AFCEC Moose Creek Response to PFOS/PFOA

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JOINT BASE ELMENDORF-RICHARDSON, Alaska – The Air Force Civil Engineer Center's long-term response to perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) contamination in Moose Creek, Alaska, kicked off Feb. 3 when the City of North Pole, Alaska, through a cooperative agreement with the United States Army Corps of Engineers funded by the Air Force, awarded the construction contract for the Moose Creek Water Expansion Project to HC Contractors, Inc., a local contractor.

To fulfill the requirements of the Interim Record of Decision (I-ROD) for the Community of Moose Creek, Alaska Long-Term Water Supply, the contract funds the construction of a six-mile transmission water main from the city of North Pole to Moose Creek, up to 12 miles of water mains within Moose Creek, up to 220 water service connections to homes and businesses, a pump house, and a 410,000-gallon water storage tank. The new water system will be operated and maintained by the North Pole Utility Department.

In 2018, Alaska adopted the Uniform Environmental Covenants Act (UECA), which requires the recording of environmental covenants on all effected real properties in accordance with Alaska statutory law. The purpose of UECA is to ensure environmental covenants are preserved and enforceable for the long term.

In Moose Creek, the Air Force is seeking environmental covenants for all properties in the community because PFOS/PFOA levels originating from Eielson AFB, Alaska, have contaminated the groundwater, and combined PFOS/PFOA levels exceed the 2016 drinking water lifetime health advisory (LHA) of 70 parts per trillion set by the Environmental Protection Agency (EPA). Of the 174 drinking wells within the Moose Creek community, 170 have combined PFOS/PFOA levels that exceed this LHA. Although an environmental covenant will place restrictions on land use, the Air Force is offering financial compensation for property owners.

The environmental covenant compensation package prepared by the Air Force, in conjunction with input from EPA, Alaska Department of Environmental Conservation (ADEC), and Alaska Department of Natural Resources (ADNR) was finalized on June 17, and covenant packages were mailed to Moose Creek property owners July 9. The environmental covenant package offers eligible Moose Creek property owners, those with a well, to be connected to the City of North Pole water system at Air Force expense. The covenant package also offers compensation to property owners for agreeing to place a covenant on the property recorded in real property records restricting the use of contaminated groundwater for any purpose; for agreeing to have all wells on the property decommissioned; for providing access for Air Force, EPA, and ADEC monitoring of Land Use Controls restricting use of groundwater; and, for the termination of existing ADNR water right certificates of appropriation.

Because of PFOS/PFOA contamination in Moose Creek, the Air Force submitted a petition to ADNR on Nov. 27, 2019, to define and establish a Critical Water Management Area (CWMA) to

restrict groundwater use. A CWMA is a tool that ADNR uses to manage water shortages or the contamination of a water source. ADNR supports the implementation of a CWMA in Moose Creek, and on July 14, a public hearing was held in North Pole to educate the public about the proposed CWMA, and to collect their feedback.

If ADNR determines that a CWMA is needed after the review of public comments, then the ADNR commissioner will issue a Department Order that states water use limitations under the CWMA.

Moose Creek Water Expansion Project construction work began April 8, and anticipated construction completion is fall of 2021. Overall, construction is progressing well, although higher than anticipated water level conditions this summer have slowed operations slightly due to the dewatering activities that have had to take place. The first picture below depicts the installation of 24-inch steel casing under the Richardson Highway via jack and bore. The second picture depicts graded pea gravel bedding in preparation of setting jack and bore track for the installation of 24" steel casing under the Alaska Railroad.