

PROJECT PROFILE: **LABORATORY**



PROJECT: SCIENCE COMPLEX EXHAUST SYSTEM RENOVATIONS, Missoula, Montana

CLIENT: U.M. Facility Services

Because of **noise-related complaints** that the University of Montana had already received about the **laboratory exhaust fans** located on the roof of its Science Complex Building, the University hired Big Sky Acoustics to **analyze and control the impact on the existing ambient noise levels** that renovations to the **rooftop ventilation equipment** would have.



SERVICES and SOLUTIONS:

- Measured the existing ambient noise levels at the University property line and in the residential neighborhood to establish a baseline.
- Provided noise control design recommendations and guidelines for the selection of quiet equipment to the mechanical engineer, reducing the need for additional noise control measures such as silencers, for the new 15,000 cfm fans.
- Predicted the change in ambient noise levels due to the proposed system renovations and new fans, and compared the predicted noise levels to the Missoula City Noise Ordinance to determine compliance.
- Conducted follow-up noise level measurements to confirm that the renovations did not noticeably increase the ambient noise levels, and that the noise from the rooftop equipment was in compliance with the City Noise Ordinance.

