

EPA, New Mexico collaborate with Sceye on air quality monitoring initiative

Five-year study will provide data critical to understanding air quality issues

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DALLAS – (Aug. 13, 2021) Yesterday, U.S. Environmental Protection Agency (EPA) announced a partnership with the state of New Mexico related to air quality research. EPA signed a memorandum of understanding with the New Mexico Environment Department (NMED) and Economic Development Department (EDD) to develop a project using airships to monitor and study air quality.

"EPA's partnership with states is the cornerstone of achieving our mission to protect public health and the environment," **said EPA Region 6 Acting Regional Administrator David Gray.** "EPA is committed to helping our state and local partners overcome environmental challenges, especially complex ones like air quality issues that cross multiple national, state, and local borders."

"Under this partnership, we will study pollution sources and their impacts on climate and air quality from 65,000 feet above New Mexico," **said NMED Cabinet Secretary James Kenney.** "As a result, we will increase our scientific understanding of climate change and air pollution to inform our ambitious policymaking."

"This memorandum of understanding to collaborate on air quality research will help us better understand the nature and source of air pollutants," said Wayne Cascio, acting principal deputy assistant administrator for science in EPA's Office of Research and Development. "This effort will build upon previous collaborations with NASA to help EPA advance our knowledge on the use of high-altitude measurements for monitoring air pollutant emissions and concentrations on the ground."

The MOU facilitates collaborative air- and energy-related research on emission sources within New Mexico as well as neighboring states and countries, such as Texas and Mexico.

Once the MOU is in place, EPA and Sceye, a material science company based in Moriarty, New Mexico, intend to enter into a public-private Cooperative Research and Development Agreement, which will specify how the monitoring data will be shared. Sceye builds and operates High Altitude Platform Stations, or HAPS, to provide environmental monitoring as well as internet access.

"The state Economic Development Department is supporting this collaboration to help boost this innovative company based in New Mexico so it can grow faster and have an opportunity to use its technology on a broader scale," **said EDD Cabinet Secretary Alicia J. Keyes.** "New Mexico is one of the cradles for this technology. It is being manufactured here in New Mexico and is creating highly paid, skilled jobs in the state that will help diversify the economy."

Future data gathered by the airships will:

- Allow NMED to increase monitoring of air quality especially in rural areas within the same areas in which the airships will provide broadband internet access
- Provide quantitative information on emissions from air pollutant sources to help support industry compliance with air quality rules and permits
- Provide information to help the state determine how much air pollution stems from Mexico and neighboring states such as Texas and contribute to New Mexico's air quality issues
- Inform public health and environmental coordination efforts between the U.S. and Mexico
- Help EPA evaluate and enhance the use of high-altitude monitoring and air quality models on a broader, nationwide level

By placing instrumentation on the airships, which rise 65,000 feet above the earth's surface, scientists and regulators from the EPA and NMED will have an unprecedented view of concentrations of greenhouse gases, particulate matter, ground-level ozone and other harmful air pollutants. In addition, regulators will have an unprecedented view of the sources of these pollutants. With over 60,000 oil and gas sources across New Mexico, utilizing state-of-the-art technology is critical to gaining a comprehensive view of industry emissions.

"We see our HAPS as instant infrastructure," said Sceye Founder and CEO Mikkel Vestergaard Frandsen. "We can use our position in the stratosphere to not only expand broadband access to all, but also to transform how we monitor and care for our environment. Tracking emissions with precision and real time data is the key to realizing New Mexico's ambitions for improving air quality. The state can set a national standard."

The five-year joint study between the state and EPA is expected to begin next year.