High Power Dump – Hall C

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7/17/2015

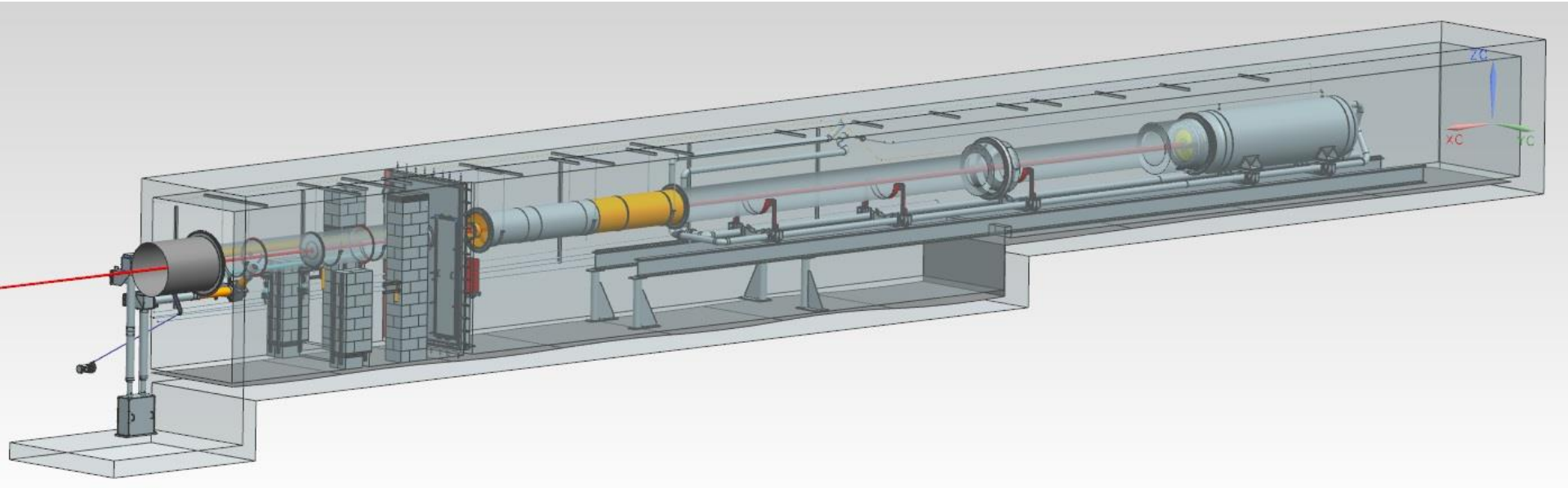
High Power Dump - Hall C

Hall C Project Objective – Dump designed, procured and installed by March, 2016. Will interface to a 24” diameter pipe that is in the Hall.

- Lessons Learned
- Delta’s - Hall A vs Hall C
- FY15 Milestones
- Hall C Status
- Risks and Potential Mitigations

New Hall A Dump

Hall A Dump – Post New Installation

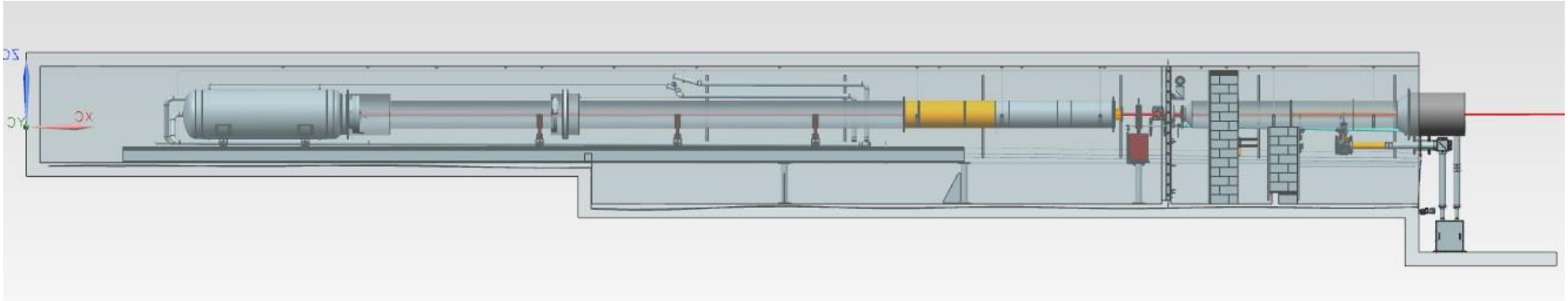


Lessons Learned from Hall A

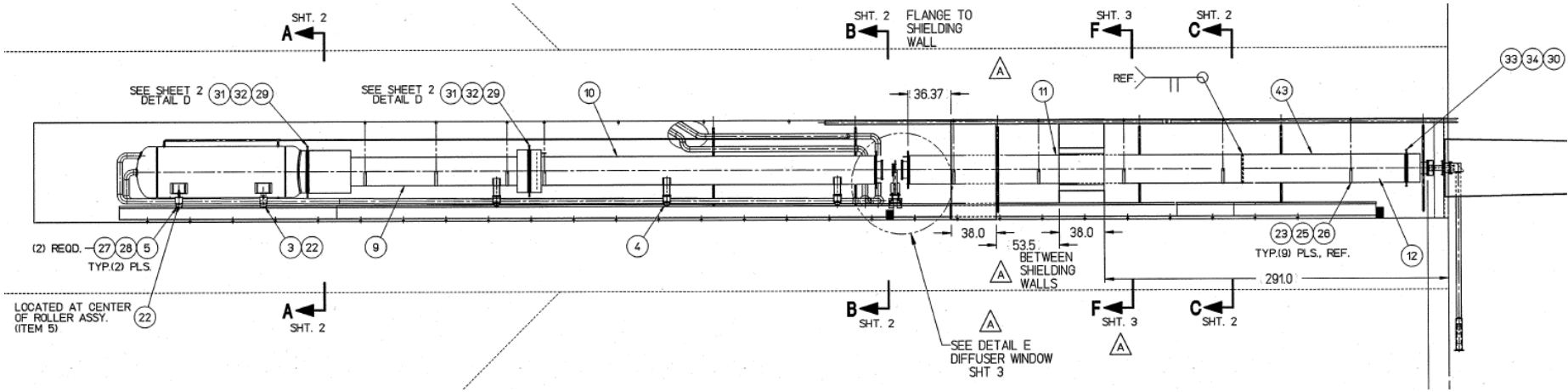
- Make sure we find the beam center line in the dump tunnel – Survey the Tunnel.
- Sealing of the Isolation Wall to the dump tunnel walls – Will improve design.
- Diagnostics suite is now finalized in Hall A, can be directly translated into Hall C.
- Seal N2 Recirc Blower – Resolved in Hall A – can be directly translated into Hall C.

Hall C Dump vs New Hall A Dump

Hall A Dump – Post New Installation



Hall C Dump – Historic Configuration



Delta's - Hall A vs Hall C

- Tunnel Size – Hall C is 7'x7', Hall A is 7'x10'
- Height of Dump Tunnel from floor of the Hall
  - Affects lengths of tubes for periscopes
  - Affects camera focal length
  - Affects work planning – added work platform, use of cranes
- Dose rates in Hall C Tunnel vs Hall A Tunnel are higher.
  - Use of DeconGel to reduce levels of activation and reduce spread of contamination
  - More extensive work planning with RadCon
- Cooling water system for aperture plate and vacuum window flange does not exist in Hall C Dump

FY 15 Planned Milestones

- Dump Demo
- Inspection of He Pipes – Testing for leaks, ability to survive another 20 years
- Inspection of Dump Face
- Removal of Burn Through Detector
- Perform a Survey of the Tunnel wrt Beam Center
- Transpose the Hall A Dump layout into Hall C Dump tunnel
- Procurement of Long Lead Items – Vacuum Pipe and He Pipe (1-3 sections – TBD)

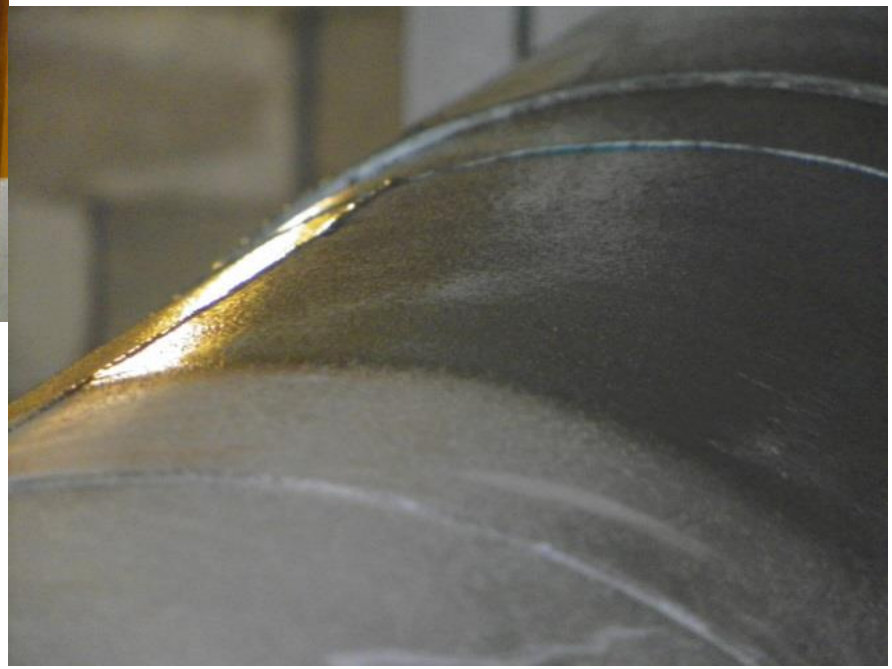
Status of Current Progress

- Installed Work Platform.

- Removed Isolation wall and installed new Gate.

Status of Current Progress

- Removed Helium pipe.

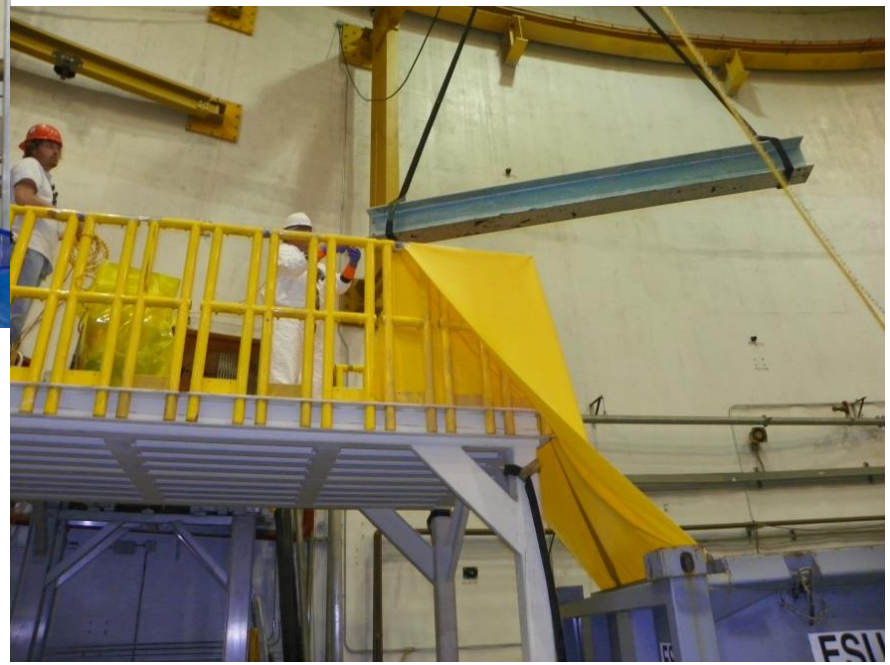


Status of Current Progress

- Removed Helium pipe.

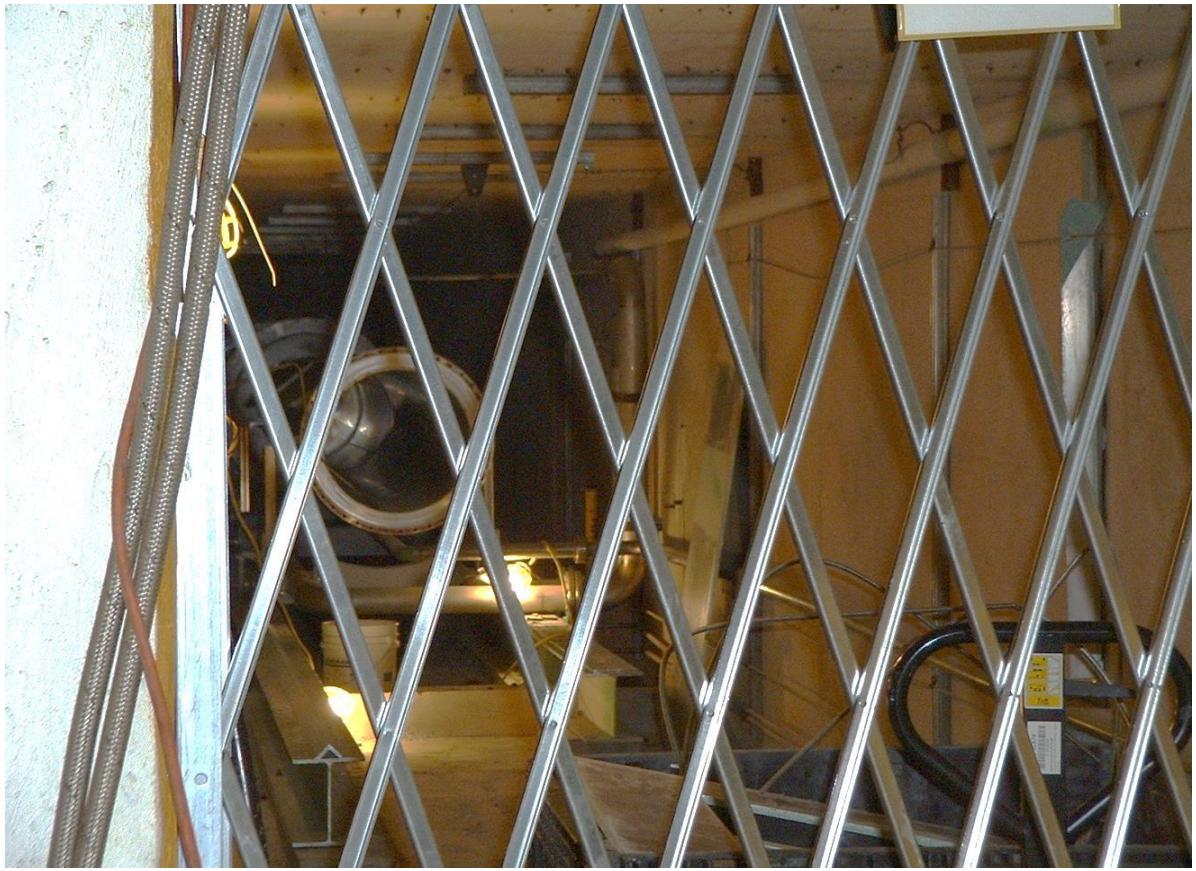
Status of Current Progress

- Removed rails and grout.



Status of Current Progress

- Removed Shielding walls, Diffuser, unused piping and old activated materials.



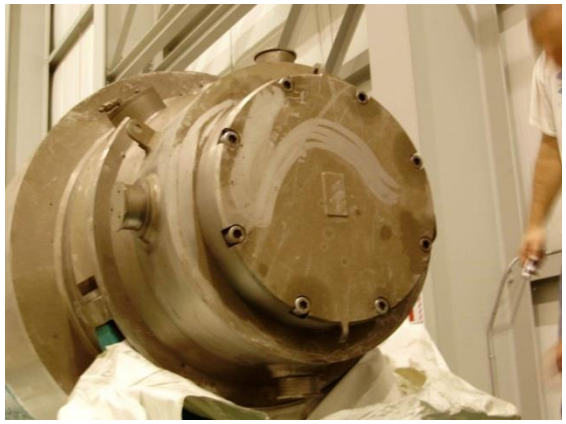
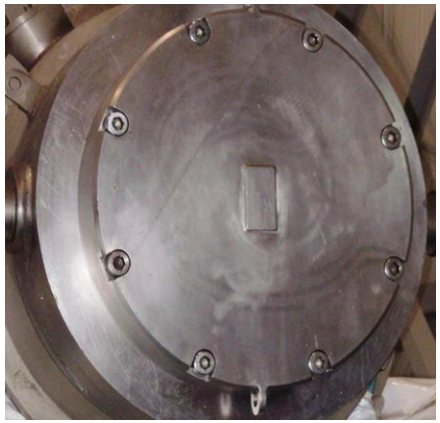
Current Progress – Next Step

- Left to complete Demo phase - Remove piece of rail, grout, misc material and DeconGel walls, ceiling and floor.

Current Progress – Next Step

- DeconGel - Easy and peelable, environmentally friendly, decontamination solution, with a broad spectrum of uses.
- Usage should mitigate requirement of most Rad II work – cost of material offsets what we added for labor – reduces worker rad exposure!



Risks and Potential Mitigations

- Helium Pipes Leak – $$ are in the budget to replace all of them.

- Dump Face needs to be replaced – We'll plan work for replacement – we have spare dump faces.

- High Dose rates – Use of DeconGel, continued monitoring of levels by RadCon, assessment of staff accumulated doses – identified additional resources which are Rad II trained.

Risks and Potential Mitigations

- Need to get MD assigned now – plan for Gary Hays to start by end of July.

- Questions from Hall Physicists regarding placement of items in the dump tunnel – need to look at these items now, resolve by August, 2015 – meeting being scheduled with Physics – agreement from Hall Leadership – no major changes from Hall A.

High Power Dumps

Thank You!!!

Tim Michalski

Keith Welch

Dave Hamlette

Neil Wilson

Ricky Taylor

Mark Weihl

Bern Johnson

All of the RadCon Techs