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""IMPLEMENTATION OF INTEGRATION PROJECT ROADMAP""
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ELEMENT""; ""6 Vadose Zone Technical Element ""; ""THE VADOSE ZONE:
WHAT IS IT, AND WHY IS IT POORLY UNDERSTOOD?""; ""SCOPE OF
VADOSE ZONE TECHNICAL ELEMENT""; ""EVALUATION OF WORK
PLANNED UNDER THE VADOSE ZONE TECHNICAL ELEMENT""; ""Field
Investigations of Representative Sites""
""Can the objectives of the planned work be achieved?""""Does the
planned work represent new science?""; ""Can the planned work have an
impact on cleanup decisions at the Hanford Site?""; ""Does the planned
work address the important issues?""; ""Are there other concerns,
comments, or suggestions that should be considered by the Integration
Project in executing the plan""; ""Transport Modeling""; ""Can the
objectives of the planned work be achieved?""; ""Does the planned work
represent new science?""; ""Can the planned work have an impact on
cleanup decisions at the Hanford Site?""
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achieved?""; ""Does the planned work represent new science?""; ""Can
the planned work have an impact on cleanup decisions at the Hanford
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""Are there other concerns, comments, or suggestions that should be
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Sommario/riassunto

The Hanford Site was established by the federal government in 1943 as part of the secret wartime effort to produce plutonium for nuclear weapons. The site operated for about four decades and produced roughly two thirds of the 100 metric tons of plutonium in the U.S. inventory. Millions of cubic meters of radioactive and chemically hazardous wastes, the by-product of plutonium production, were stored in tanks and ancillary facilities at the site or disposed or discharged to the subsurface, the atmosphere, or the Columbia River. In the late 1980s, the primary mission of the Hanford Site changed from plutonium production to environmental restoration. The federal government, through the U.S. Department of Energy (DOE), began to invest human and financial resources to stabilize and, where possible, remediate the legacy of environmental contamination created by the defense mission. During the past few years, this financial investment has exceeded \$1 billion annually. DOE, which is responsible for cleanup of the entire weapons complex, estimates that the cleanup program at Hanford will last until at least 2046 and will cost U.S. taxpayers on the order of \$85 billion. Science and Technology for Environmental Cleanup at Hanford provides background information on the Hanford Site and its Integration Project, discusses the System Assessment Capability, an Integration Project-developed risk assessment tool to estimate quantitative effects of contaminant releases, and reviews the technical elements of the scierovides programmatic-level recommendations.
