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National Reactor
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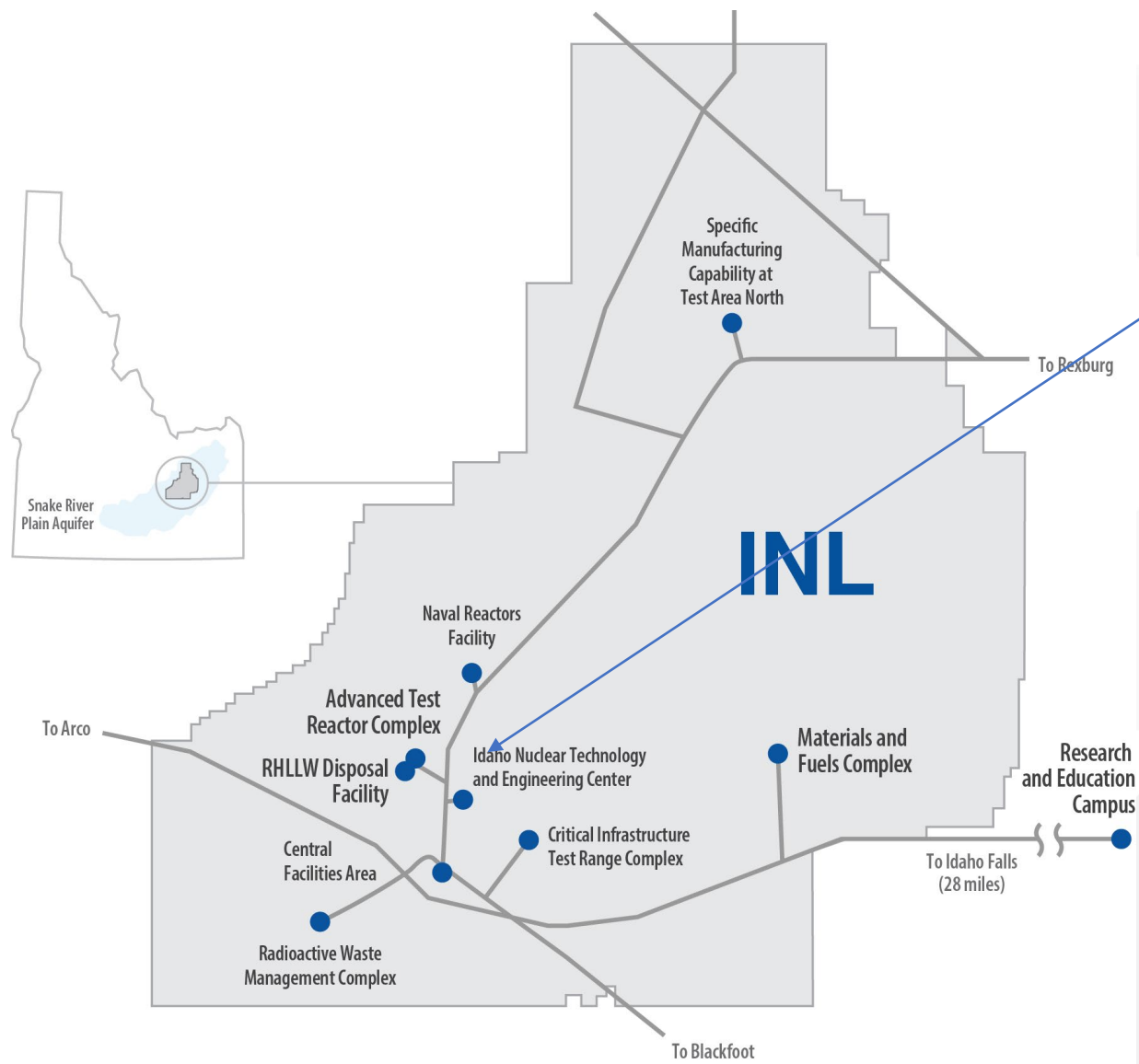
Fresh Fuel Handling at Materials Security Complex (MSCF; CPP-651)

Tim Arsenault
MSCF Nuclear Facility Manager
Materials Fuels Complex

7/9/2024

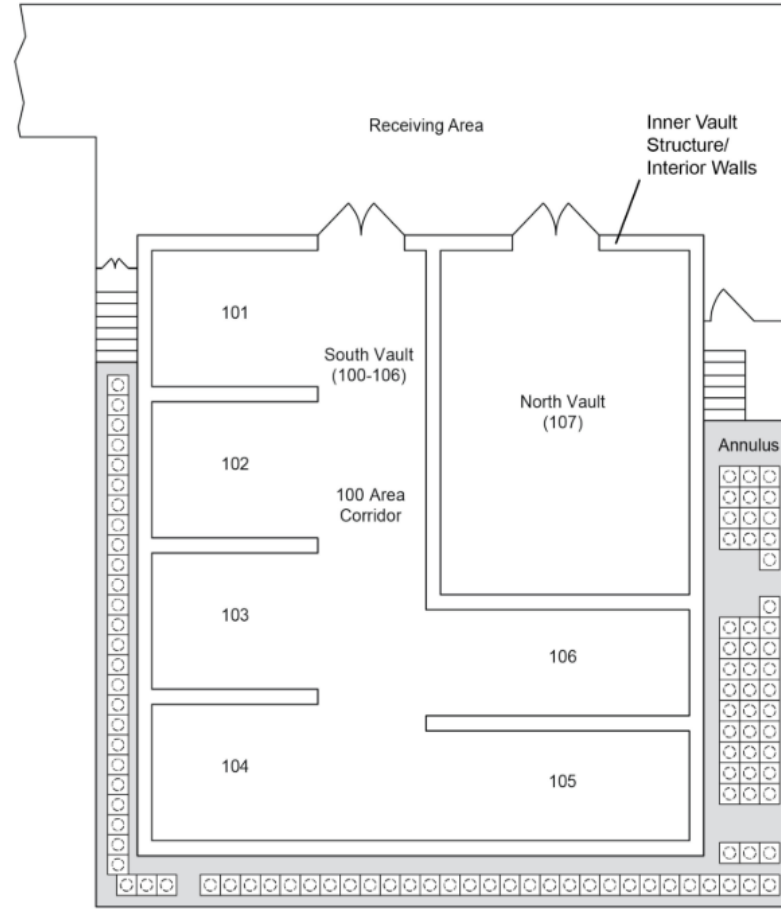
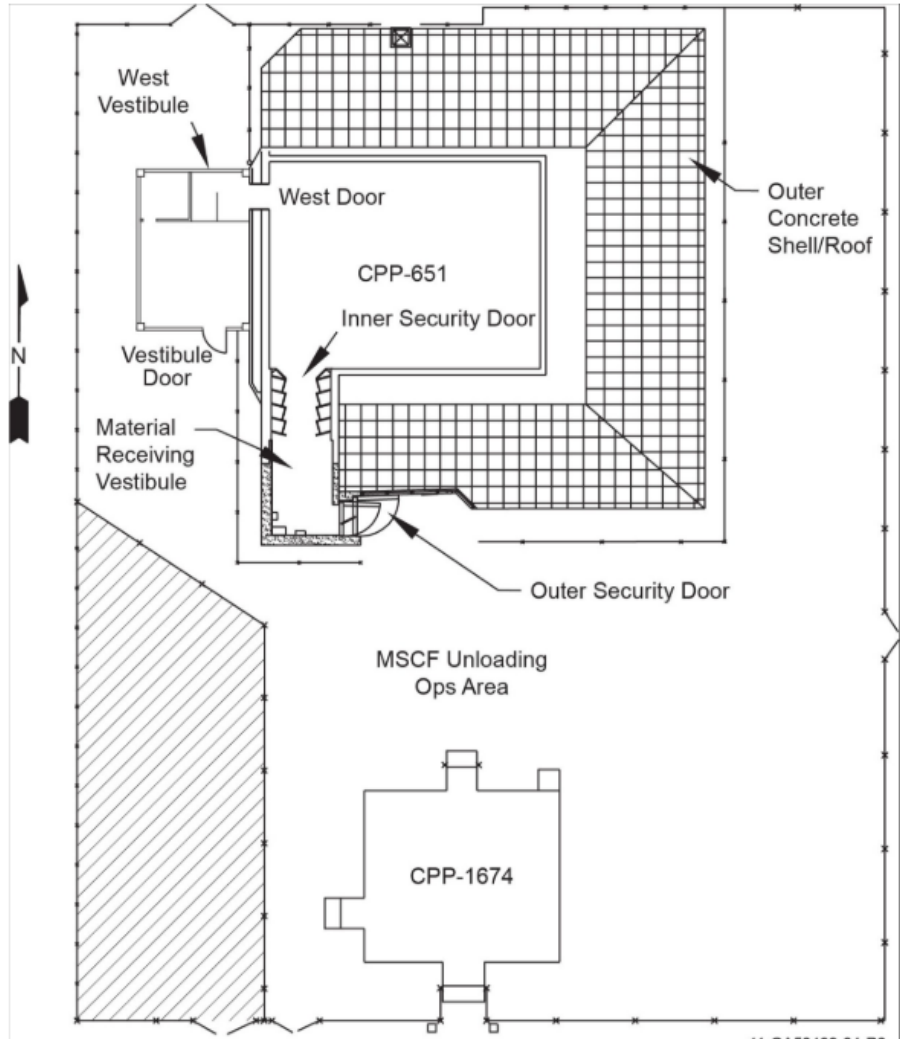


MSCF Location



MSCF is owned and operated by MFC under BEA but is located at the Idaho Nuclear Technology and Engineering Center (INTEC), roughly fifteen miles from MFC

MSCF Layout



North Vault is currently being used. Rooms 104, 105, 106 are for other projects. Space is available in rooms 101, 102, 103 and the annulus.



Operational Restrictions

- MSCF is currently approved to handle, store, and repackage unirradiated uranium
- No more than 700g of fissile material outside of approved package for repackaging
- Approved package means drum/container is either on the INL Criticality Control List, DOT approved, or specifically analyzed for storage at CPP-651
- The mass limit for storage is based on the total Criticality Storage Index (CSI). That limit is 100CSI.
 - CSI is assigned is based on the container and the contents.
 - DOT approved containers ref. the CSI in the Certificate of Compliance (COC)
 - INL criticality program may assign a new CSI based on the container and material packaged.



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