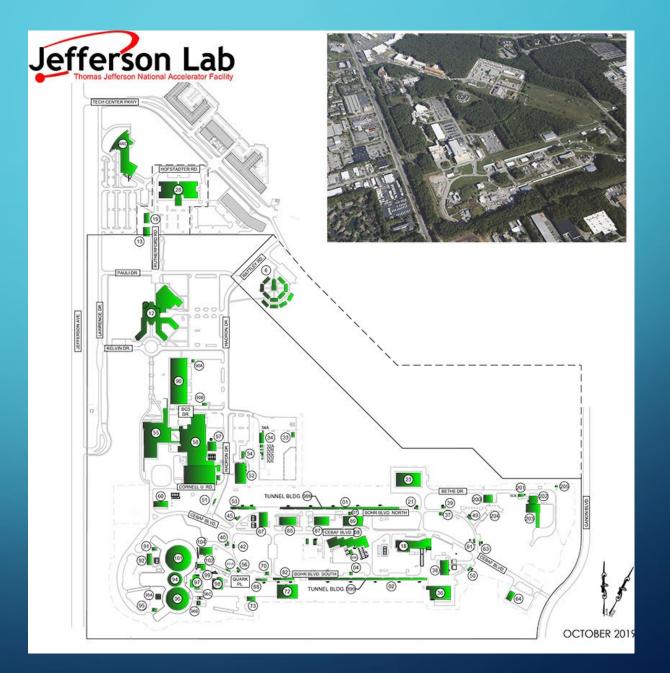
THOMAS JEFFERSON LAB INSPECTION PROGRAM & FEEDBACK

ANNE PAYNE

AGENDA

- Site Information
- Types of Inspections
- Inspection Process
 - Prep Work
 - Field Inspection
 - Equipment
 - Reporting



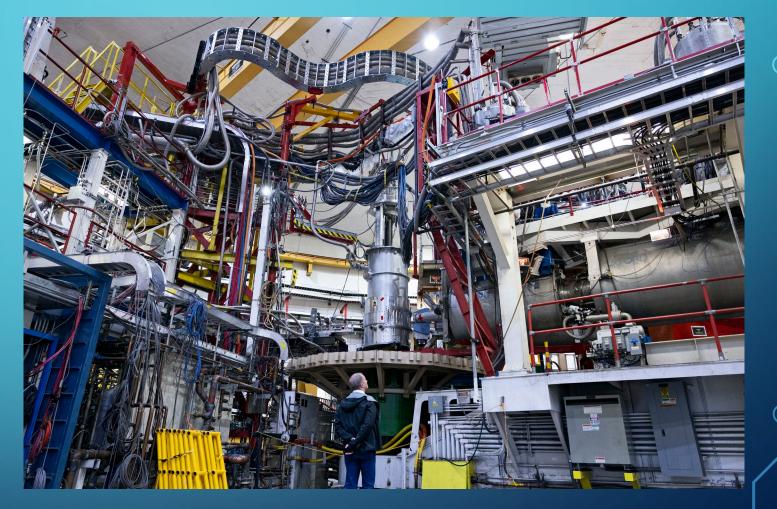
° SITE INFORMATION

BUILDINGS

72 Buildings

Average Age: 27 Years Total SF DOE Owned: 1,045,483 Total SF DOE Leased: 37,627 OSF'S 43 OSF's Experimental Equipment: 4 Others: Cooling Towers Stormwater Features Utilities

Roads



Hall C Experimental Equipment

TYPES OF INSPECTIONS

CONDITION ASSESSMENT SURVEYS & FUNCTIONALITY SURVEYS:

- Minimum of every 5 years for most
 OSF's and Buildings
- TJNAF Every 3 years for underground structures

TARGETED INSPECTIONS:

- Response to specific questions or concerns
 - Water intrusion in underground structures
 - Tunnel smoke & helium ventilation

INSPECTION PREP

• Review

- Original as-builts & completed projects file
- CAIS for previous entries
- Building usage code
- Outstanding work orders
- Maximo asset list
- Print labels for known assets

Workorder # Location Person Group							
Requester	Descript Replace End Station Cool	ling Tower 92-CT-1	57926	992-CT02		0	
Carroll Jones	Water Head Building 57 Cooling Toy Shower Installation	wer Outdoor		10 57-CT02		- /	
Mattee Sprouse 8-CTP-1 Replacement Motor Out Mike Sprouse 8-CTP-1 Replacement Motor Gattee Sprouse ROULBESHOOT AND REPAIR SOUTH ACCESS COOLING TOWER LEVEL ACCESS COOLING TOWER LEVEL 63554738-CT02 FMM SENSORS - CELLS 1 THRU 3 READING 63554738-CT02 FMM Carroll Jones LOW AND CE 681604/08-CT02 FMM Mike Sprouse CT08 CHL2 Return Ppg Completed Projects > Buildings > 08 CHL 1-Original Construction Vike Sprouse CT08 CHL2 Return Ppg Vame 2-East Addition 3-West Addition 3-West Addition 4-12GeV 99-Misc Projects 99-Misc Projects 99-Misc Projects							
			U				
	58 67-DS-WR2	RM 107				ISOLATION POINT	
	59 67-DS-AC5	DS FOR SPRINKLER AIR COMPRESSOR				IN POINT	-
	70 67-EWH-1						
	71 67-WH-1	WATER HEATER RM 105					
	72 67-DS-WH1	RM 105				N POINT	
	73 67-EWH-2	RM 105					-
	74 67-LCWF-7	RM 100 RM 108 NORTH WALL					
	75 67-MSR-AC1	CURTIS COMPRESSOR					-
	76 205-EAP-1-ECB1	Panelboard				SSET DOES NOT EXIS	т
	77 205-EAP-1-ECB2	Panelboard				DELETE ASSET DOES NOT EXIST	
	78 205-EMER-ECB	Panelboard				DELETE ASSET DOES NOT EXIST	
	79 EF-205-1	VENTILATOR REMOVE DOES NOT EXIST				DELETE ASSET DOES NOT EXIST	
	30 203-EWH-1					DELETE ASSET DOES NOT EXIST	
	31 205-CRAC-1	Computer Room unit CHANGE TO 205-CRU-1					-
	32 205-CRAC-2	Computer Room Unit CHANGE TO 205-CRU-2					
	33 205-ATS	Auto XFER Switch RENAME 205-ATS-EAP1			ISOLATIC	N POINT	
	34 205-DS-P-XFMR-EAP1	PRIMARY DISCONNECT EAP1			ISOLATIC		_)
	B5 205-DS-S-XFMR-EAP1				ISOLATIC		
	200 DO O ALIVIN LAFT	SECONDART DISCON			ISOLATIC		

FOLLOW-UP QUESTION:

 ARE THERE ANY OTHER PREP ITEMS THAT YOU ALL DO PRIOR TO GOING OUT TO PERFORM AN ONSITE INSPECTION?

ONSITE INSPECTION

- Walk through and label
- Identify additional assets
- Identify areas of concern
- Perform walkthrough with Mechanical Engineers



LOTO in place, basin heater is labeled as not functional CAIS 2334 February of 2024

ADD 200-BH-I TO MAXIMO

March 07 2024





The water flows from the perimeter trench drain and floor drains into an in slab piping system that is routed to two auxiliary pumps located in Room BS106 in the basement of the counting house. There is a primary and backup pump each 270 GPM at 65 TFH discharged directly to the sanitary sewer system. These pumps are on the backup generators in the event of a power outage. The pumps are sufficient to control the water that is entering the hall through the cracks and penetrations. In the event that both of these pumps fail there is a gate valve between the sanitary sewer pit and the groundwater de-watering pit that has three ground water pumps which can be opened. The ground water pumps consist of two 625 GPM pumps and one 53 GPM pump which discharge to the ditches on the south side of the site. Discharge from these pumping systems is monitored by Radcon and these pumps are capable of discharging the water should the two primary pumps fail. Operation of both the floor drain and groundwater pumps are monitored and remotely alarmed by the Facilities Honeywell Control System.

Recommendations: Scope in slab pipes to check capacity and look for sediment buildup due to age of pipes. April of 2023





Sanitary sewer pumps, primary and redundant Ground water pump 2

FOLLOW-UP QUESTIONS:

- DO MOST SITES HAVE ASSETS LABELED ALREADY OR DO YOU TRY TO ADD IT IN THE CONDITION ASSESSMENT PROCESS?
- DO SITES HAVE SUPPORT FROM SME'S?
 - If yes, how do sites get buy in from SME's to participate in the inspection process?

EQUIPMENT

- Thermal imaging camera
- Tell-tales & calipers
- Tape measure
- Tablet
- Questions:
 - Are any sites using Matterport, iGuide, etc in house?
 - Are there any other tools or equipment that you carry for the inspections?



REPORTING

- Compile report using ArchiSnapper
- Send out for comment in Bluebeam
- Enter WO's for small items
- Enter CAIS IU's for RN, DM & MODS



Field report 1 for project B200 Cooling Tower Condition Assessment

B200 Cooling Tower Condition Assessment B200 Cooling Tower Condition Assessment 200 Bethe Dr Newport News, VA 23606 (US) Report number: 200-CTCA-24-1 Date: January 18 2024

Status

These cooling towers were completed in 2012 as part of the 12GEV upgrade project and they support the Hall D complex. Functionally the cooling towers meet the needs of the end users. They are overseen by Carroll Jones.



FOLLOW-UP QUESTIONS:

- DO SITES HAVE SUPPORT FROM SME'S FOR REPORT REVIEW TO HELP PRIORITIZE RN, DM & MODS?
- IF YOUR SITE DOES FULL REPORTS, HOW DO YOU DISSEMINATE THEM?
- DO MOST SITES WORK ALONG SIDE DOE TO DISCUSS FINDINGS OR DO MOST SITES JUST WORK WITH IN HOUSE TEAM TO PRIORITIZE NEEDS?

THANK YOU

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