

MEMORANDUM OF UNDERSTANDING

BETWEEN THE

U.S. ENVIRONMENTAL PROTECTION AGENCY

AND THE

NEW MEXICO ENVIRONMENT DEPARTMENT

AND THE

NEW MEXICO ECONOMIC DEVELOPMENT DEPARTMENT

I. PURPOSE/OBJECTIVES/GOALS

PURPOSE

The purpose of this Memorandum of Understanding (MOU) is to facilitate collaborative environmental research between the Office of Research and Development (ORD), the Office of Air and Radiation (OAR), and the Dallas Regional Office (Region 6) in the United States Environmental Protection Agency's (EPA), and the New Mexico Environment Department (NMED) and New Mexico Economic Development Department (NMEDD). In general, the parties intend to focus on air and energy related environmental research of mutual interest and benefit to both EPA and NMED.

OBJECTIVES

EPA, NMED and NMEDD have a shared objective in protecting human health and the environment and are engaging in complementary air monitoring and modeling activities in aid of that common mission. The primary objectives of this MOU are to collaborate on: (1) the implementation and evaluation of remote sensing/monitoring methods deployed on high altitude air ships; (2) the use of data generated by these methods to assess air emissions sources and transport within the state of New Mexico and between New Mexico and areas surrounding the state, as well as transport across those areas; and, (3) the possible use of high altitude data to inform and evaluate air quality modeling tools.

GOALS

Both parties plan to collaborate on a five-year research effort anticipated to take place over 2021-2025 aimed at demonstrating the potential utility of placing air monitoring equipment on airships which will be deployed at high altitudes for sustained periods of time to inform national and international air quality management activities impacting the southwest region of the United States.

II. BACKGROUND

The state of New Mexico through the NMEDD is working in collaboration with Sceye to deploy high altitude airships to deliver wireless broadband to its residents. These airships also provide an opportunity to host monitoring equipment and sensor technology that could be used to better understand emissions and transport of air pollution within the State and between the State and surrounding areas, as well as

across those areas. The Sceye airships are operational with the possibility of an air quality related payload to be deployed approximately nine (9) months after the signature of an agreement. NMED is specifically interested in research that would help them increase monitoring in rural areas and understand emissions across the airshed. It is also interested in how to use EPA models, especially to understand cross border transport. EPA is conducting research to evaluate and enhance the use of high-altitude monitoring and sensor systems to inform and assess air quality management activities. Currently, there is scientific uncertainty in these types of measurements and EPA ORD has research efforts underway that are designed to reduce this uncertainty, involving the use of ground-based instrumentation as a means for evaluation and refinement of the high-altitude remote sensing. Work conducted as part of this MOU would also inform EPA efforts related to the Border 2025 initiative to address environmental cooperation between the U.S. and Mexico, including to reduce air pollution near the U.S.-Mexico border, establish real-time access to air quality data, and increase the quality of emissions inventories.

III. AUTHORITIES

EPA enters into this MOU under the authority of Section 103 of the Clean Air Act, 42 U.S.C. § 7403, which provides EPA with authority to undertake cooperative efforts with private and public organizations to promote the coordination and acceleration of research, studies, training, education, and other efforts to study, assess, prevent, reduce, and eliminate environmental pollution and protect public health.

NMED enters into this MOU pursuant to NMSA 1978, Section 74-1-6(C), which provides NMED the authority to enter into agreements with environmental and consumer protection agencies of other states and the federal government pertaining to duties of the department.

NMEDD enters into this MOU pursuant to NMSA 1978, Section 9-15-7(C) which provides the Secretary of NMEDD the authority to enter into contracts with state, federal or private entities.

IV. ROLES AND RESPONSIBILITIES

NMED and NMEDD intend to:

- A. Establish and maintain a partnership with Sceye to deploy airships;
- B. Provide EPA with access to air quality related data collected on the Sceye airships;
- C. Facilitate potential deployment of EPA equipment on Sceye airships;
- D. Participate in and contribute to planning and technical discussions among the study collaborators.

EPA intends to:

- A. Provide technical expertise to help with the set-up and interpretation of observations taken from Sceye airships to inform characterization of emissions which can be used to address Ozone NAAQS attainment and other air quality management issues and, depending upon timing and resource availability, may be able to augment measurements with ground-based instrumentation and associated interpretation and evaluation of data.
- B. Facilitate dialogue between EPA, NMED and other study collaborators on the collaborative research effort.

C. Consider additional opportunities for collaboration with NMED in future research planning efforts.

V. LIMITATIONS

A. All commitments made in this MOU are subject to the availability of appropriated funds and each party's budget priorities. Nothing in this MOU, in and of itself, obligates NMED, NMEDD or EPA to expend appropriations or to enter into any contract, assistance agreement, interagency agreement, or other financial obligation. NMED and NMEDD agree not to submit a claim for compensation for services rendered to EPA or any other federal agency for activities it undertakes in carrying out this MOU.

B. This MOU is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement or contribution of funds between the parties to this MOU will be handled in accordance with applicable laws, regulations, and procedures, and will be subject to separate subsidiary agreements that will be effected in writing by representatives of both parties.

C. Except as provided in Section V. paragraphs (A) and (B) and Section VII. INTELLECTUAL PROPERTY, this MOU is not legally binding and does not create any right or benefit, substantive or procedural, enforceable by law or equity against NMED, NMEDD or EPA, their officers or employees, or any other person. This MOU does not direct or apply to any person outside NMED, NMEDD and EPA.

D. The parties agree that use of EPA ORD research and test facilities, and the presence of outside users at the EPA ORD facilities by non-government entities or individuals, will be properly documented and approved in a separate Outside User's Agreement if the use is appropriate and in the public interest.

E. NMED and NMEDD may make factual statements to the public which describe their cooperation with EPA. However, nothing in this MOU allows EPA to endorse the purchase or sale of NMED or NMEDD products or services. NMED and NMEDD agree not to make statements to the public in news releases, product brochures, on websites or in any media that imply EPA endorsement of NMED or NMEDD products or services.

VI. PROPRIETARY INFORMATION

To carry out the joint work resulting from this MOU, NMED or NMEDD may need to disclose proprietary information to EPA. For the purpose of this MOU, proprietary information is defined as information that an affected business claims to be confidential and is not otherwise available to the public. NMED and NMEDD agree to clearly identify as such confidential information disclosed to EPA in writing; and to clearly memorialize, in writing and within a reasonable time, any confidential information initially disclosed orally. EPA agrees not to disclose, copy, reproduce, or otherwise make available in any form whatsoever to any other person, firm, corporation, partnership, association or other entity information designated as proprietary or confidential information without consent of NMED and NMEDD except as such information may be subject to disclosure under the Freedom of Information Act (5 U.S.C. § 552), and EPA's regulations at 40 C.F.R. Part 2, or as otherwise authorized by law.

VII. INTELLECTUAL PROPERTY

The parties agree that NMED or NMEDD may copyright any copyrightable subject matter created jointly by the parties from the activities conducted under this MOU, including but not limited to journal articles, training, educational or informational material, or software. NMED and NMEDD hereby grant to EPA a royalty-free, nonexclusive, irrevocable right to reproduce, distribute, make derivative works, and publish or perform the work(s) publicly, or to authorize others to do the same on its behalf.

The parties agree that any patented invention created by NMED or NMEDD pursuant to the terms of this MOU will be jointly owned by the parties regardless of inventorship unless an alternative agreement indicates otherwise.

VIII. POINTS OF CONTACT

The following individuals are designated points of contact for the MOU:

U.S. Environmental Protection Agency:

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Director

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IX. MODIFICATION/DURATION/TERMINATION

This MOU will be effective when signed by all parties. This MOU may be amended at any time by the mutual written consent of the parties. The parties will review this MOU every 5 years to determine whether it should be revised, renewed, or cancelled. This MOU may be terminated by either party at any time by one party notifying the other party in writing 90 days in advance of the termination date.

X. APPROVAL

New Mexico Environment Department	U.S. Environmental Protection Agency
James C. Kenney, Cabinet Secretary	Wayne E. Cascio, MD, Acting Principal Deputy Assistant Administrator for Science US EPA Office of Research and Development
(Date)	(Date)
New Mexico Economic Development Department	
Alicia Keyes	
Alicia J. Keyes, Cabinet Secretary	
(Date)	