



**Case Study Category:** REWW

**Case Study Title:** Horizontal Directional Drilling Allows Installation of Pipelines at Airport in Portland, Oregon

**Utility Name:** Portland Water Bureau

**Case Study Abstract:** This case study details the experience that the Port of Portland had using horizontal directional drilling (HDD) technology to install new pipelines for Deicing System upgrades at the Portland International Airport (PDX). The technology was used in two locations, the first at an outfall into the heavily regulated Columbia River and the second beneath an active airfield that had to remain in service at all times. A brief introduction to the Port of Portland and PDX systems is provided as well as an overview of the directional drilling technology used to complete these two installations. Details of the project from design to installation are provided, focusing on the various factors that impacted technology use and issues that had to be addressed along the way. The technology benefits and limitations are summarized as well as some valuable lessons learned and tips for success based on the experience that the Port of Portland had with HDD technology.

**Case Study Link:** <http://waterid.org/content/horizontal-directional-drilling-allows-installation-pipelines-airport-portland-oregon>