Decommissioning Case Studies

2017 Health Physics Society Midyear Meeting
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Worcester Polytechnic Institute

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U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Worcester Polytechnic Institute Research Reactor

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Leslie C. Wilbur Nuclear Reactor Facility in Worcester, Massachusetts

- 10 kW (thermal) Open Pool Reactor
- Integrated lifetime power = 515,058 kW-hrs.

Regulatory Milestones

- December 1959 - Initial operating license issued
- 1989 – Converted to LEU fuel
- June 2007 – Shutdown
- August 2008 - Possession Only license issued
- Sept 2009 - Decommissioning Plan submitted
- February 2010 - DP approved
- July 2011- Fuel removed (UMass - Lowell)
- Sept 2011 – Pool drained

Worcester Polytechnic Institute Research Reactor

U.S.NRC
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Leslie C. Wilbur Nuclear Reactor Facility in Worcester, Massachusetts

Schedule

- Fall 2012 - 16 Weeks D & D
  - Reactor core structure, thermal column, pool equipment, water treatment system, ventilation equipment, bioshield
- Winter 2012 - 4 Week FSS
- Early 2013 - 1 Week Confirmatory Surveys
- Mid 2013 - Request license termination
- Late 2013 – Terminate license

Cost Estimate = $2,594,000 US (with 25% contingency)

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CAUTION
RADIOACTIVE MATERIALS AREA

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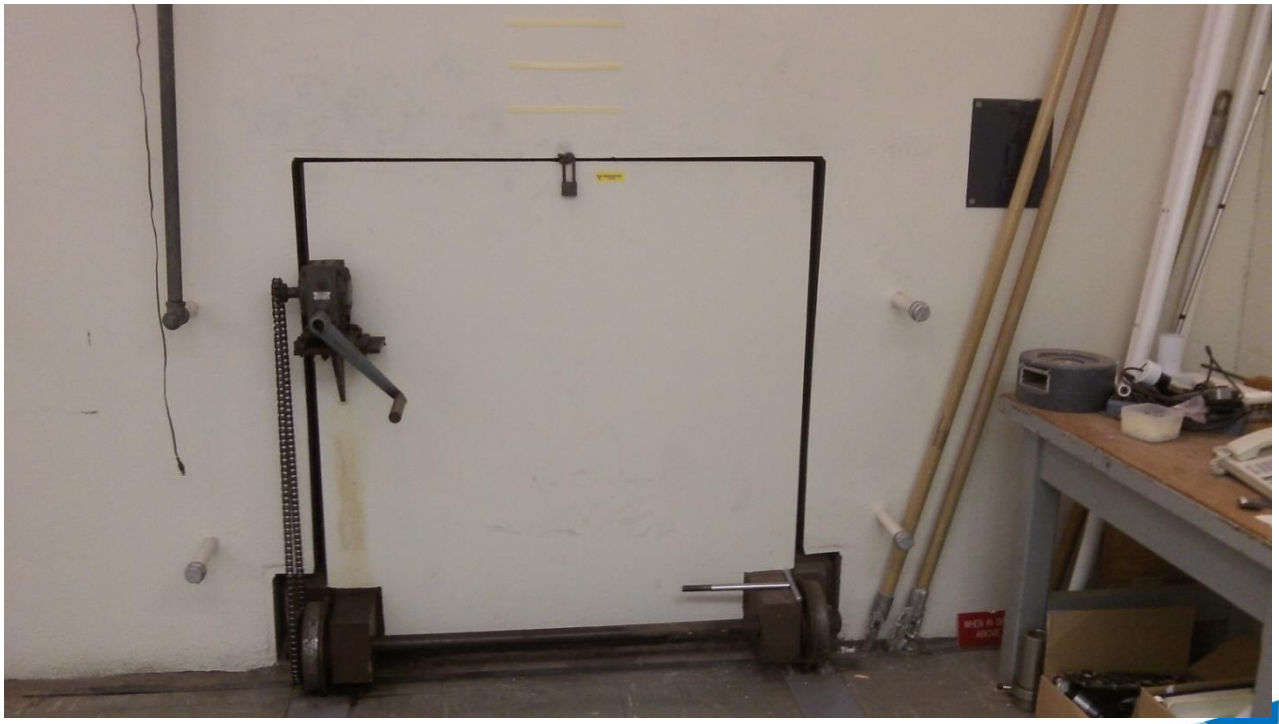

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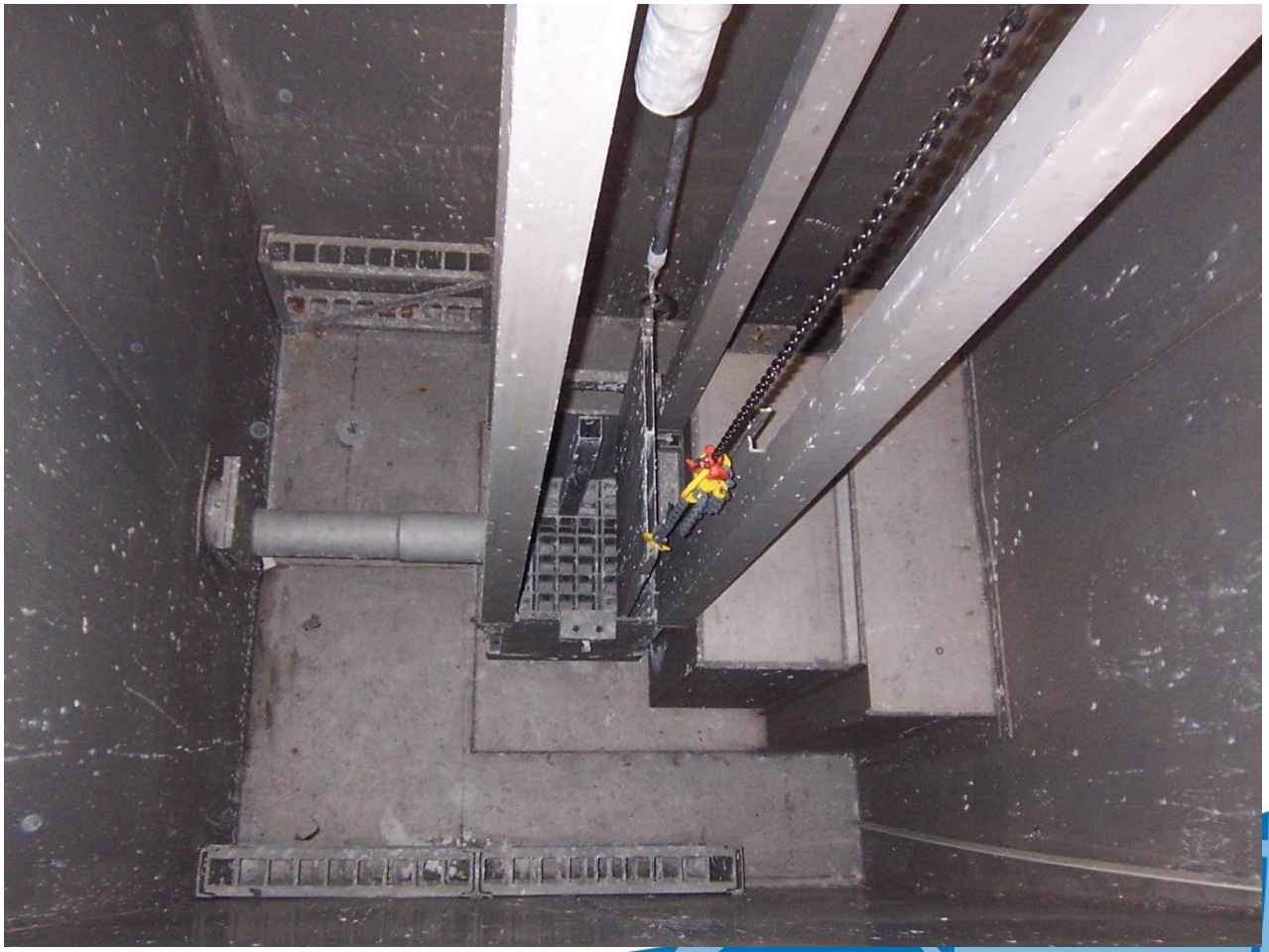

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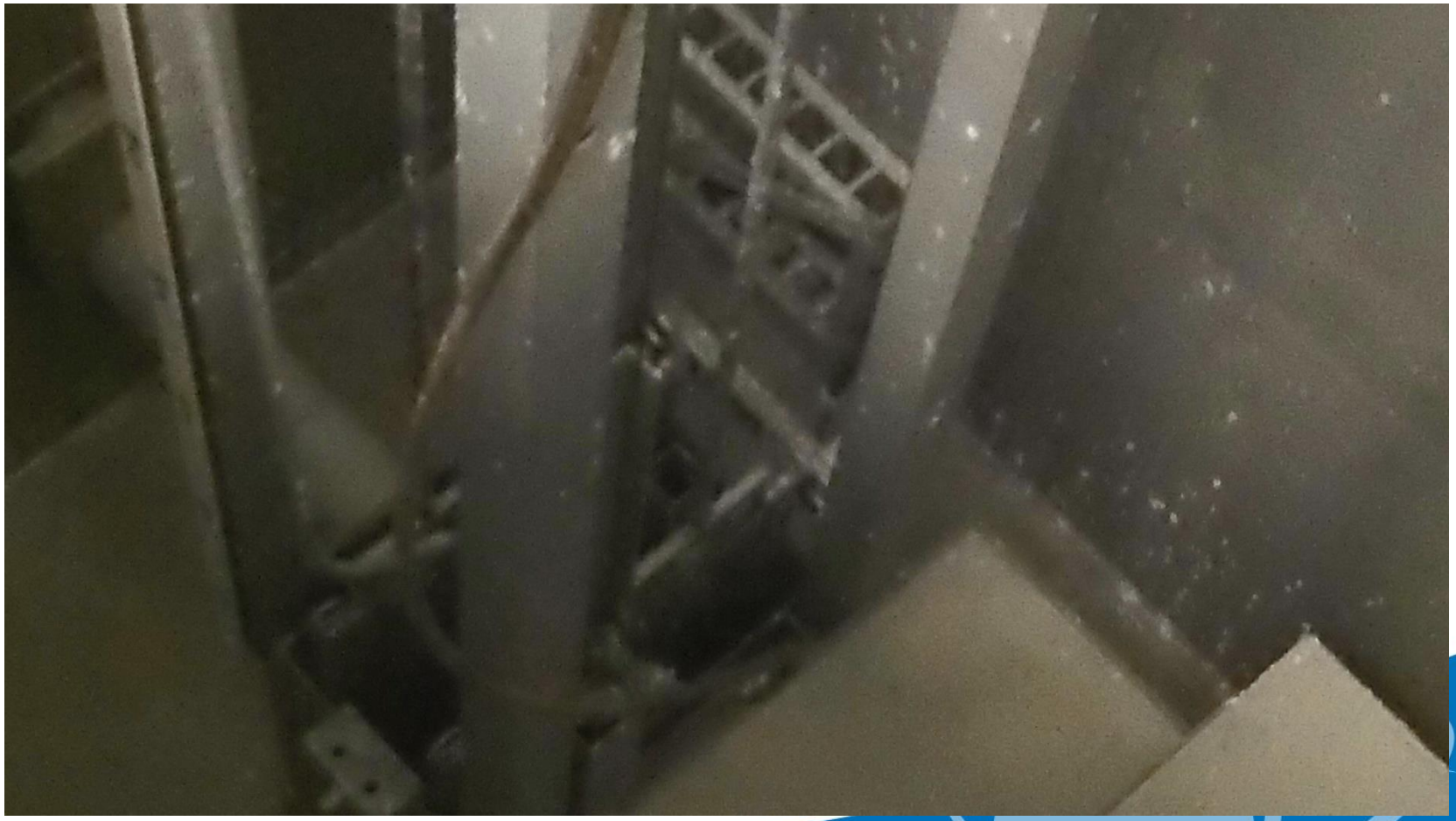

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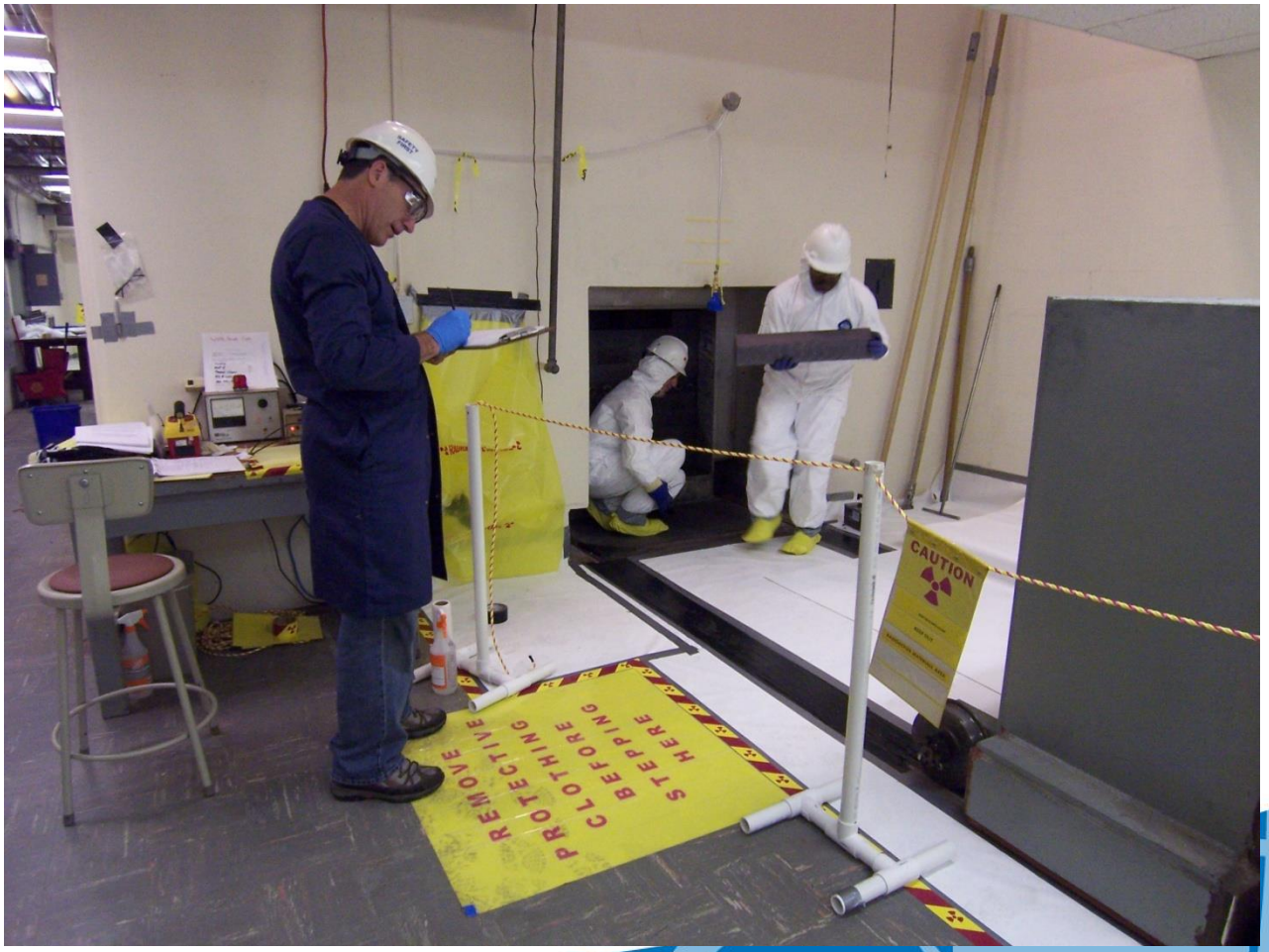

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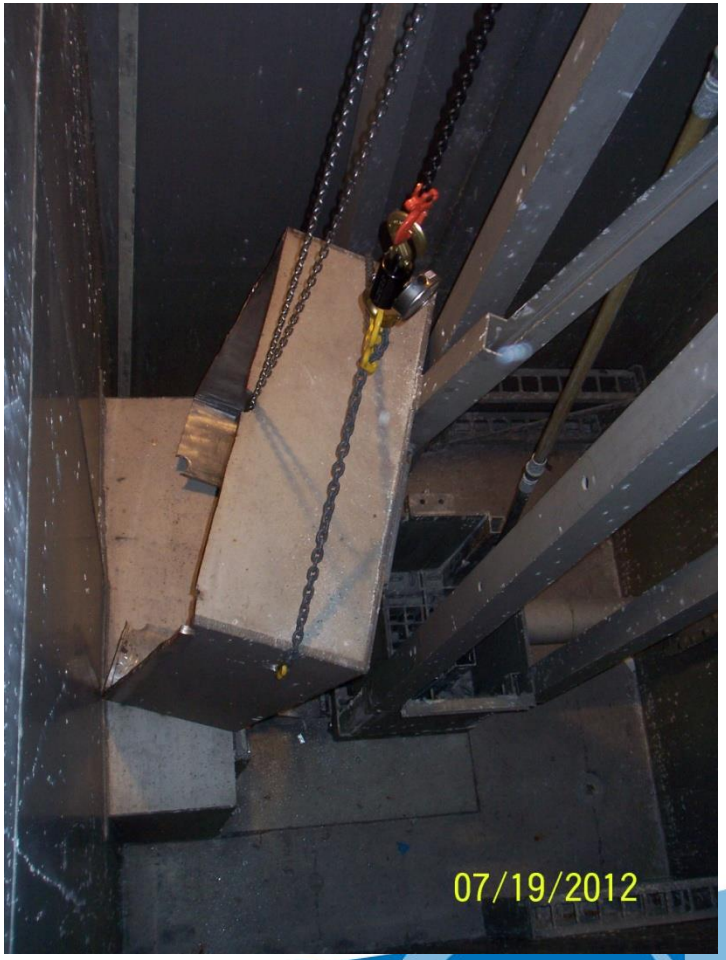

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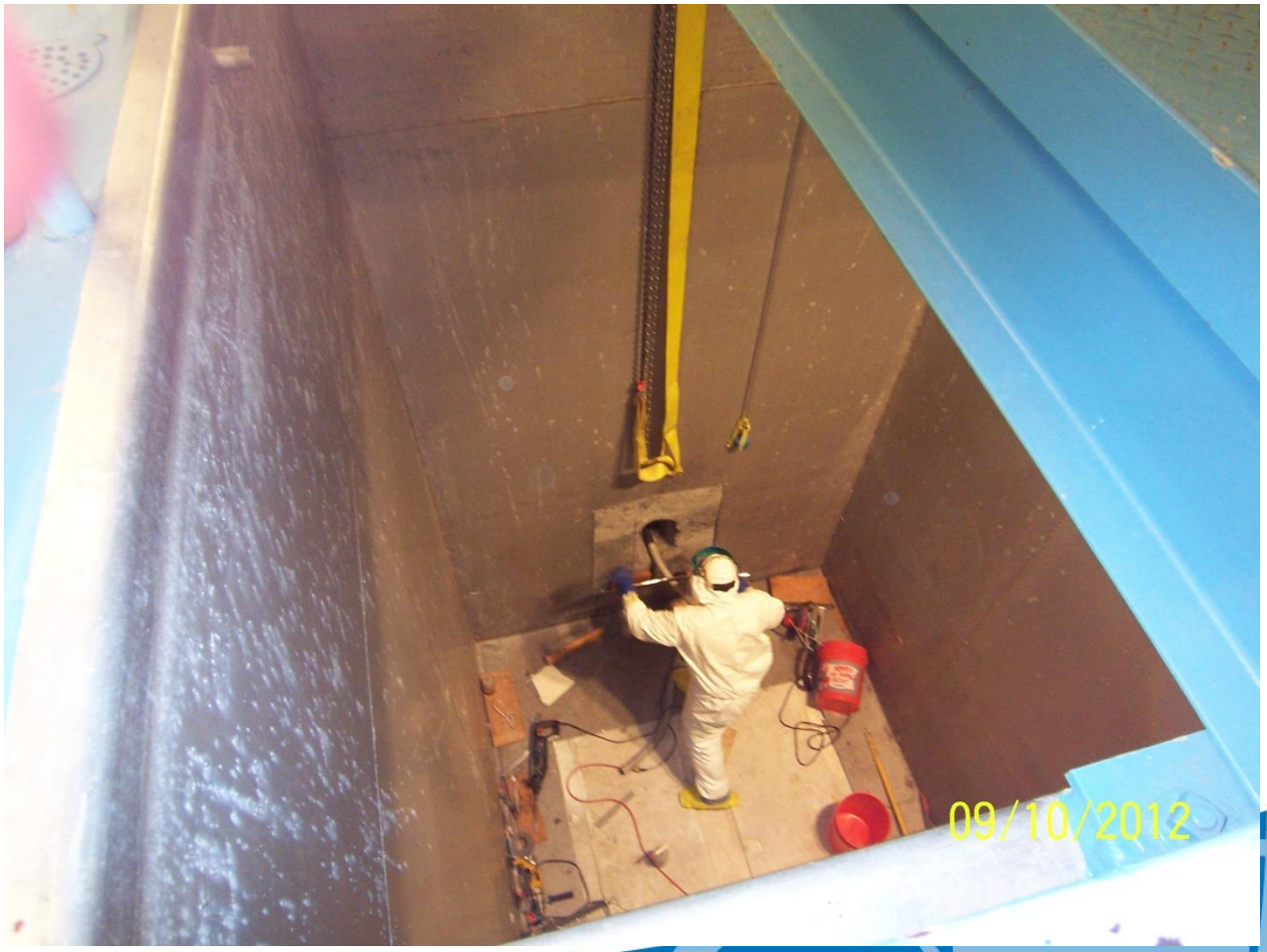

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