Ryan Jacobsen Summer Extern 2012 South Dakota State University Rosebud Service Unit Rosebud, SD

My name is Ryan Jacobsen and I am a chemistry student from South Dakota State University. I was very excited to be chosen as the Rosebud Area Indian Health Service Environmental Health and Safety 2012 Summer Extern. My previous experiences in the military and as a civilian make Environmental Health and Safety a career path that I am very interested in working in. Experiences I



have had while at Rosebud this summer were very positive. I thoroughly enjoyed working both with and for the people of the Rosebud Reservation; Charles Mack was a great mentor and supervisor.

This summer I was able to go into a wide variety of tribal institutions and settings to conduct institutional assessments. We also surveyed Boys and Girls Clubs, the Casino, Waste Water Treatment Facilities, Pow Wows, and schools. These surveys are done to ensure that good health and safety practices are done throughout the reservation communities in tribal entities.



The surveys that I really found surprising were the seat belt surveys. Being an East River South Dakotan, seatbelt use is just one of those things you do automatically when you get in a car. I reinforce the importance of seatbelts with my children daily, as a parent. But I was happy to see that the usage rate doubled on drivers from previous occupant protection surveys this year on the Rosebud Reservation.

The Food Safety Training that was given to the Summer Food Program workers was one experience that I personally enjoyed. I had previously taken a health nutrition class that taught the importance of food safety. We were able to take the key safety points of food

preparation and explain why common food safety practices are done so the participants understood the how's and why's of food safety. I had the opportunity to convey personal anecdotes from my experiences to help communicate key learning objectives. Conducting this training enabled me to use both knowledge and personal experiences in a real world situation. Summer Food Program inspections then allowed me to go out and see the people I taught in action. Building those personal relationships with the local community is probably the most rewarding aspect of the job.

The Longhorn Complex Fire that occurred June 20th was probably the pinnacle event of the summer, burning over 41,000 acres. Fires had broken out in the forested areas surrounding the Crazy Horse Canyon due to lightning strikes. These fires spread across the drought stricken region. Local fire crews were incapable of extinguishing or containing all eight blazes with 12 engines and 3 hand crews, three large fires remained burning; Beads Fire, Longhorn Fire, and Iron Shell Fire. The Rocky Mountain Area Incident Management, Team-C, was called in to manage & fight the out of control inferno. They arrived with 3 engines and enough fighters for one night shift. The management team coordinated with several out of state fire crews to fight the blaze, raising the number of engines from twelve to sixty, and the number of personnel to 597 to fight this fire.

The Spring Creek housing community was evacuated Saturday, July 21st from the Iron Shell Fire. An emergency evacuation shelter was established at the St. Francis Middle/High School, in which our office responded. We went to the shelter to make sure that the facility was equipped to handle the influx of displaced persons. Signage with information on good hygiene practices were posted in appropriate areas. Communication with the Red Cross and OEH was established, in which both agencies were in sync with each other on the importance of safety, public health, and safe nutrition.

The Beads Fire burned out of control and reached the rolling grasslands toward the Upper Cut Meat housing community, residence were evacuated the evening of Sunday, July 22nd to the shelter in St. Francis. Our office responded in the aid of the evacuation of the housing community. We had responded to one residence in which an elderly man refused to evacuate. We aided the elder in protecting his home from the fire by hosing down the premises and counseling the elder on safety and the risks he was taking, not only putting himself in danger but also his family. He still would not leave. We assessed the evacuation shelter in St. Francis that night from the influx of displaced persons.



Monday, July 23rd we went to the evacuation shelter to see how things went for the night and conduct a food survey. Upper Cut Meat evacuees were able to return to their homes that morning. The kitchen was staffed by local Summer Food employees and School Cooks, and they did an outstanding job. The restrooms were depleted of supplies and were in need of custodial attention. I coordinated with the St. Francis custodian on developing a twice daily cleaning/monitoring schedule of the facility, and stressed the importance of keeping a clean environment to prevent spreading diseases. We also aided the team from the portable shower company with water management contacts, reports and testing vials. Our emergency support efforts helped to ensure a safe, clean evacuation center for displaced persons as well as for volunteers and firefighters.



This summer I have been working on a Playground Safety Continuing Quality Improvement Project. We went around to all the Todd County Elementary playgrounds and St Francis schools to conduct safety assessment of all playground equipment. We used the U.S Consumer Product Safety Commission standards to conduct our assessments. I was surprised by how many different variables there are when looking at the safety of a playground. Going out to all the different playgrounds and comparing them was very fun and rewarding.

Previously I have had some experience with EHS while working in the Air Force as the 821st security and safety representative and also with the SDSU EHS office. I always enjoyed working with EHS and have always thought it would be an interesting job. I was right. This externship gave me the opportunity to work in an EHS office and I enjoyed the heck out of it. With this job you never do the same thing twice and it is never boring. I had such a great summer and mentor, I really couldn't have asked for a better experience.