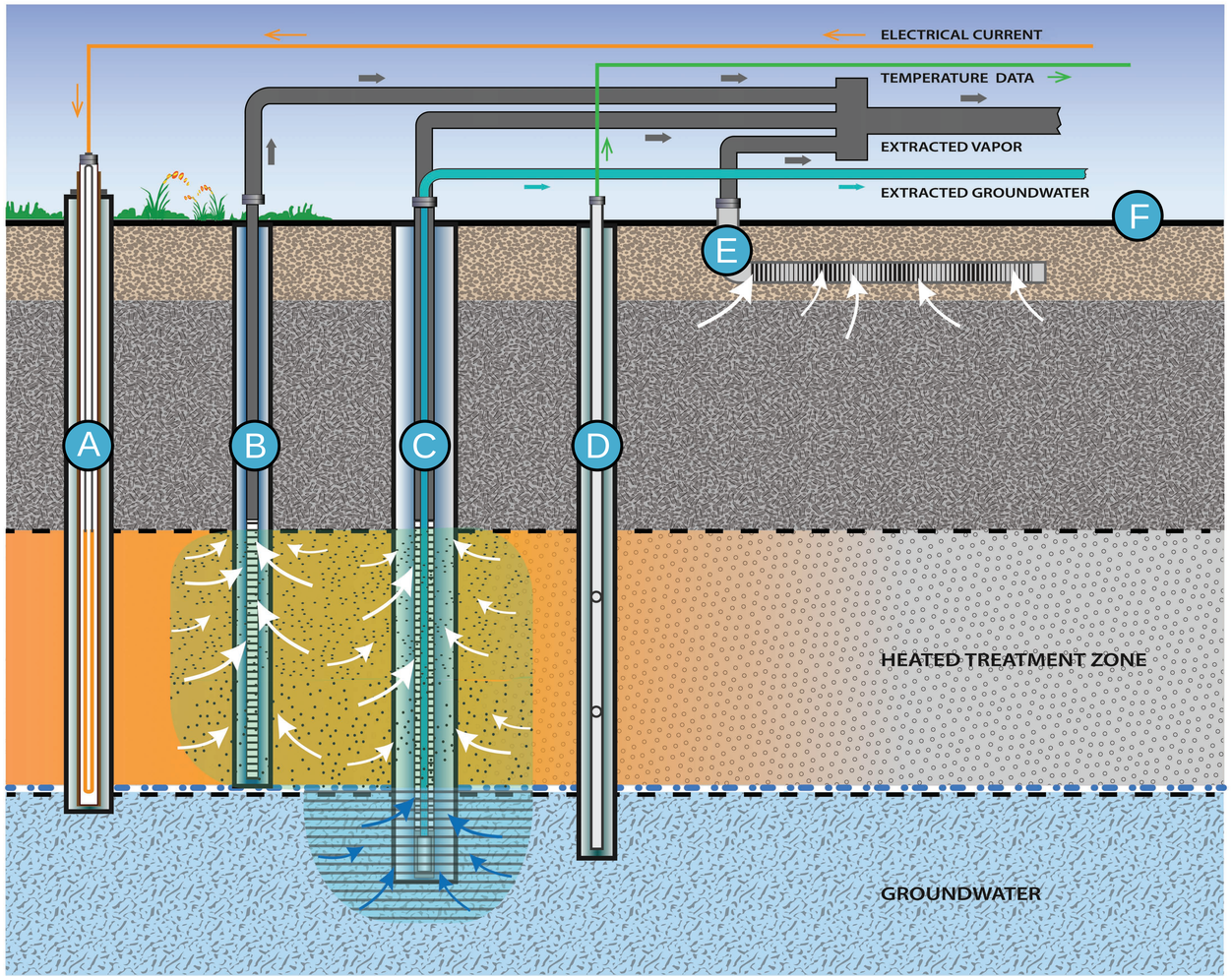
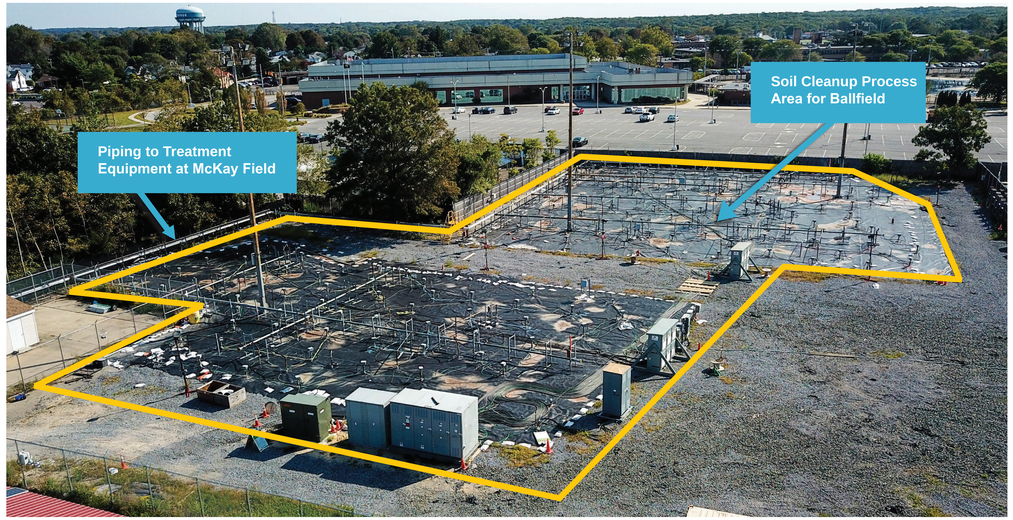
NORTHROP GRUMMAN

Soil Cleanup Process for Ballfield





A Heater Wells
Electrical current is applied to metal rods in these wells to heat the deep soil (about 30 to 60 feet below the surface) and vaporize volatile organic compounds (VOCs). No heat is felt at the ground surface during treatment.

B Vapor Extraction Wells
Vapors produced by heating are removed from deep soil by applying a vacuum in these wells and conveying the vapors to the treatment system at McKay Field.

C Vapor and Groundwater (Multiphase) Extraction Well
Both soil vapors and groundwater are removed by three specially designed deep wells and conveyed to the treatment system at McKay Field.

D Temperature Monitoring Points
Underground sensors are used to measure temperatures within and outside the heated treatment zone to monitor the progress of soil heating.

E Horizontal Vapor Extraction Wells
Vapors are removed from shallow soil by applying a vacuum in these wells and conveying the vapors to the treatment system at McKay Field. These wells are placed within a layer of clean imported gravel.

F Surface Cover
A surface cover over the soil treatment areas, along with the horizontal vapor extraction wells, prevents vapors in shallow soil from being released to the outdoor air.