

FERNALD CLEANUP PROGRESS BRIEFING

NOVEMBER 2000

6:30 p.m. Opening Remarks	Gary Stegner
6:35 p.m. FCAB	Jim Bierer
6:40 p.m. Long Term Stewardship/ Technology Programs	Kathleen Nickel
6:45 p.m. Project Updates	
Waste Pits Remedial Action Project	Dave Lojek
Soil & Disposal Facility Projects	Rob Janke
Decontamination & Dismantlement	John Trygier
Silos Project	Nina Akgunduz
Aquifer Restoration/Wastewater Project	Rob Janke
Waste Generator Services	Debbie White

Question and Answer Session

8:30 p.m. Adjourn

PROJECT NEWS

LONG TERM STEWARDSHIP

National Activities

- National Defense Authorization Act Data Call
 - Report to Congress
- Long Term Stewardship Study
 - <http://lts.apps.em.doe.gov>
 - Steve Livingstone, Project Manager, USDOE
P.O. Box 45079, Washington DC 20026-5079
- Planning

PROJECT NEWS

LONG TERM STEWARDSHIP

Fernald Activities

- Draft LTS Strategic Plan
- Comprehensive Stewardship Plan
 - To be developed in 2001
- LTS Technology Demonstration Project

PROJECT NEWS TECHNOLOGY PROGRAMS

Mission - To support the Fernald clean-up mission by seeking out, identifying, demonstrating and implementing innovative technologies. The goal is to find or demonstrate new proven technologies for safer, cheaper and faster remediation of Fernald.

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PROJECT NEWS

TECHNOLOGY PROGRAMS

Public Involvement

Site Technology Coordination Group (STCG)

The STCG, which consists of stakeholders, regulators and site personnel, meets periodically to discuss and prioritize the site's technology needs.

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PROJECT NEWS

TECHNOLOGY PROGRAMS

Current Projects

- Integrated Technology Suite for Soil Characterization
- Aquifer Re-injection
- Integrated Excavation Control
- Memory Buttons
- Universal Processor
- LTS Demonstration Project

PROJECT NEWS

WASTE PITS REMEDIAL ACTION PROJECT

- Rail transportation
- Waste pit excavation
- Dryer operations

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WASTE PITS



Photo taken September 2000

ROUTE 129 CROSSING



Photo taken October 2000

Graphics # 6686.1C 11/00 Photo # 7487D-6

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PIT 1 EXCAVATION

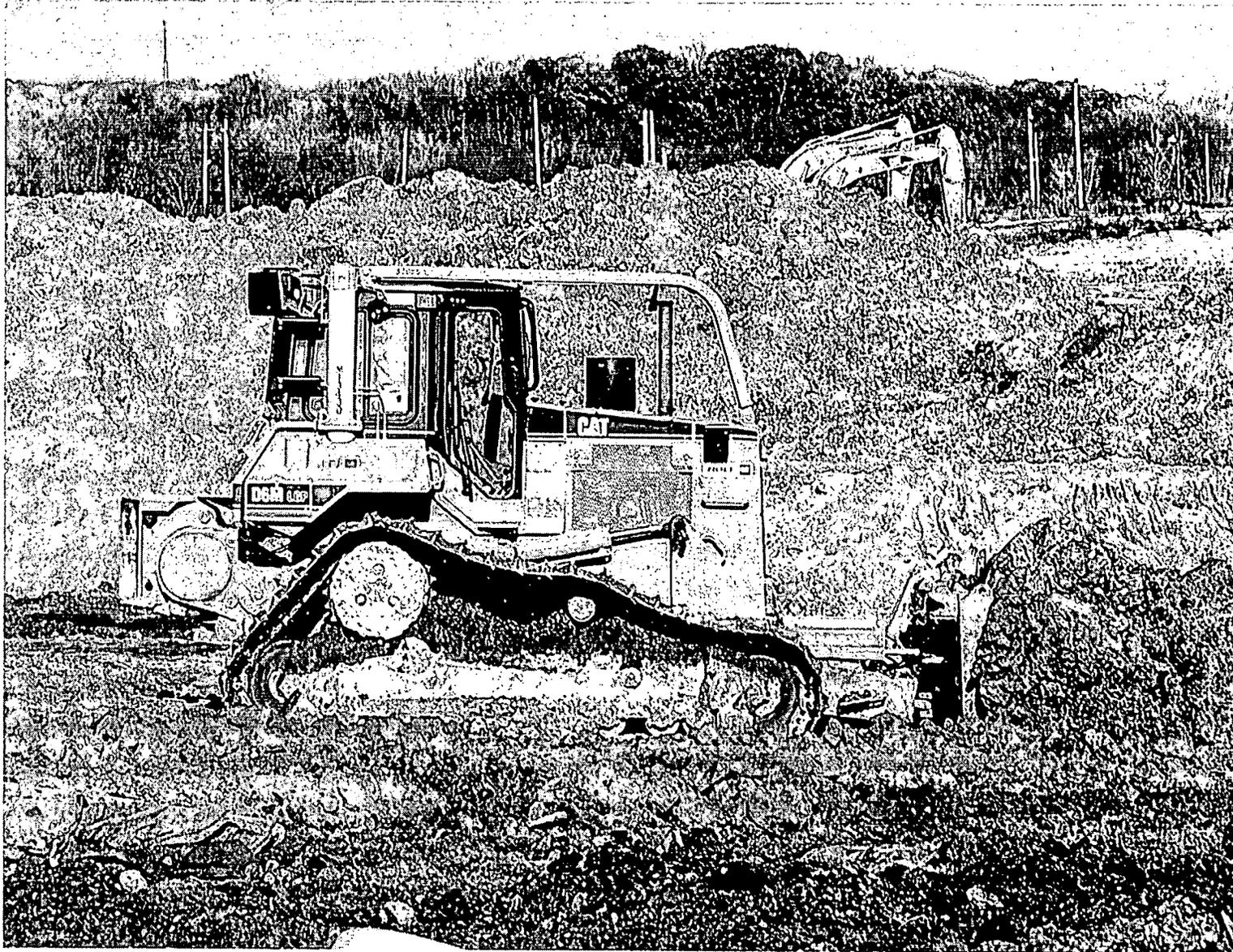


Photo taken November 2000

PROCESSING FACILITY

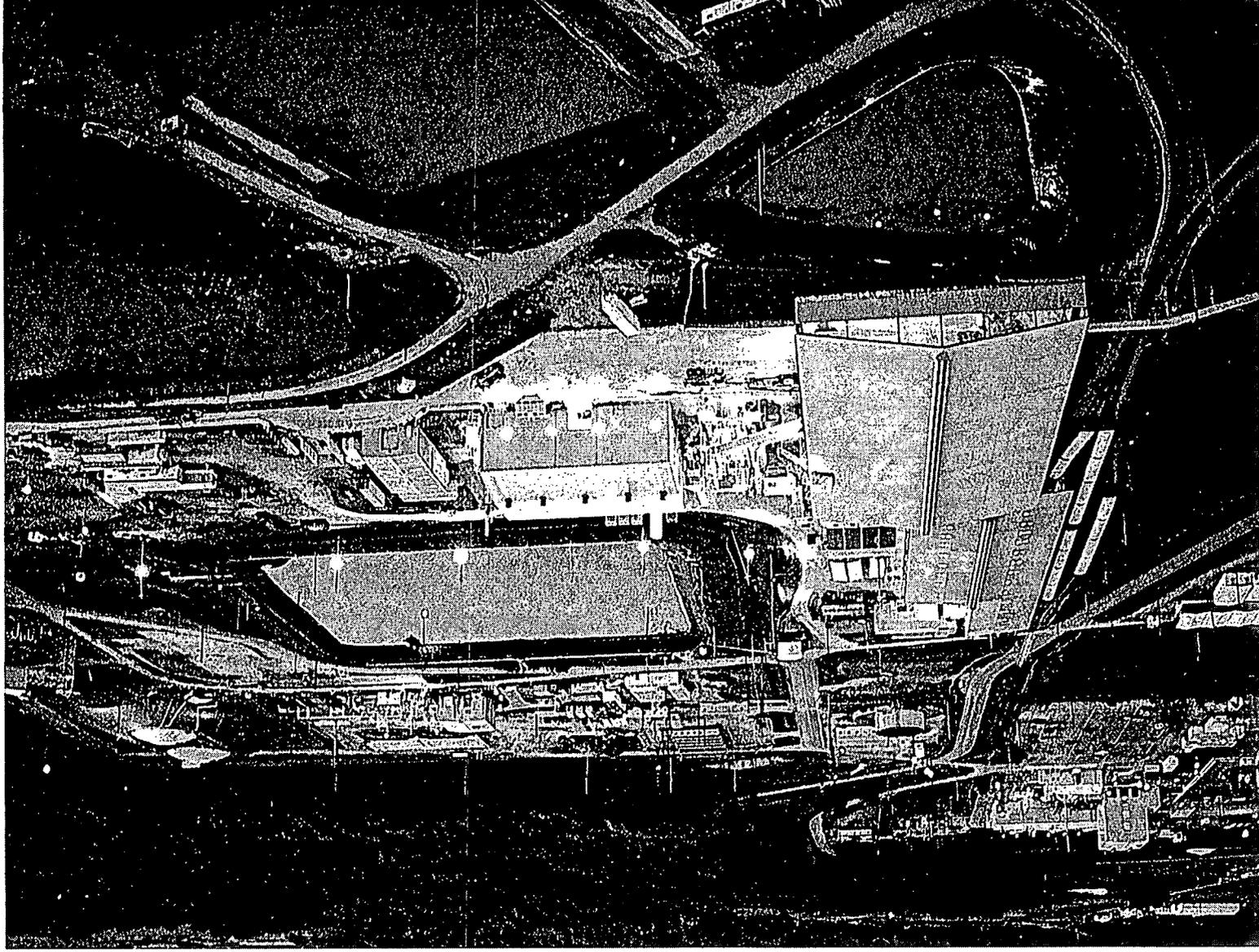


Photo taken September 2000

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PROJECT NEWS

WASTE PITS REMEDIAL ACTION PROJECT

FY 2000 Accomplishments

- Shipped 125,000 tons of material via 20 trains to Envirocare
- Initiated the operation of two indirect-fired dryers
- Excavated approximately 30 percent from Pit 1 and 3
- Received two safety awards:
 - Fluor Corp. Tri Star Award for 250,000 hours without lost-time injuries
 - IT Corp. Safety Award for over 1,000 days without lost-time injuries

PROJECT NEWS

SOIL & DISPOSAL FACILITY

PROJECT

- Reached 100 percent capacity (314,000 cubic yards) in Cell 1
- Completed construction of the bulk debris staging/transfer area
- Completed construction of the OSDF laydown area
- Completed certification sampling in Area 1, Phase III and Area 8, Phase III South

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PROJECT NEWS

SOIL & DISPOSAL FACILITY PROJECT

- Completed excavation of the Southern Waste Units to design grade
 - Excavated 392,400 total bank cubic yards since 1998
- Shutdown OSDF for construction season
 - Filled 100 percent of Cell 1
 - Filled 51 percent of Cell 2
 - Filled 23 percent of Cell 3

MATERIAL TRANSFER AREA

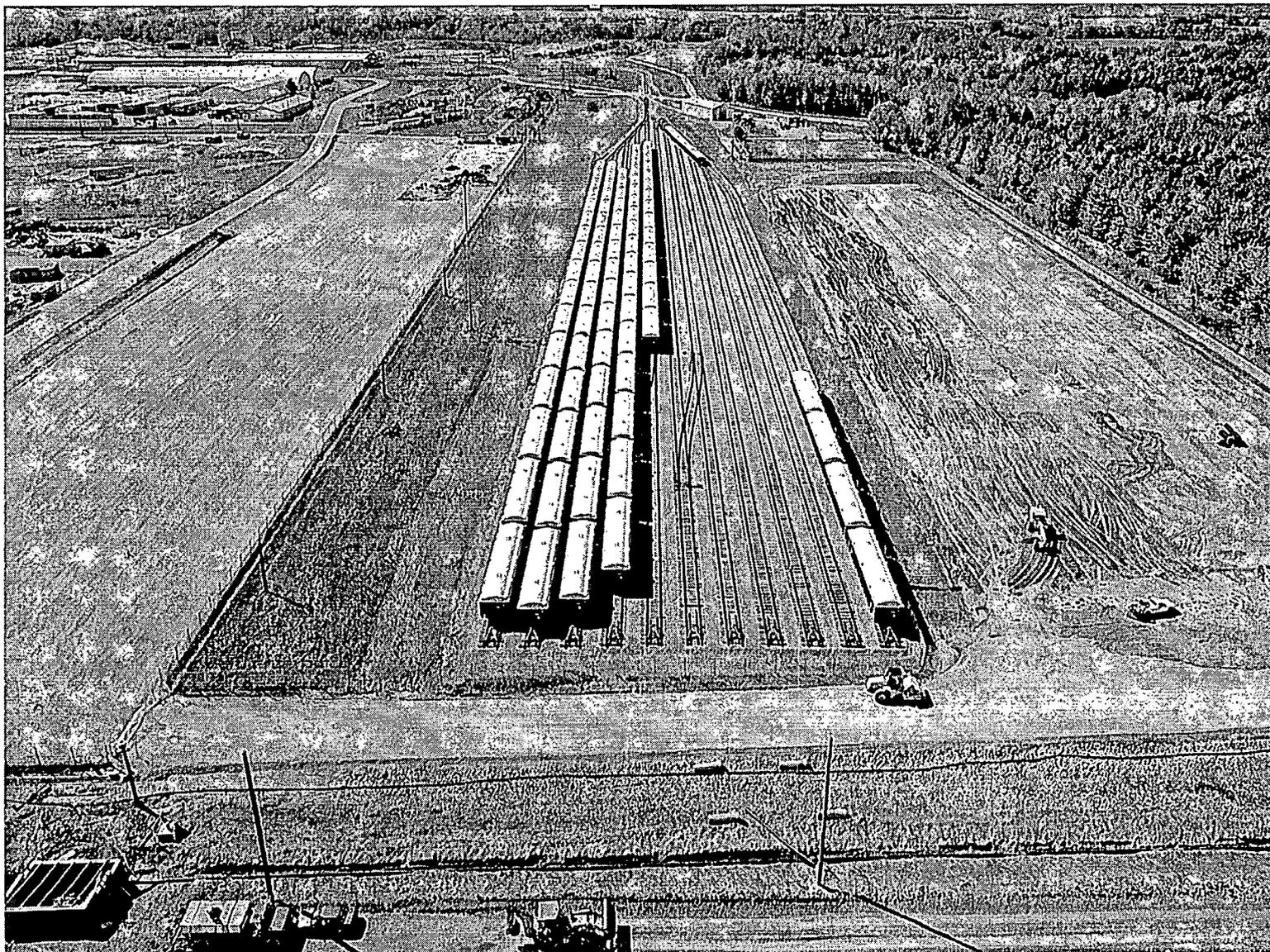


Photo taken September 2000

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SOUTHERN WASTE UNITS



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Photo taken Septmeber 2000

PROJECT NEWS

SOIL & DISPOSAL FACILITY

PROJECT

FY 2000 Accomplishments

- Excavated over 170,000 cubic yards of material
- Reached designed capacity in Cell 1
- Completed construction of the On-Site Disposal Facility (OSDF) laydown area
- Completed construction of the OSDF bulk debris staging/transfer area
- Certified 15 percent of the site as attaining approved cleanup levels

PROJECT NEWS

DECONTAMINATION & DISMANTLEMENT

- Plant 5
 - Completing the final release cleaning of Building 5A
 - Began encapsulating exterior transite
- Plant 6
 - Completed demolition of: Plant 6 Covered Storage Area (6B)
Electrostatic Precipitator – South (6C)
Electrostatic Precipitator – Central (6D)
Electrostatic Precipitator – North (6E)
Salt Oil Heat Treatment Building (6F)
 - Continuing interior demolition
- Security Building (28A) and Industrial Relations Building (28B)
 - Completed demolition of Building 28A & 28B
 - Completing final area restoration

PROJECT NEWS

DECONTAMINATION & DISMANTLEMENT

CY 2000 Accomplishments

- Plant 5
 - Slag Recycling Building (55A)
 - Slag Recycling Pit/Elevator (55B)
 - Plant 4 Warehouse (4B)
- Plant 6
 - Plant 6 Covered Storage Area (6B)
 - Plant 6 Electrostatic Precipitator (6C)
 - Plant 6 Electrostatic Precipitator (6D)
 - Plant 6 Electrostatic Precipitator (6E)
 - Plant 6 Salt Oil Heat Treatment Building (6F)
- Nuclear Fuel Services Tanks (Building 2E) and the Pump House
- Process Water Storage Tank (20H)
- Security Building (28A)
- Industrial Relations Building (28B)
- Main Gate Guard Post Building (28N)

PROJECT NEWS

SILOS PROJECT

Accelerated Waste Retrieval (AWR) Project Status

- Completed installation of TTA tank pads and radon control system foundation
- Submitted balance of plant design by Foster Wheeler Environmental Corporation
- Incorporating EPA comments into Remedial Design Package

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PROJECT NEWS

SILOS PROJECT

Silo 3 Project Status

- Submitted responses to comments on the Remedial Design Package to EPAs
- Completed concrete pour for the ISA pad
- Initiated pre-loading of the gantry foundations

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PROJECT NEWS SILOS PROJECT

Path Forward

- Submit Remedial Design Package to agencies
- Radon Control System (RCS) design approval by Fluor Fernald
- Continue construction activities on RCS

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PROJECT NEWS

SILOS PROJECT

FY 2000 Accomplishments

- Obtained EPA approval of amended Record of Decision for Silos 1 and 2 project
- Initiated field work on Accelerated Waste Retrieval for Silos 1 and 2
- Initiated mobilization and construction activities to support Silo 3 project

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PROJECT NEWS

AQUIFER RESTORATION/ WASTEWATER PROJECT

- Completed construction of the AWWT access Platforms Project
- Initiated construction of first phase of ARASA Basin Reroute Project
- Successfully regenerated the ion exchange resin in vessels 400A and 400B at the AWWT
- Pumped 305,000,000 gallons from aquifer
- Treated 204,000,000 gallons of groundwater

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MULTI-MEDIA & ION EXCHANGE TANKS

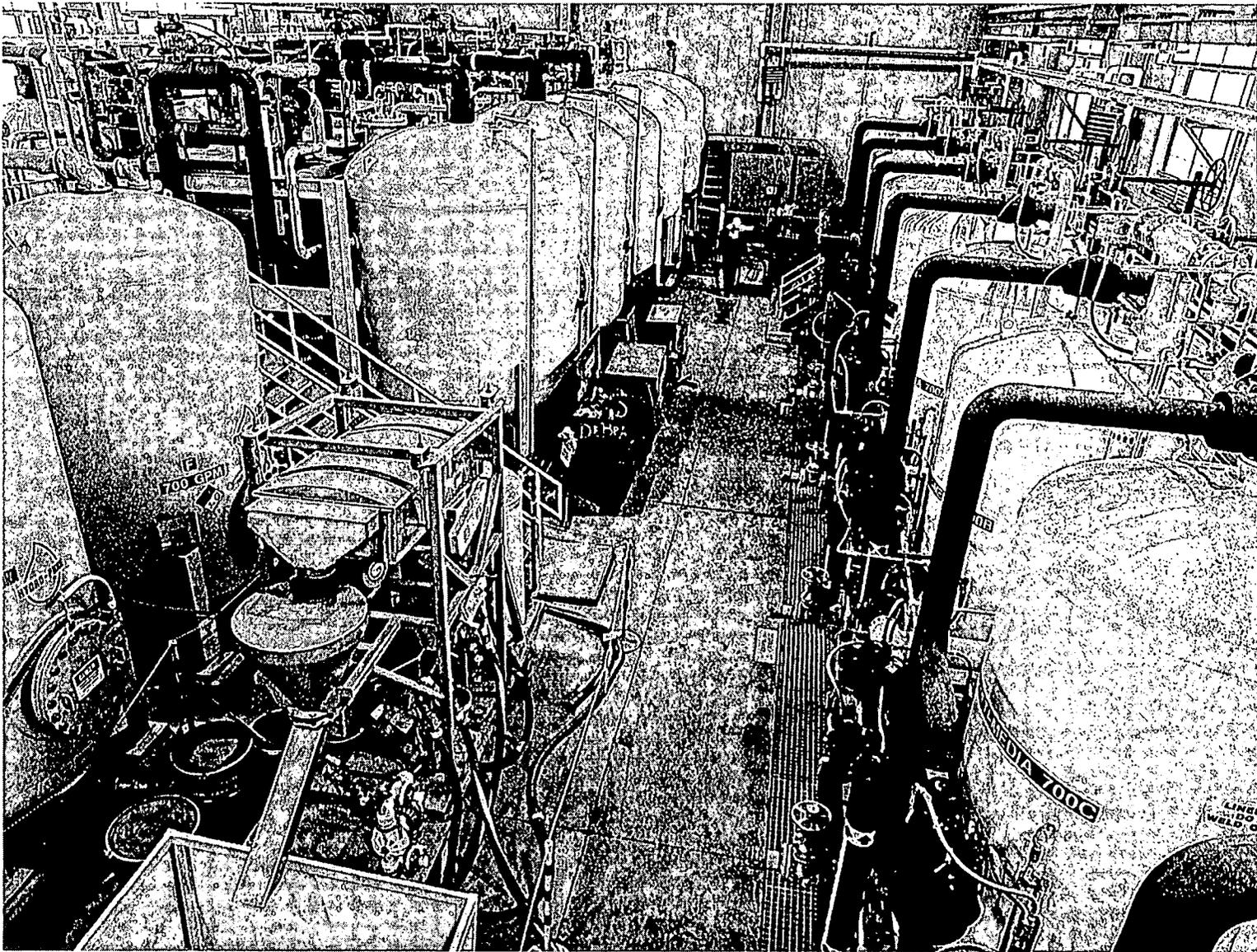


Photo taken 1993

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ADVANCED WASTEWATER TREATMENT

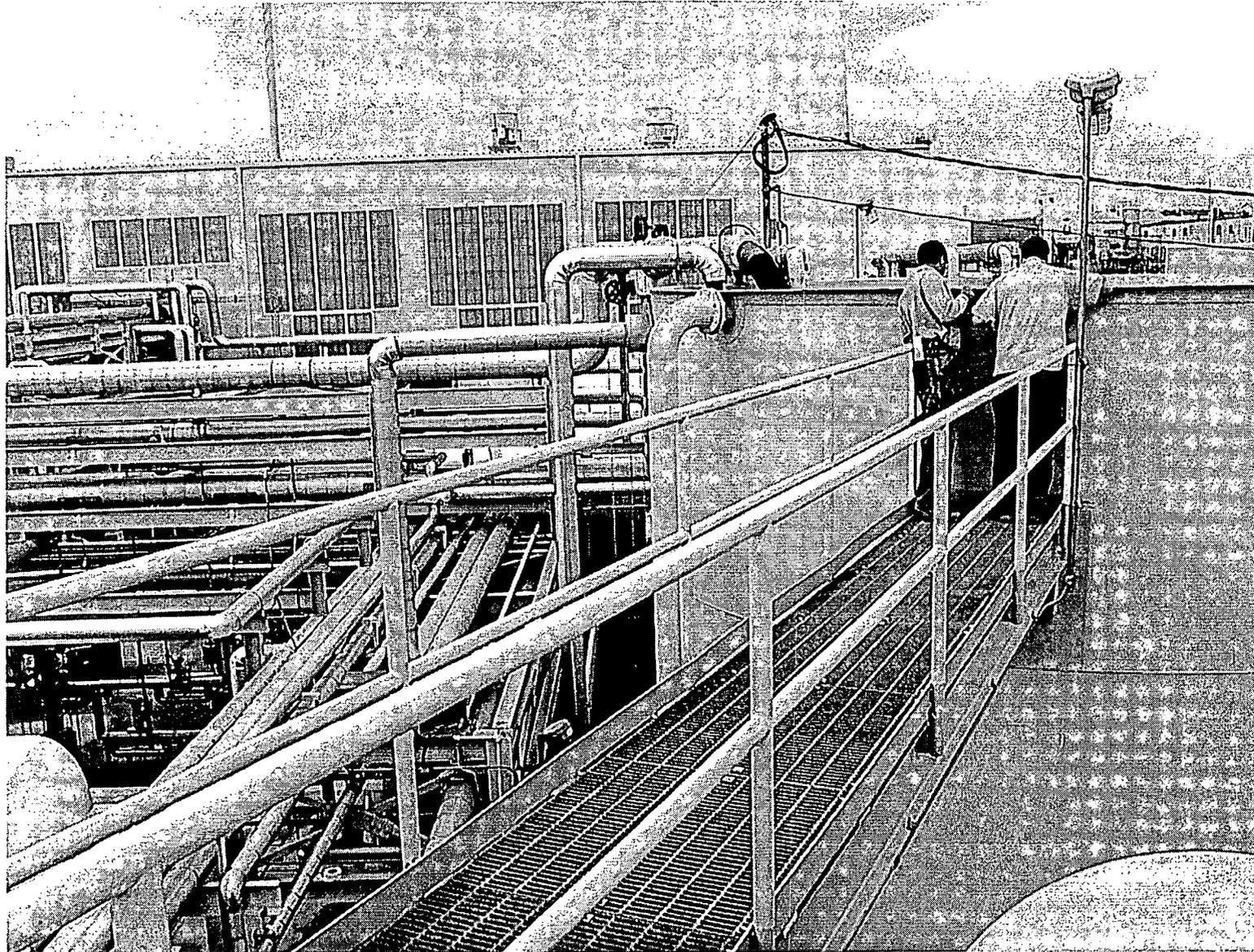


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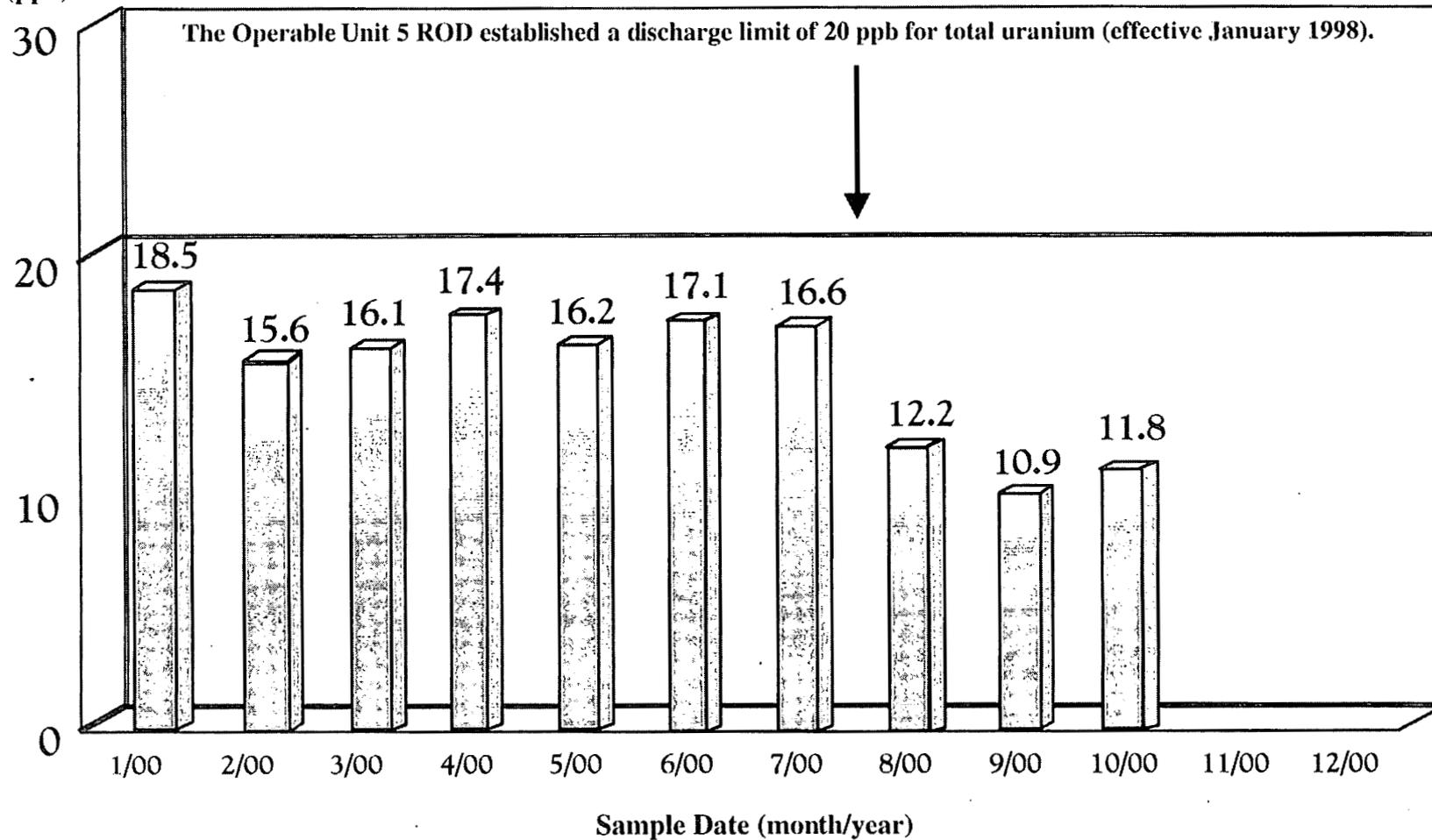
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AVERAGE MONTHLY TOTAL URANIUM CONCENTRATION DISCHARGED TO THE GREAT MIAMI RIVER IN 2000

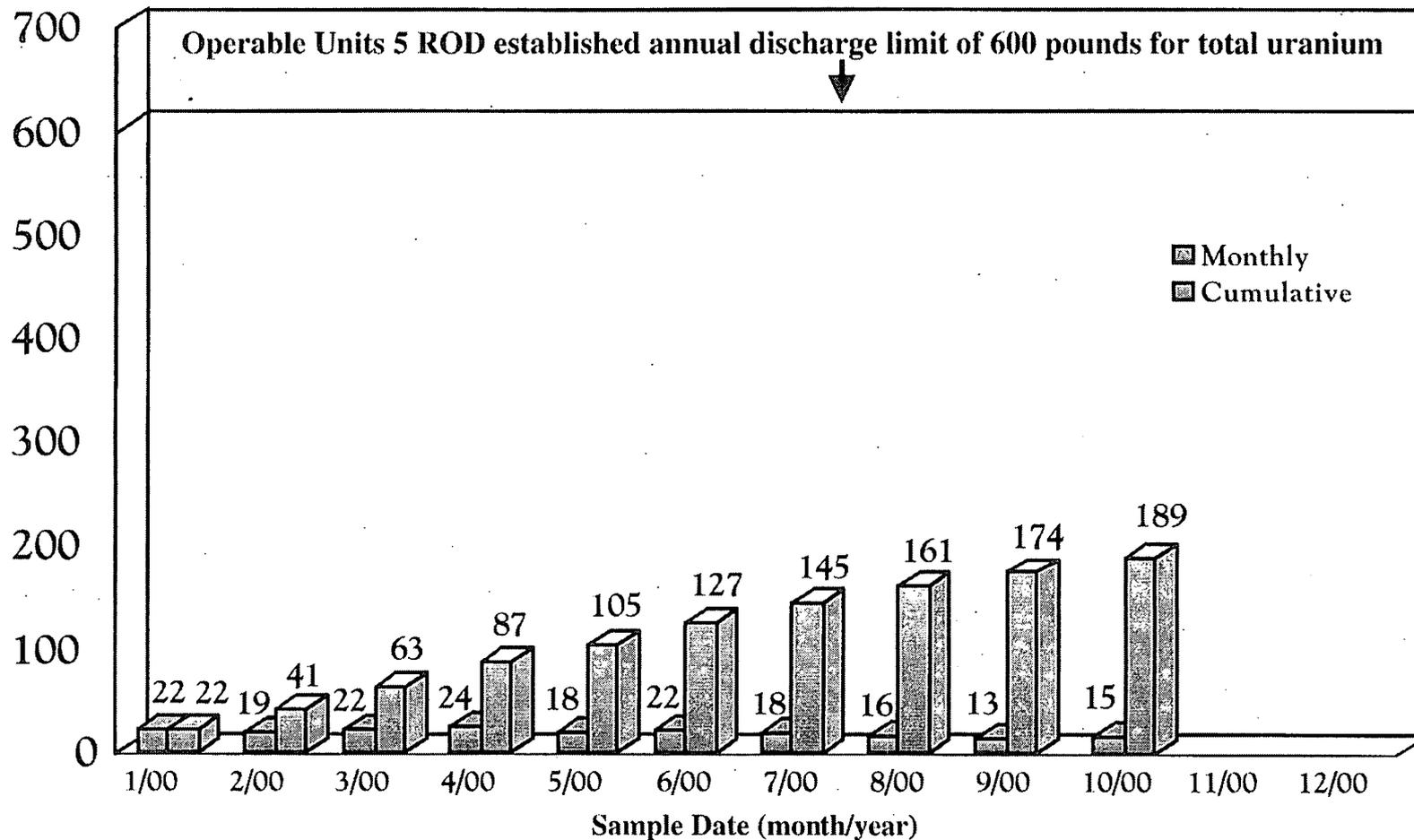
Concentration (ppb)



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POUNDS OF URANIUM DISCHARGED TO THE GREAT MIAMI RIVER IN 2000

Weight (pounds)



Note: Sum of monthly discharges may not always agree with cumulative total because of rounding differences.

28

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PROJECT NEWS

AQUIFER RESTORATION/ WASTEWATER PROJECT

FY 2000 Accomplishments

- Pumped over one billion gallons from aquifer (net)
- Removed 790 pounds of uranium from aquifer (net)
- Treated over one billion gallons of groundwater
- Processed over two billion gallons of groundwater and waste water
- Maintained less than 20 parts per billion

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PROJECT NEWS

WASTE GENERATOR SERVICES

- Nuclear Materials Disposition
 - Shipped 147.7 metric tons uranium (MTU) in September and 54.9 MTU in October to Portsmouth, OH
 - Packaged an additional 115.5 MTU for shipment to Portsmouth
 - Completed Consent Package for private sector sale of selected nuclear
- Hazardous and Mixed Waste
 - Shipped 127 cubic feet of liquid mixed waste to Oak Ridge TSCA Incinerator in September
 - Shipped 2,034 cubic feet of hazardous waste to Envirocare in September
- Low Level Waste
 - Shipped 24,254 cubic feet to Nevada Test Site (NTS) in September and 7,848 cubic feet in October

PROJECT NEWS

WASTE GENERATOR SERVICES

FY 2000 Accomplishments

- Nuclear Materials Disposition
 - Shipped 1,928.4 metric tons uranium (MTU) to Portsmouth, OH
 - Shipped 3,228.3 MTU since June 2, 1999; equates to 85 percent of 3,801 MTU total
- Hazardous and Mixed Waste
 - Positioned 19,038 cubic feet of waste treatment inventory
- Low Level Waste
 - Shipped 130,341 cubic feet to NTS
 - Disposed of 142,754 cubic feet at the On-Site Disposal Facility (OSDF)
 - Initiated Soil Bulking and positioned 10,900 cubic feet

Critical Analysis Team Public Briefing

14 November 2000

Management

- Lack of strong project organizations and infrastructure:
 - Roles and responsibilities between and within contractors subcontractors, DOE, and regulators.
 - Lack of project documentation (meeting minutes, telecons).
 - Poor performance status reporting (cost and schedule tracking/performance).
 - DOE and Fluor Fernald not prepared to implement fixed price contracting.
- DOE system fails to attract/reward good contractors.
- Schedule has been delayed significantly.

Technical

- 90 foot EMMA Tower raises significant safety, maintenance and operations issues.
- Poor performance to date (design, procurement, and construction).
- Three changes in Silo 3 waste product in one year is a concern.

Remote

- Both AWR and Silo 3 need backup plans to high risk activities such as arm based retrieval operations, end effector capabilities, and packaging.
- Training, operability and maintenance present significant challenges.