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JRCOSTEP – 2006
University of Georgia
Southeast Alaska Regional Health Consortium
Sitka, Alaska – Alaska Area IHS

Through the USPHS JrCOSTEP program, I gained experience in the profession of environmental health. I never imagined that I would gain the knowledge and experience that I have this summer. My experience working at Southeast Alaska Regional Health Consortium (SEARHC) in Sitka, AK has been enjoyable and educational. I am a student at the University of Georgia working on a degree in Environmental Health Science. I learned about the JRCOSTEP program from my father who is in the U.S. Public Health Service.

My COSTEP was a 75 day assignment working for SEARHC in Sitka, AK. SEARHC is a Native Health Consortium that provides health care and related services to 27 communities. Sitka is a small Alaskan town located in the Southeast region of Alaska. This tiny town in located on Barnaof Island, and has the land mass of Delaware, it has breath taking views of Mountains and the majestic water ways of the Alaskan Gulf and Pacific Ocean. This area of Alaska is also known as the Panhandle. During my 11 week assignment, I traveled to 5 Native Alaskan communities. The primary method of travel to many of these villages is by small plane, the state-run ferries, or smaller boats. One of the most interesting parts of my travel experience was my first float plane ride and water landing when I traveled to Angoon, AK.

While working at SEARHC, I worked with the Director of Environmental Health, the Field Environmental Health Specialist, the Remote Maintenance Worker (RMW), the Safety and Infection Control Officer, and the Injury Prevention Staff. My responsibilities and duties included; conducting fluoride proficiency sampling; food service surveys; and sanitary surveys of the water and wastewater systems, landfills, offices, and residential boarding homes. I conducted food safety training for the nutrition staff and conducted a regulated medical waste survey at Mt. Edgecumbe hospital and at a SEARHC satellite clinic in Juneau, AK. I updated the safety and infection control manual, and conducted a phone survey on alternative energy uses in hopes of finding funding for alternative energy. I also organized two fire drills for the Community Health Service facilities.

My first trip was flying on a twin engine Piper Chieftain to the remote community of Kake, located on Kupreanof Island. I assisted the Environmental Health Specialist and the Remote Maintenance Worker (RMW), in conducting sanitary surveys of the water, wastewater, and solid waste systems. When we arrived to Kake, we assisted the wastewater operator with the inspection of man holes and lift stations. The next day we started by inspecting the wastewater discharge pipe from the community septic tank. We did this during low tide so we could inspect the length of the pipe to the low water line.

Once this was completed we inspected the water plant and took several chlorine reading of the water distribution line. The RMW had the Water Operator backwashing the pressure filters and resolved some backwashing issues that would increase the effectiveness of the backwashing process and increase the filter train run times. In addition, the turbidity readings were off so the RMW and Water Operator worked on the effluent turbidimeter for finished potable water. The turbidimeter was cleaned and put back on line. On my last day in Kake, we went back to the water plant to evaluate the turbidimeter readings and treatment train. Once this was completed I went to the health clinic with the Institutional Environmental Health Consultant from the Alaska Native Health Consortium in Anchorage. I observed as he completed a radiological and clinic survey.

My next big trip flying was to Angoon, located on Admiralty Island in a Cessna 185 float plane. I assisted with the cleaning and disinfection of the water storage tank. This was needed because the polymer solution had been overfed and created what is referred to as polymer “snot”. Polymer solution is injected as part of the treatment process to create conditions that allow suspended particles clump together, so that they can be filtered.

When we arrived, we conducted an inventory the equipment that had to be shipped in to complete the cleaning of the WST. Next, we inspected the WST to ensure that the tank actually was dirty and needed cleaning. The following day we brought all of the equipment up to the WST to perform a dry run to ensure that all of the equipment was working properly and then we clean and sanitized all of the equipment that would enter the WST. The next day, after draining the WST the night before, we looked into the tank to ensure that the water level was below the hatches before opening the hatches. Squeegees were used to push the polymer “snot” over to the pumps until there was

almost no more water in the tank. After that, we used the pressure washers, supplied with water having a chlorine concentration greater than 50 ppm, to push the polymer “snot” over to the pumps while using the squeegees to guide the “snot” into our sandbag catch basins. When the WST was clean we removed all of the equipment, added additional hypochlorite, bolted the doors back on and started up the water plant. The next day we flew back to Sitka.

I had a great time working as an Ensign in the U.S. Public Health Service in Sitka, AK. I gained a vast amount of knowledge while working there, and was able to deal with environmental health issues that are unique to Alaska. The COSTEP program has provided me with hands on working experience and I would recommend the JrCOSTEP program and Alaska to any Environmental Health student.