

# Big Sky Acoustics, LLC

## PROJECT PROFILE: PROCESSING PLANT



**PROJECT: Idahoan Foods**  
*Idaho Falls, Idaho*

A resident 1-mile southeast of Idahoan Foods complained about noise from the Plant disturbing him at night. The Plant has numerous exhaust fans, cyclones and dust collection systems used for production and packaging, typically operating 24 hours per day. BSA completed an Environmental Noise Study and recommended noise control measures to quiet the systems.

**BSA's SERVICES AND SOLUTIONS:**

- Completed noise level measurements of individual pieces of equipment (and associated fans) on the Packaging and Production building rooftops, and in the residential neighborhood.
- The measured frequency spectra helped identify the dominant noise sources of the “whine” (dust collection system fans) and the “rumble” (Drum Stack Fans) noted by the complaining resident.
- Determined the performance characteristics and recommended sound attenuators in the exhaust stacks of the Bag House fans.
- Recommended other noise control measures and provided specifications to modify the inside of the Fill House, construct a barrier around the dust collection fans, and replace the propellers of the Drum Stack Fans.

The atmospheric conditions at night enhanced the propagation of sound and caused noise fluctuations in the residential areas. BSA's noise control measures can reduce the noise 10 dB—approximately half as loud as the measured conditions.