

### Project Summary - CFS Alert Water Licence Application

CFS Alert is located on the north-eastern tip of Ellesmere Island; approximately 817 kilometres from the geographic North Pole at coordinates 82°28' N, 62°30' W. Alert has been in continuous operation as part of the Canadian Military since September 1958.

Alert is applying for a water licence for the first time. There are about 120 people but there can be as many as 220.

Alert uses approximately 185 cubic metres of water each day. Most of the water is used to prevent freezing of the water and sewer pipes. If it does freeze, there will be no water and it will be very dangerous for the people. There are bleeders, but Alert is making repairs to their buildings and has agreed to reduce water bleeding by 25 percent by 2015.

All of the water used becomes sewage. Waste food from the kitchen is discharged in the sewage. The sewage is discharged over the land into an ocean inlet, Parr Inlet. There is no treatment plant. The sewage is frozen in the winter but melts and flows into the sea during the summer.

Many birds come to Alert and spend the summer in the area where the sewage discharges. Environment Canada comes to Alert each year to study these birds. They have come each summer for more than 25 years.

Environment Canada believes that if sewage is treated the birds will no longer come and they will not be able to study them any more.

DND has designed a special treatment area that will treat the sewage on the land. At the same time Environment Canada will still be able to study the birds. Both DND and Environment Canada believe this will allow us to understand the effect that climate change will have on the high arctic. DND will build this new sewage treatment area in the summer of 2010.

Environment Canada is also interested in studying how the new treatment area works. It will be the first new overland treatment area in Nunavut. It will provide understanding of land treatment in the high arctic and the growth of plants and organisms that treat sewage.

There is a family of wolves that live year-round at the station. The people at Alert are very proud of these wolves but they do not feed them or bother them. Environment Canada says that the wolves do not eat food from the sewage area. The wolves have to leave the station to hunt for arctic hare and other food but always return.

Alert incinerates all of its garbage so there is no food in the garbage for the wolves, or for any other animal to eat.