National Park Service
U.S. Department of the Interior

Interior Regions 6, 7, and 8 (Intermountain), and
Air Resources Division
Natural Resource Stewardship & Science

RECEIVED Pamela Jones Digitally signed by Pamela Jones Date: 2021.07.28 21:15:21 -06'00'
By Environmental Improvement Board at 9:14 pm, Jul 28, 2021

Technical Testimony Requirements

Submitted July 28th, 2021 for the hearing on September 20th, 2021

1) The person for whom the witnesses will testify:
    a. The National Park Service will testify in support of New Mexico's proposed ozone precursor rule. Recent research at Carlsbad Caverns National Park in New Mexico demonstrates the need for emission reductions that this rule will support. The NPS will offer recommendations to strengthen the proposed rule.
2) Primary technical testimony will be presented by:
    a. John Vimont
        i. Education: B. Sc. University of Washington in Atmospheric Sciences, M. Sc. Atmospheric Science, Colorado State University
        ii. Work Background: National Park Service; Air Resources Division; Research and Monitoring Branch Chief (2003-present); Air quality modeling – National Park Service (1991-2003), Environmental Protection Agency (1987-1991), New Mexico Air Quality Bureau (1982-1987)
        iii. Relevant Expertise: Air quality modeling, air quality monitoring, supporting policy with science
    b. Additional technical witnesses will attend and be available to respond to questions if needed:
        i. Lisa Devore
            1. Education: B Sc. and M Sc. Environmental Engineering, University of Colorado at Boulder
            2. Work Background: National Park Service, Intermountain Region (2020 – present). Colorado Department of Public Health and Environment, Air Pollution Control Division (2005 – 2020), Planning Special Lead, Emerging Air Quality Issues Supervisor, Planner, Permit Engineer, Air Quality Modeler.
            3. Relevant Expertise: air pollution control technology and regulatory review.
        ii. Kirsten King
            1. Education: M. Sc. Environmental Science. University of Colorado, Denver; B. Sc. Chemical Engineering and Petroleum Refining. Colorado School of Mines, Golden CO.
            2. Work Background: National Park Service; Air Resources Division; Policy, Planning, and Permit Review Branch Chief/Environmental Engineer (2017-present). Encana Oil & Gas Environmental Manager (2014-2017). Colorado Department of Public Health & Environment Stationary

Sources Program Manager (2006-2014); Regulatory & Compliance Assistance Unit Supervisor (2002-2006).

3. Relevant Expertise: air quality permitting and regulations

iii. Anthony Prenni

1. Education: B Sc. in Chemistry, Emory University. Ph D. in Analytical/Atmospheric Chemistry, University of Colorado. Postdoctoral Scientist, Atmospheric Science Department, Colorado State University.
2. Work Background: National Park Service, Air Resources Division: Chemist; IMPROVE Program Manager; Special Studies (2013-present). Colorado State University, Department of Atmospheric Science: Research Scientist (2003-2013).
3. Relevant Expertise: atmospheric chemistry, air quality monitoring.

iv. Barkley Sive

1. Education: B Sc. and M Sc. in Chemistry, University of California, Irvine. Ph D. in Analytical/Atmospheric Chemistry, University of California, Irvine. Postdoctoral Research Associate in Atmospheric Chemistry, Laboratory for Atmospheric and Space Physics, University of Colorado, Boulder.
2. Work Background: National Park Service; Air Resources Division; Chemist and Gaseous Pollutant Monitoring Program Manager (2013-present). Appalachian State University; Department of Chemistry; Assistant Professor (2011-2013). University of New Hampshire; EOS Institute; Climate Change Research Center; Research Assistant/Associate Professor (2002-2011).
3. Relevant Expertise: atmospheric chemistry, source apportionment, air quality monitoring,

v. Andrea Stacy

1. Education: Bachelor's in Environmental Science from Montreat College, Master's level continuing education credits in Environmental Engineering, University of Colorado
2. Work Background: Nineteen years of experience working for the federal government in the air resources field. Work experience includes technical review and analysis of state and federal air pollution control technology evaluations, air permits, state and federal environmental plans, documents, rules, and regulations. Thirteen years of specialized experience in addressing air emissions from the oil and gas industry as the NPS Air Resources Division lead for oil and gas NEPA and permitting, including working on oil and gas emission inventories, air quality impact assessments and review of regulatory and compliance requirements. Current work in a national NPS office provides a wide breadth of experience in addressing various state regulations and requirements across the country.

3. Relevant Expertise: air quality policy, planning, regulatory, and permit review; and air pollution control technology and oil and gas industry.

3) This hearing will be held virtually and all witnesses intend to join remotely.
4) Direct testimony: Refer to the associated presentation (NPS NM EIB Hearing.pptx)
5) Recommended modifications: Refer to the associated presentation (NPS NM EIB Hearing.pptx) and proposed redline document (NPS redline_Proposed-Part-20.2.50-2021.07.28 Final.docx)
6) Exhibits:
    a. The associated file (NPS NM EIB Hearing.pptx) is the annotated presentation that will be shared as technical testimony during the hearing on September 20th, 2021.
    b. In addition, please reference:

Benedict, K.B., A.J. Prenni, M.M.H. El-Sayed, A. Hecobian, Y. Zhou, K.A. Gebhart, B.C. Sive, B.A. Schichtel, and J.L. Collett, Jr., Volatile organic compounds and ozone at four national parks in the southwestern United States, Atmospheric Environment, 239, 117783, doi.org/10.1016/j.atmosenv.2020.117783, 2020.