Mr. Chairman and members of this committee.

To Quote an influential coach from my high school days; "Laxidazical, Laxidazical, Laxidazical". This is the feeling that I have when referring to the efforts being used in the oil industry relating to remediation of oil and salt water spills, affecting the pristine farm land of North Dakota!

My name is Darwin Peterson. I am the third member of what I hope to be a fifth generation farm, in the Antler area. My Grandmothers father homesteaded in Sherman Township, and prevailed over the adversities to pass on an inheritance and life style of farming, which I continue to pass on to my family. My concern for this committee today is the quality of the farm land that I have to pass on to my Grandson.

I and my son farm land that has been devastated by one of the largest salt water spills in North Dakota. The fact that this spill occurred is only one issue that needs to be addressed. A rushed, non engineered, random, unprofessional placement and installation of this flow line was primary in it resulting in four failures, with two of them being on this property. This will be the third season that I will be unable to produce a crop on the affected acres, with no foreseeable improvements occurring.

Remediation efforts have been initiated. In my opinion, it has been to little, way to late. A product called "Desalt" was applied to the affected areas, concentrating on the top surface layers of the soil. The general theory of this product was for the calcium makeup of this solution to adhere to and replace the sodium particles on the soil, allowing the sodium then to be carried out of the root zone by water. Two small drain tiles were installed to collection points, to aid in the removal of contaminated waters. Initially, contaminated water was removed and hauled to a disposal in excess of a million gallons, from a reported spill of 300 barrels. These sump collection areas have at times, been submerged under surface water, instead of keeping the water below the root zone as required. According to soil samples taken by an Environmental Consulting Firm, salt contamination of the soil profile, was found at a depth of six feet.

I refer to published literature by SOS Environmental, a remediation firm who also promotes the use of Desalt. "The environmental industry has a track record of only limited success in the remediation of salt affected areas.""Salt contamination of soils is a serious environmental issue facing the oil and gas industry today. Salts found in produced water spills and leaks can completely devastate surrounding vegetation.""Soils, drill cuttings and other solid wastes which are exposed to high levels of salt through spillage from drilling and producing operations, pipe line breaks or leaks, become saturated with sodium. Although the EPA and the industry have demonstrated that the vast majority of such wastes are non-hazardous, in actuality, they have an adverse impact on the fertility of the soil."..."In many cases, if the spillage has been occurring frequently for some length of time without any remediation, under given soil mineralogical conditions, the land could suffer semi to permanent damage."

I stand before this committee as an unfortunate example of what can happen, and has happened, to our limited farm land resources, in the pursuit of this state's oil reserves, without the proper implementation and enforcement of remediation procedures to combat the devastation, when salt spills do occur.

Remediation procedures and standards need to be developed and enforced to protect the farm and ranch lands of North Dakota. I encourage this committee to follow through with the concerns from today's testimony. I support and encourage the oil development in this great state of North Dakota, but also see the need for the protection of our natural resources. Quality water, air, and the preservation of our lands can coexist with the development of our oil reserves.

Mr. Chairman, as I conclude, I would like to personally invite you and your committee members to visit and tour the location of our salt water spill, and other affected areas. I also would entertain to answer any additional questions you might have today, or in the future as you address these concerns.

Thank you.





























