

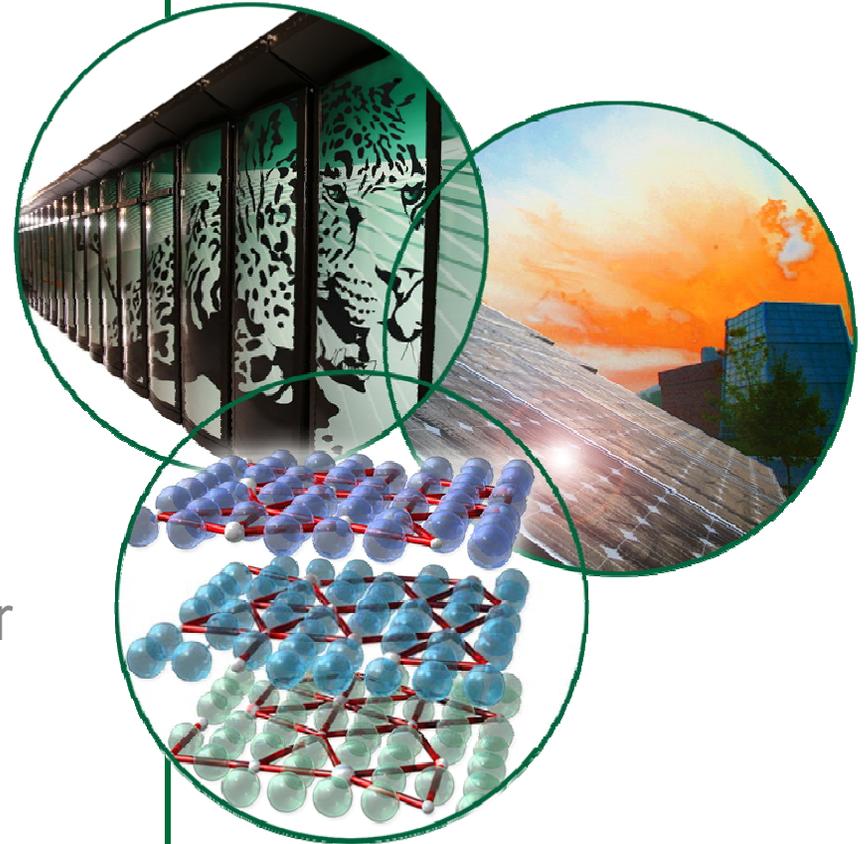
Oak Ridge National Laboratory Emergency Management Program and Laboratory Update

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Emergency Management

Oak Ridge National Laboratory

New Hope Center
October 1, 2009



ORNL is DOE's largest science and energy laboratory

- **\$1.4B budget**
- **4,350 employees**
- **4,000 research guests annually**
- **\$500 million invested in modernization**

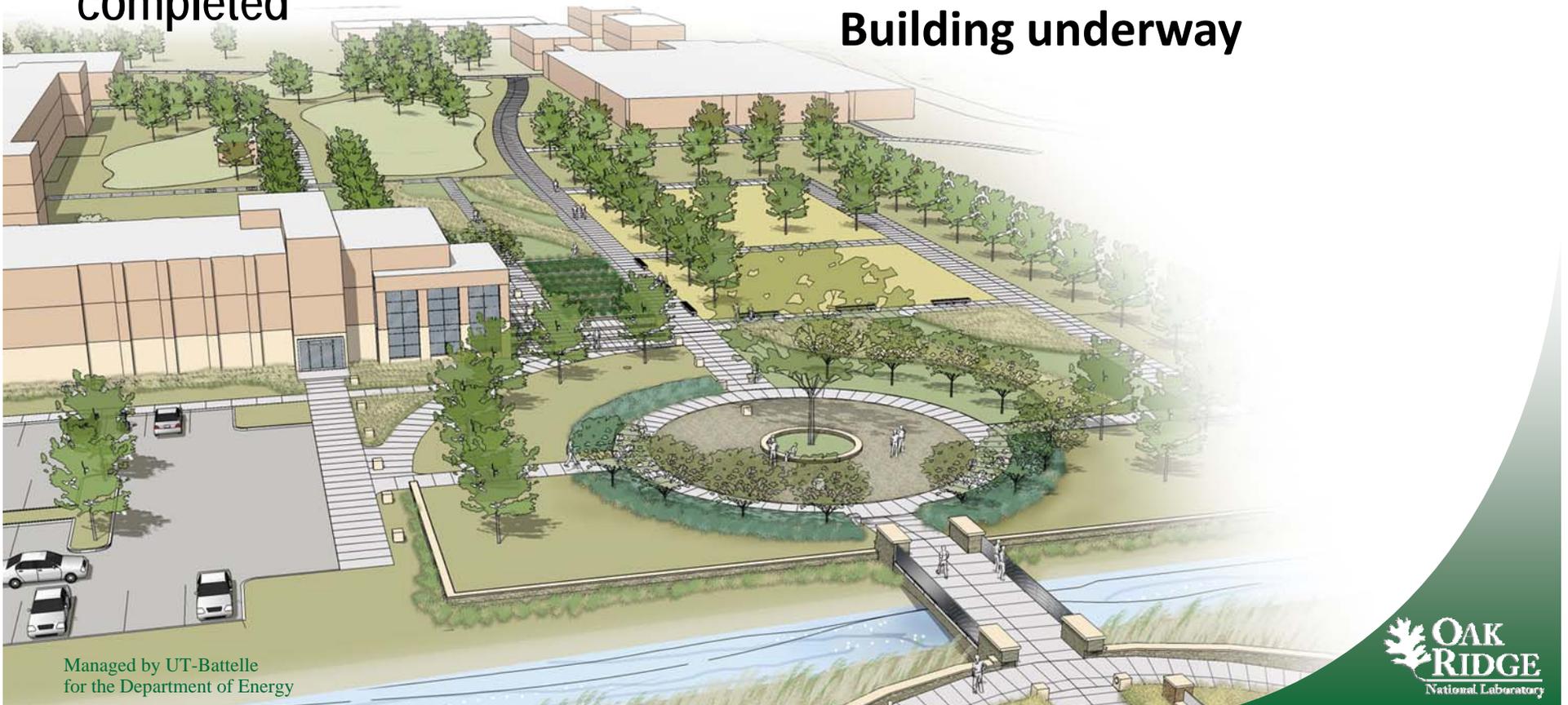
- **Nation's largest concentration of open source materials research**
- **World's most intense pulsed neutron source and a world-class research reactor**

- **World's most powerful open scientific computing facility**
- **Nation's most diverse energy portfolio**
- **Managing the billion-dollar U.S. ITER project**



Aggressive Infrastructure Investments

- Joint Institute for Biological Sciences Open
- West Campus hardscape completed
- Expanded chillers and electrical infrastructure to feed Tennessee Office Building and Computational Sciences Building underway

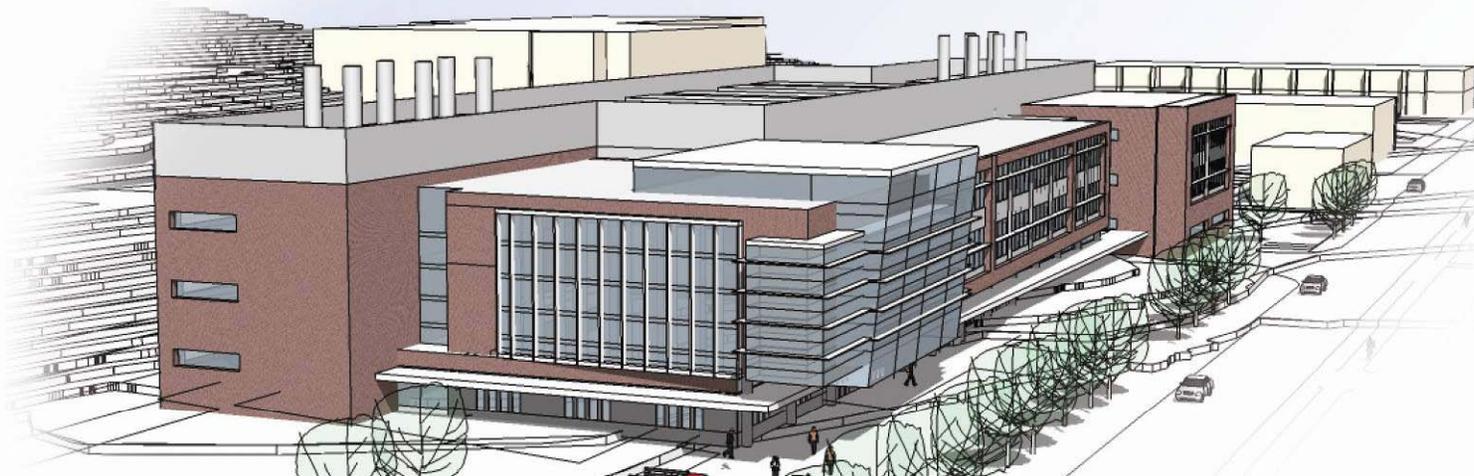


Managed by UT-Battelle
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Progress on replacing Building 4500 capabilities

Multi-purpose Laboratory Facility will be 150,000 ft²

- Construction currently underway along Central Avenue across from 4500 North
- The new facility will relocate key research capabilities from aged facilities
- The new 3 story building will have 160,000 gsf of 21st century research laboratory and support space



September 29th Site Picture



East Campus Facilities Construction and Improvements Planning Underway



Perspicive View from Northeast

FY09 Emergency Management Drills and Exercises

Purpose:

Drills and exercises are conducted to evaluate the proficiency and readiness of the ERO in the event of an actual emergency.

Goal: Meet drill/exercise objectives

Current Status: 100% of objectives met

Date	Facility	Type	Objectives Met/Total Objective	Comments
12/04/08	Lab-wide	FE	2/2	Lab-wide shelter-in-place exercise
1/14/09	3038	CPX	45/45	Security as the IC
3/17/09	Lab-wide	FE	2/2	Lab-wide take cover exercise
4/20/09	White Oak Dam	NNX	9/9	LSS only
6/22/09	7572	NNX	9/9	LSS only
6/24/09	7855	Drill	7/7	LSS/EOC only
7/15/09	3047	FSE	104/104	Annual exercise

CPX – Command Post Exercise FE – Functional Exercise

FSE – Full Scale Exercise FPE – Full Participation Exercise

TTX – Tabletop Exercise NNX – No Notice Exercise

Hazardous materials on-site that may result in operational emergencies based on EPHAs

Chemical	Radioactive
Sodium Nitrate	Activation Products (Co-60, Fe-59, etc.)
Fluorine	Fission Products (Cs-137, Sr-90, etc.)
Hydrogen Fluoride	Transuranics (Pu-239, Cm-244, etc.)
Lithium Hydride	Uranium (various isotopes)
Nitric Acid	Other Radioactive Materials (Ra-226, Th-232, etc.)
Uranyl nitrate	
Sodium nitrate	
Thorium nitrate	
Ammonium persulfate	
Sodium	
Sodium Hydroxide	
Sulfuric Acid	
Zinc Bromide	

Technical Basis update – number of facilities based on the current EPHA that result in classifiable operational emergencies

Emergency Class			Radionuclide/Chemical Material
A	SAE	GE	
4	4	0	Chemicals
16	21	7	Radionuclides

Integrated Facilities Disposition Project

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