Section I: TPG Summary

Montana Tech conducts three NIOSH—sponsored training programs under a single grant. An undergraduate program leads to a B.S. degree in Occupational Safety and Health (OSH). There are two graduate programs leading to an M.S. degree in Industrial Hygiene (IH). One IH program is conducted on campus and the other is offered through distance delivery (online). The three programs are housed in the Safety, Health and Industrial Hygiene (SHIH) Department. Seven faculty members in the department are substantially involved in teaching and research in safety, health, and industrial hygiene.

The undergraduate OSH curriculum provides a comprehensive education to develop graduates with capability for serving as exceptional safety and health professionals as well as contributing to society in general. It is accredited by the Applied Science Accreditation Commission of ABET (ASAC/ABET). The first two years of the program focus on foundation disciplines including general chemistry, college physics, calculus, organic chemistry, statistics and English composition. Humanities and social sciences are distributed throughout the four year curriculum. With the exception of one freshman introductory class, OSH courses are in the second through fourth years of the program. Of the 128 total hours in the curriculum, at least 48 credits are OSH courses.

The two ASEC/ABET accredited graduate programs aim to develop exceptional IH professionals. The curriculums provide a full range of IH courses and supporting electives. The on-campus program requires 37 credit hours consisting of 28 lecture courses, two hours of graduate seminar, six hours of thesis research and a one-hour technical writing seminar. A thesis or publishable paper is required and defended at an oral examination. The distance delivery program also requires 37 credit hours consisting of 34 lecture courses and, up through last academic year, a capstone IH report. This fall of 2015, the capstone project has been modified to a written and oral comprehensive exam, which will more accurately reflect student outcomes for the program. Students in the distance delivery program may sit for the exam during the last semester of coursework. One of the courses in the distance delivery program, Sampling and Evaluation of Health Hazards, requires a one week residency in the summer.

The NIOSH grant provides funds for valuable program enhancement, primarily through scholarships for on campus students. Additional enhancements include student travel, faculty development, and partial summer salary for program enhancements by program managers. NIOSH support unquestionably enhances program quality and recognition.

A web link for Montana Tech’s Safety, Health and Industrial Hygiene Department Programs is provided in the following link: http://www.mtech.edu/academics/mines/shih/.
Section II: Program Highlights

Efforts were made in the 2014-15 academic year to support regional professional societies, maintain the high quality of our faculty, and prepare students for professional careers. Summaries of these efforts conducted to sustain the strength of our three NIOSH supported trainee programs are provided below.

Supporting regional professional societies
Twelve students and four faculty members attended the Northwest Occupational Health Conference in Richland, WA. Six graduate students and one undergraduate student received local section AIHA scholarships at this event. Six students and two faculty members attended the annual professional development conference co-sponsored by the Big Sky Chapter of ASSE.

Faculty members had leadership roles in regional societies: Dr. Hart served as Montana Local Education Officer for the Pacific Northwest Section of the AIHA. Dr. Jensen served the Big Sky Chapter of ASSE as an officer, and acted as faculty advisor for the Montana Tech Student Section of ASSE. Dr. Jensen also served on the Advisory Board of the Rocky Mountain Center for Occupational and Environmental Health at the University of Utah.

Sustaining a high quality faculty
The Safety, Health and Industrial Hygiene Department completed a national search for a replacement tenure-track faculty position for our department during the spring of 2015. A successful search resulted in Dr. Dan Autenrieth joining the faculty for this fall semester. Dr. Autenrieth is currently teaching courses in both our undergraduate and graduate programs. In addition to this appointment, campus administrators approved an additional tenure-track faculty position for our department and a search is being conducted during this fall semester.

Funding from the NIOSH grant enabled faculty development. Two faculty members attended the national AIHce, one attended the national ASSE conference, and one attended and presented at the NIOSH-hosted national occupational injury Research Symposium in West Virginia. We were fortunate to have 3 students secure AIHA Foundation scholarships at the national conference.

Preparing students for OSH and IH careers
During the fall semester of the 2014-15 academic year, Montana Tech had 89 undergraduates register as Occupational Safety and Health (OSH) majors. Of those, 27 were NIOSH supported trainees. Of the 15 awarded a B.S. in OSH, 11 took OSH positions in private industry, two entered graduate school in industrial hygiene, one is working for the Montana State Department of Labor, and one is working outside of the OSH field. Montana Tech had 15 graduate students register in full-time status in the campus M.S. Industrial Hygiene (IH) degree program. Five were NIOSH supported trainees. Of the three awarded their M.S., one is working as an IH in private industry, one accepted a position with the Montana State Department of Transportation, and one secured a position in environment, safety, and health with the Public Health Service in his tribal hometown. Montana Tech had 67 distance students taking one or more online courses. Thirteen were awarded an M.S. in Industrial Hygiene Distance Learning/Professional Track. All of them are working in IH/OSH positions.