

CMRR SEIS Alternatives

No Action Alternative (2004 CMRR-NF)

Construct and operate the 2004 CMRR-NF at Technical Area 55 adjacent to the new RLUOB

- Design and construction as analyzed in the 2003 CMRR EIS and selected in the 2004 Record of Decision
- Implement decision included in the Complex Transformation Supplemental Programmatic EIS Record of Decision
- Would not meet the standards for a Performance Category 3 structure*
- Does not support the full suite of analytical chemistry (AC) and materials characterization (MC) mission work

Modified CMRR-NF Alternative

Construct and operate a modified CMRR-NF at Technical Area 55 adjacent to the new RLUOB

- Incorporates design and construction modifications to address seismic and nuclear safety requirements, infrastructure enhancements, and sustainability design principles
- Two construction options:
 - o *Deep Excavation Option* – excavate to about 130 feet, removing poorly welded tuff layer, and fill with 60 feet of concrete to provide a stable construction surface
 - o *Shallow Excavation Option* – excavate to about 58 feet, staying above the poorly welded tuff layer to provide a stable construction surface
- Supports the full suite of AC and MC mission work

Continued Use of CMR Building

Do not construct a replacement facility for the capabilities planned for the CMRR-NF

- Continue limited operations in CMR Building
- Perform normal maintenance and component replacement as needed to sustain programmatic operations for as long as feasible
- Does not support the full suite of AC and MC mission work

CMR = Chemistry and Metallurgy Research
CMRR-NF = CMR Replacement – Nuclear Facility
RLUOB = Radiological Laboratory Utility Office Building

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* Performance Category 3 structures, systems, and components are those for which failure to perform their safety function could pose a potential hazard to public health, safety, and the environment from release of radioactive or toxic materials. Design considerations for this category are to limit facility damage as a result of design-basis natural phenomena events (for example, an earthquake) so that hazardous materials can be controlled and confined, occupants are protected, and the functioning of the facility is not interrupted.