2011-2016, exceedances in the area were usually measured area-wide at multiple monitors, and other sites typically measured higher concentrations than at JD Smith. Joe Neal is the current design value site for the PM₁₀ maintenance area based on 2016 design values, and three other sites also have higher 2016 design values than at JD Smith. Also, as noted in DAQ's April 17, 2017 letter and supporting documentation, PM₁₀ concentrations at JD Smith are highly correlated with concentrations at Sunrise Acres, with an R² of 0.89 for daily data from 2012-2016. Furthermore,

discontinuance of this monitor does not compromise data collection needed for implementation of the PM₁₀ NAAQS and will not prevent DAQ from meeting 40 CFR 58 Appendix D requirements.

Finally, discontinuation of the monitors at JD Smith will allow DAQ to use the equipment to begin monitoring at the Walnut/Cecile site. As part of this request, EPA also reviewed the proposal for CO, NO₂, O₃, PM_{2.5}, and PM₁₀ SLAMS monitors at the Walnut/Cecile site as provided in the DAQ's 2016 annual network plan (ANP). This site will have similar monitoring objectives and spatial scales as JD Smith and will be located in an area that is not currently well-represented by the existing monitoring network.

Based on these analyses, EPA approves DAQ's discontinuation of the JD Smith CO, NO₂, O₃, PM_{2.5}, and PM₁₀ SLAMS monitors, and also approves DAQ's proposal for SLAMS monitoring for these same pollutants at the Walnut/Cecile site. The approval of new SLAMS monitors assumes that the new site will meet all 40 CFR 58 requirements, including the siting requirements specified in Appendix E, as described in the site table for the proposed site in DAQ's 2016 ANP. Please work with EPA to ensure that the new site meets all relevant requirements. Also, please include these network modifications and EPA's approval in your next ANP. If there are any questions regarding this letter, please feel free to contact me at (415) 947-4534 or Anna Mebust of my staff at (415) 972-3265.

Sincerely,



Meredith Kurpius
Manager, Air Quality Analysis Office

cc: (via email) Yousaf Hameed, DAQ
 Stephen Deyo, DAQ
 Piotr Nowinski, DAQ