

PHENIX

WEEKLY PLANNING

8/24/06

Don Lynch

PHENIX Shutdown Overview



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Task_Name	Duration	Start_Date	Finish_Date
PHENIX Shutdown '06	145 days	5/1/2006	12/12/2006
Pre Shutdown Tasks	60 days	5/1/2006	DONE
End of Run 6	0 days	6/27/2006	DONE
Shutdown Preparations	16 days	6/27/2006	DONE
Detector Upgrades	47 days	7/19/2006	9/29/2006
Planned electrical power outage	5 days	7/24/2006	DONE
Subsystem maint/repair tasks	47 days	7/19/2006	9/22/2006
Building and infrastructure tasks	113 days	5/1/2006	10/31/2006
E carriage roll in & setup	14 days	10/9/2006	10/27/2006
RHIC Cooldown Begins	0 days	10/27/2006	10/27/2006
Run Prep	25 days	12/1/2006	12/1/2006
Shutdown Concluded	0 days	12/1/2006	12/1/2006

Prior To Shutdown

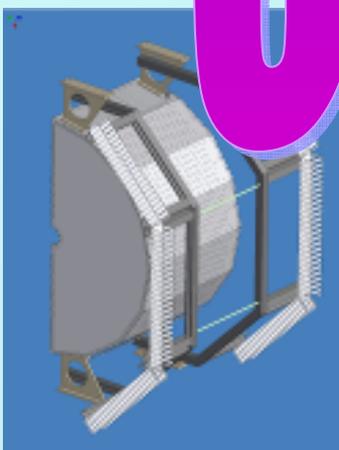
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Pre Shutdown Tasks

Mechanical design For RXNP	4 wks	Complete
HBD cable mangement	4 wks	Complete
Receive TOF West detectors from VU	0 days	Complete
TOF West pre-installation tests (hi bay)	4 wks	Complete
Design mounting/install'n for MPC N	6 wks	Complete
Order/fabricate RXNP/HBD/MPC	4 wks	Complete
Modify TEC cooling to RXNP/HBD/MPC	4 wks	Complete
Design piping for RXNP/HBD/MPC	4 wks	Complete
Work Permits for RXNP/HBD/MPC	4 wks	Complete
End of Run Conference	1 day	Complete

60 days

Complete



Shutdown Prep

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Shutdown Preparations

- Purge gas from all detectors
- End of Run party
- DAQ tests (no Flam. Gas)
- Open up & prep
- Open rolling door
- Remove rolling door plug doors
- Take down ECR
- Prepare EC for move
- Remove bearing cradle
- Move MMS from south and re-
- Retract and re-extend ECR
- Install 12 ton cradle
- Move beam pipe to hall
- Install decking



	16 days	6/26/2006	7/18/2006
Purge gas from all detectors	2 days	Done	Done
End of Run party	0 days	Done	Done
DAQ tests (no Flam. Gas)	3 days	Done	Done
Open up & prep	1 day	Done	Done
Open rolling door		Done	Done
Remove rolling door plug doors		Done	Done
Take down ECR		Done	Done
Prepare EC for move		Done	Done
Remove bearing cradle		Done	Done
Move MMS from south and re-		Done	Done
Retract and re-extend ECR		Done	Done
Install 12 ton cradle	1 day	Done	Done
Move beam pipe to hall	1 day	Done	Done
Install decking	1 day	Done	Done

complete



Detector Upgrades

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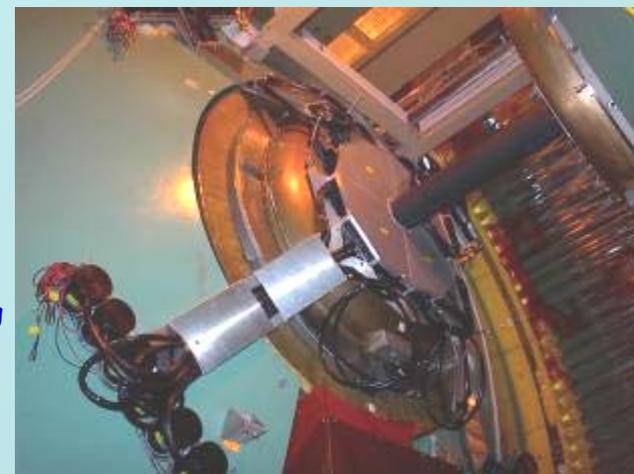
TOF West	-	-
Design	Done	Done
Purchased/procured parts	Done	Done
Fabricated parts	Done	Done
Assembly at 510	Done	Done
Work permit	Done	Done
Mechanical Installation	Done	Done
PHENIX mechanical survey offsets (adjustments completed no further adjustment reasonably feasible)	Done	Done
 Electrical	-	-
HV/LV/Signal Cable routing & connecting	Done	Done
Modify/upgrade rack	-	-
electronics	18-Jul	15-Sep
cooling water	18-Jul	1-Sep
Testing	18-Jul	15-Sep



Detector Upgrades

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RXNP	-	-
Design	Done	Done
Purchased/procured parts	Done	Done
Fabricated parts	-	-
PMT Covers	Done	Done
Fan covers	Done	Done
Assembly: 8 quadrants	-	-
South detector	Done	Done
North detector	Done	Done
Pre-Survey: 8 quadrants	Done	Done
Mechanical Installation: South detector, North detector, cable trays	-	-
South detector	Done	Done
North detector	Done	Done
Cable trays	Done	Done
Installation survey	25-Aug	25-Aug



Detector Upgrades

RXNP (Cont'd)

Electrical Installation	-	-
HV/signal/optical routing and connecting	28-Aug	29-Aug
Rack installation	-	-
Mechanical Installation	30-Aug	2-Sep
Water hookup	4-Sep	8-Sep
Power hookup	4-Sep	8-Sep
Cable connections	4-Sep	8-Sep
Safety systems	4-Sep	8-Sep
Grounding	4-Sep	8-Sep
Testing	30-Aug	1-Oct
Project Closeout	27-Oct	1-Dec



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Detector Upgrades

T E C H N I C A L S U P P O R T 2 0 0 6

HBD	-	-
Design	Done	Done
Purchased/procured parts	Done	Done
Fabricated parts	Done	Done
Assembly	-	-
West and East detectors at Stony Brook	18-Jul	15-Sep
electronics racks at PHENIX	30-Aug	1-Sep
cable trays at PHENIX	Done	Done
movable cable trays	Done	Done
Fixed cable trays	Done	Done
Pre-Survey: West and East detectors at Stony Brook	-	-
West detector	24-Aug	24-Aug
East detector	18-Sep	19-Sep
Scribe centerline marks on upper and lower ibeams	25-Aug	25-Aug
Mechanical Installation: West and East detectors in IR	-	-
West detector	30-Aug	1-Sep
East detector	20-Sep	22-Sep
West moveable cable trays	5-Sep	6-Sep
East moveable cable trays	25-Sep	26-Sep
Fixed cable trays	Done	Done



Detector Upgrades

HBD

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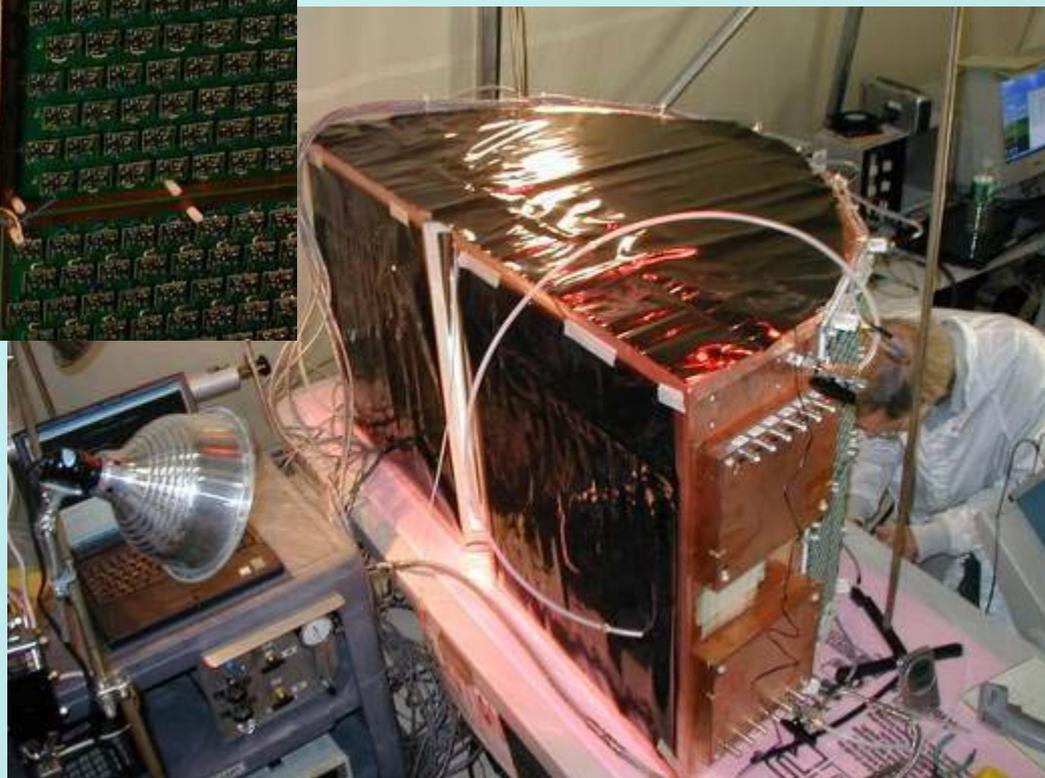
Installation survey	-	-
Set up equipment for West detector	7-Sep	7-Sep
Adjust location of West detector	8-Sep	8-Sep
Set up equipment for East detector	27-Sep	27-Sep
Adjust location of East detector	28-Sep	28-Sep
Electrical Installation		
HV/signal/LV routing and connecting	11-Sep	6-Oct
Rack installation and connection	30-Aug	8-Sep
Mechanical Installation	30-Aug	8-Sep
Water hookup	30-Aug	8-Sep
Power hookup (Mike Rau)	30-Aug	8-Sep
Cable connections	30-Aug	8-Sep
Safety systems	30-Aug	8-Sep
Grounding	30-Aug	8-Sep
Testing	9-Sep	13-Oct
Gas system	-	-
Final piping	30-Aug	13-Oct
IR distribution panel and monitoring hardware	30-Aug	13-Oct
Gas house controls and monitoring system	30-Aug	31-Oct
Monitoring hutch controls, monitoring and piping	30-Aug	13-Oct
Other: Cooling, Heating, Flash Lamp: design/review/fabrication/installation	???	???





More pictures of the HBD at Stony Brook
can be found at:

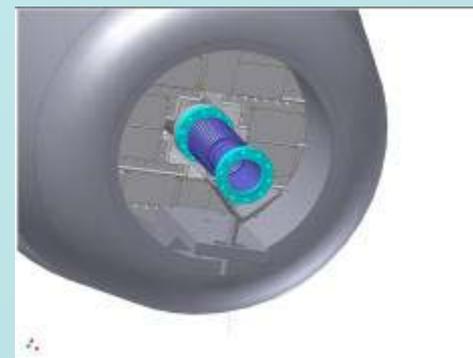
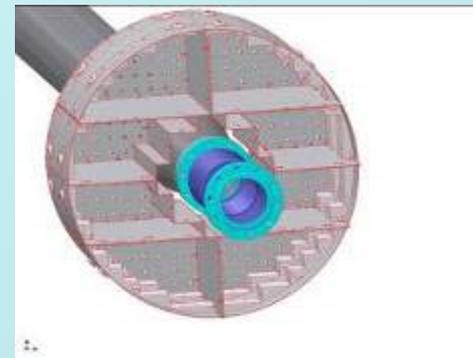
<http://picasaweb.google.com/jkamin/HBD>



Detector Upgrades

MPC N

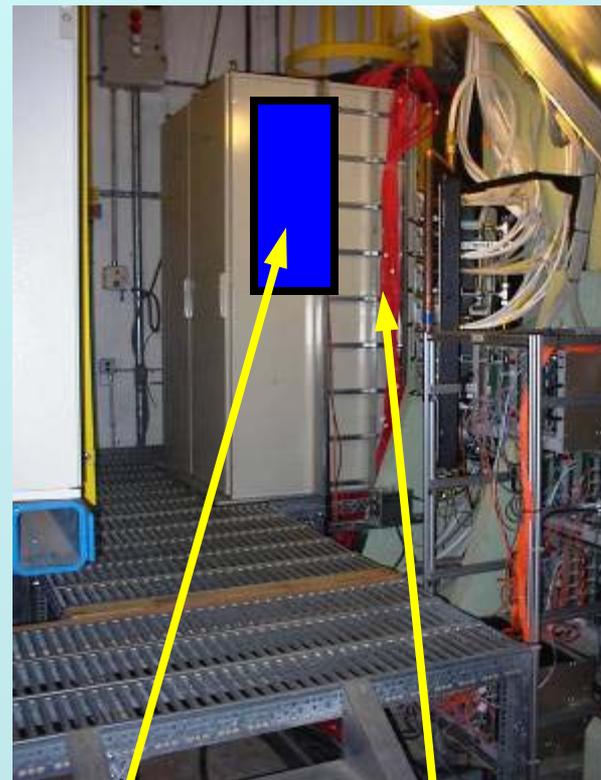
Design	Done	Done
Purchased/procured parts	Done	Done
Fabricated parts	-	-
Detector Parts	Done	Done
Go-No Go gauge	Done	Done
Assembly	-	-
Pre assembly/fit up at UI	Done	Done
Pre assembly/fit up at PHENIX	Done	Done
electronics racks at PHENIX	11-Sep	15-Sep
Mechanical Installation:		
Detector sextants	5-Sep	8-Sep
cable trays	11-Sep	12-Sep
Installation survey	15-Sep	15-Sep
Electrical Installation		
HV/signal/LV routing and connecting	18-Sep	22-Sep
Rack installation and connection	25-Sep	29-Sep
Mechanical Installation	25-Sep	29-Sep
Power hookup	25-Sep	29-Sep
Cable connections	25-Sep	29-Sep
Safety systems	25-Sep	29-Sep
Grounding	25-Sep	29-Sep
Testing	2-Oct	13-Oct
Project Closeout	27-Oct	1-Dec



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MPC N at BNL

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MPC N Rack goes here oriented with long edge vertical

18" cable tray to be replaced with 6" tray shifted 12" to the north on this face of MUID rack

Subsystems

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IV. Existing Detector Maintenance

EMCal

WC maintenance and repair Done Done

EC maintenance & repair Done Done

DC

HV/LV patch panel Done Done

West Wire repairs 18-Sep 22-Sep

MuTr

Prepare work permits for MMS and MMN Done Done

Remove SE vertical lampshade Done Done

Remove SE bias lampshade Done Done

Troubleshoot shorts in MMS Done Done

Repair shorts Done Done

Troubleshoot and repair Repair MMS and MMN HV/FEE's etc. Done Done

Reinstall SE bias lampshade Done Done

Reinstall SE vertical lampshade Done Done

Closeout workpermit 9-Oct 9-Oct



Subsystems (continued)

TECHNICAL SUPPORT NOON

IV. Existing Detector Maintenance

MPC S

Prepare work permit	Done	Done
Remove cables for access	Done	Done
Remove top 2 octants for rework	Done	Done
Rework/repairs on removed octants	Done	Done
Reinstall top octants	24-Aug	24-Aug
Reinstall wiring	Sep 26	Sep 26
Closeout work permit	9-Oct	9-Oct

TEC

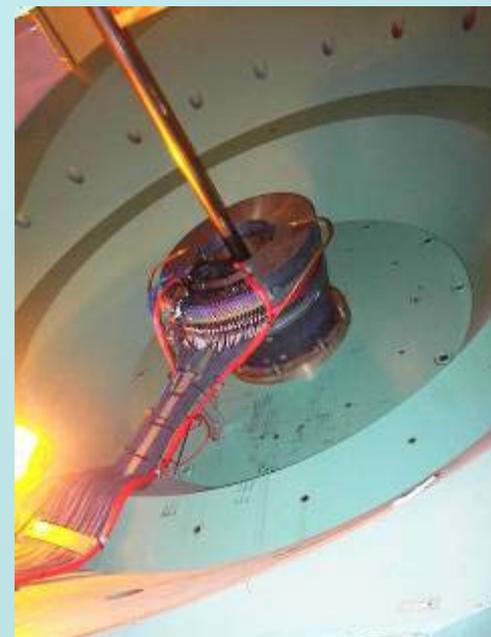
Machine slots in fittings	Done	Done
Maintenance and repairs on TEC electronics	31-Jul	15-Sep

BBC

Remove BBC South and	Done	Done
Remove BBC North	5-Sep	5-Sep
Maintenance and repairs	23-Aug	22-Sep
Reinstall BBC North	25-Sep	25-Sep
Reinstall BBC South	26-Sep	26-Sep

MuID

	30-Oct	3-Nov
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Infrastructure Work

TECHNICAL SUPPORT 2006

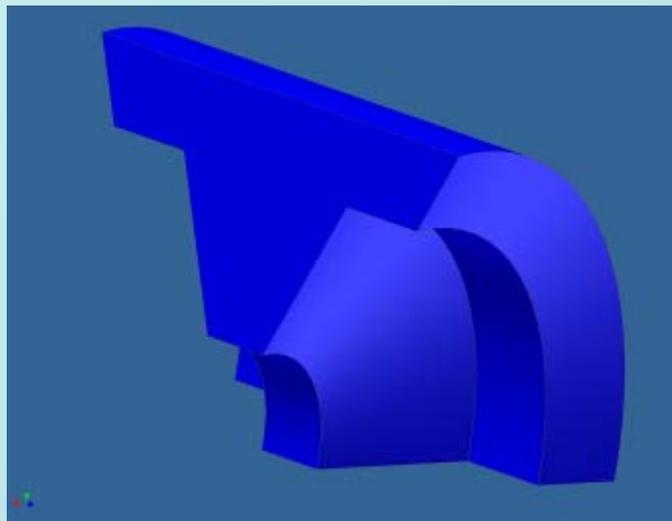
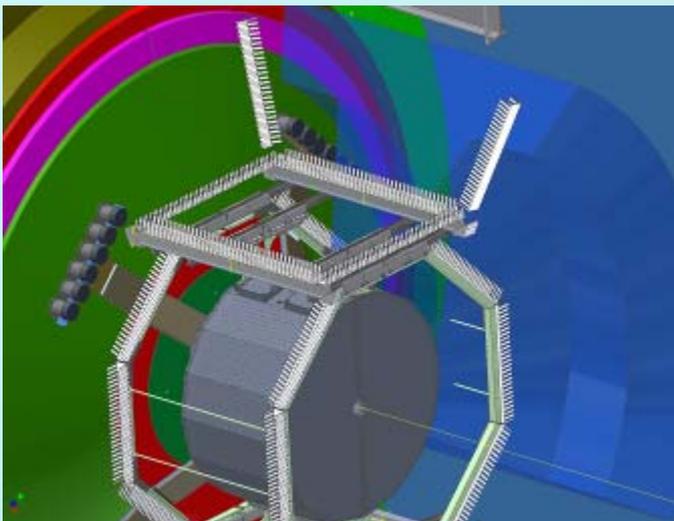
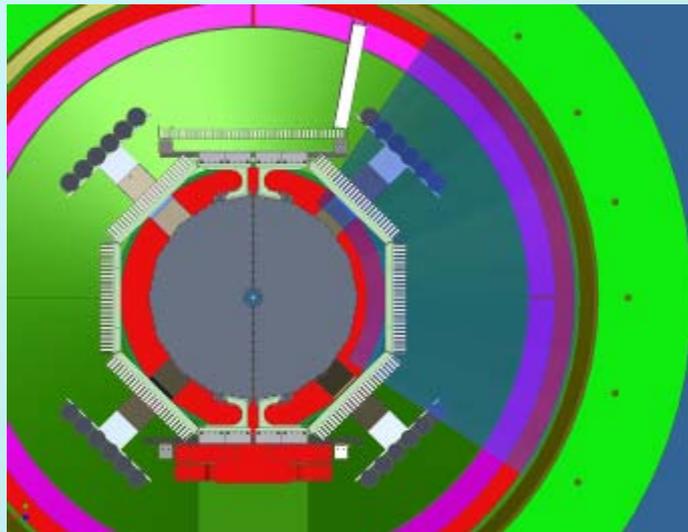
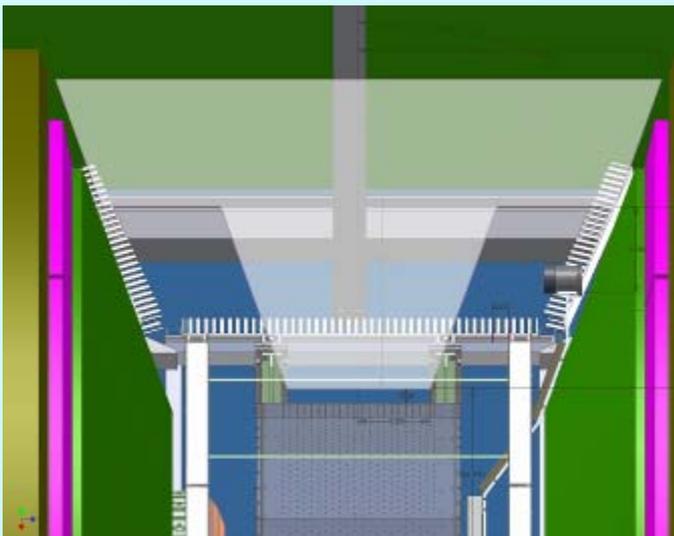
CAD/RHIC PHENIX infrastucture related mechanical and electrical support

Emergency remote breaker installation	Done	Done
Summer Sunday review platform and safety rails	Done	Done
Bridge Water supply vertical piping rework	Done	Done
Replace emergency fan louvres	-	-
Rewire/Add IR ceiling lights on emergency power	-	-
Replace WC sliding platform hoisting cables	-	-
Mixing House exhaust fan maintenance	-	-
Raw materials storage container painting and doors	Done	Done
Roof leak repairs	-	-
He Bags	1-Aug	31-Oct
Bridge protective runners	Done	Done



He Bags

TECHNICAL SUPPORT ROOM 2002



2006 Shutdown Wrapup/Run 7 Prep

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East carriage roll in & setup

Prepare EC for move to IR	9-Oct	13-Oct
EC Roll in	16-Oct	17-Oct
Connect EC services	18-Oct	24-Oct
Install EC Ladder	25-Oct	26-Oct
Install EC rear access & ext.	26-Oct	27-Oct
MuID Commissioning	30-Oct	3-Nov
RHIC Cooldown Begins	27-Oct	27-Oct
Move MMS full North	27-Oct	27-Oct
Install beam pipe collar	30-Oct	30-Oct
Rebuild Rolling door	31-Oct	6-Nov
Install Plug Door & steel platform	6-Nov	6-Nov
Close rolling door	7-Nov	7-Nov
Pink Sheeting & Blue Sheeting	8-Nov	21-Nov
Start Flammable Gas Flow	22-Nov	22-Nov
All Up Commissioning	27-Nov	1-Dec
Beam in yellow ring	22-Nov	29-Nov
Beam in blue ring	29-Nov	5-Dec
RHIC beam conditioning	5-Dec	12-Dec
Shutdown Concluded	12-Dec	12-Dec



Next Week

- RXNP Final Survey
- RXNP cable installation to bridge
- RXNP LED fiber installation
- HBD west installation
- HBD west final survey
- HBD west cable installation to bridge and to LV/signal rack
- TEC repairs
- BBC S repairs ?

Tier I knocks

1. Flammable material in the tech shop stored in boxes should be placed in the chemical cabinet
2. The following housekeeping issues must be corrected:
 - a. Boxes stored in the tech shop must be emptied and stored properly.
 - b. Storing material between the building and shielding (Electronics Area) is not considered a storage area and should be removed.
 - c. Storing gas tanks and holders under the wood steps outside is not allowed and should be removed.
 - d. Cardboard on floor behind PHENIX experiment should be removed.
 - e. 1008F wiring found outside and should be relocated.
3. The PHENIX facility has numerous 4" openings that are not in compliance with OSHA standard. The standard allows 4" holes but not openings that are 4" wide by 8 - 10 feet long. All of the grating system needs to have fillers placed in these large openings

Tier I knocks

4. In the PHENIX highbay area there is a sink and water pump in front of a disconnect that needs to be relocated per OSHA
5. The PHENIX laser is not secured. A key was left in the power supply and the door is open. Remove the laser key and secure the area as required.
6. The PHENIX gas storage facility has three (3) small isobutene cylinders not secured. A gas storage sign is on the ground. Also a gas cylinder rack is all rusted (behind the carbon dioxide dewar) that needs to be replaced. In addition, the 5,200 gallon dewar does not have a "label" on it identifying its contents
7. In the PHENIX gas storage facility there is a 5,200 gallon dewar that has a manufacturer plate on it stating that this dewar is rated and designed to hold hydrogen. However, it is believed that the content of this large dewar is nitrogen, which is 14 times the density of hydrogen. This dewar requires the manufacturer to supply legal documentation stating that it is capable of holding 5,200 gallons of nitrogen. This document must be provided to the C-AD ESH Coordinator.



Where To Find PHENIX Technical Info

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Links for the shutdown schedule as well as weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found from the web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm