

# Emergency Shutoffs for the LAPD Run 2 Located at PC4

For LAPD Run 2 the PC4 enclosure is classified as ODH 0. ODH alarms and smoke detector alarms go to FIRUS and summon the Fire Department. PC4 contains liquid argon and liquid nitrogen such that leaks would create cold vapor that is heavier than air.

## Primary Contacts:

Terry Tope

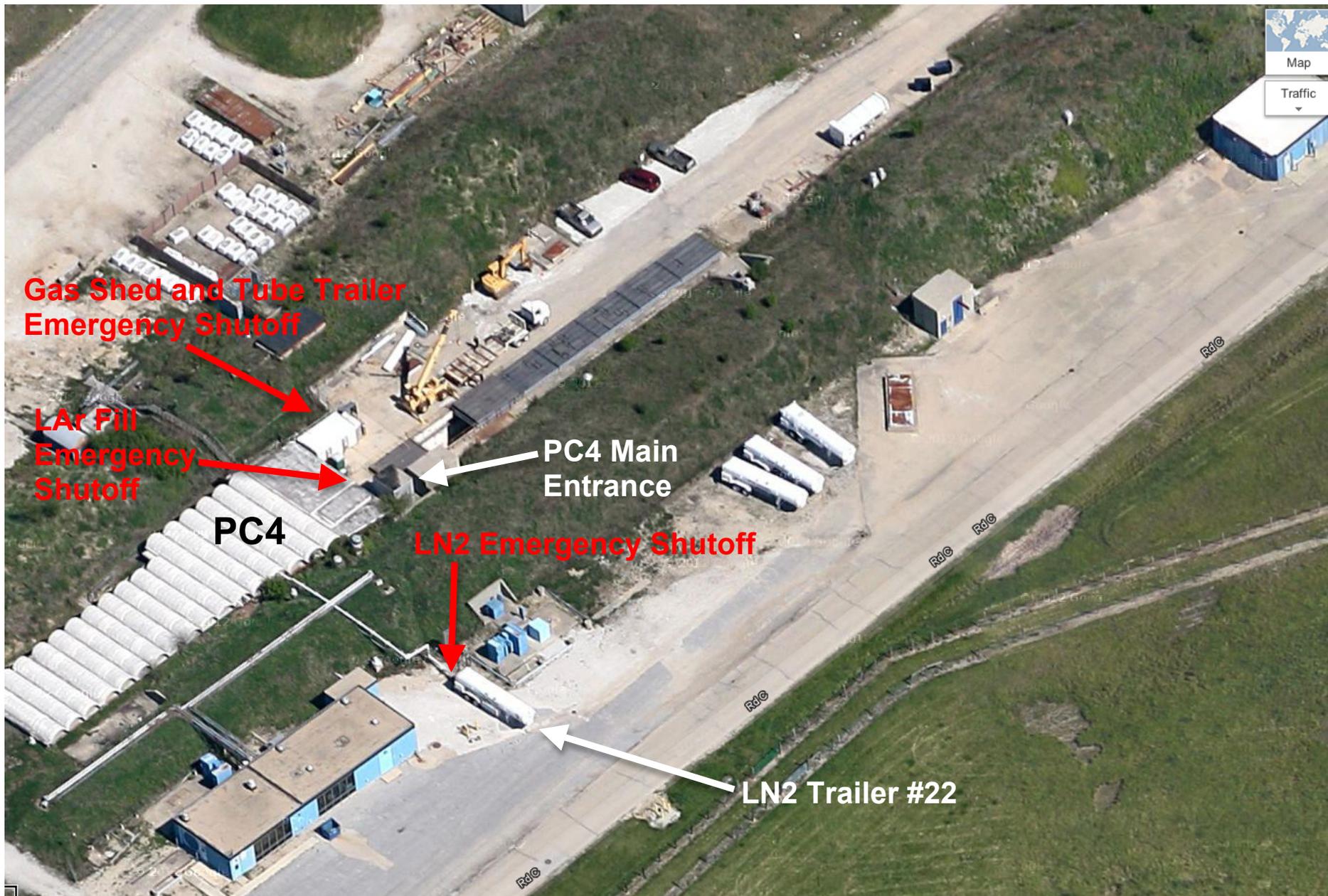
630.730.9021

630.840.2666

Brian Rebel

630.701.8943

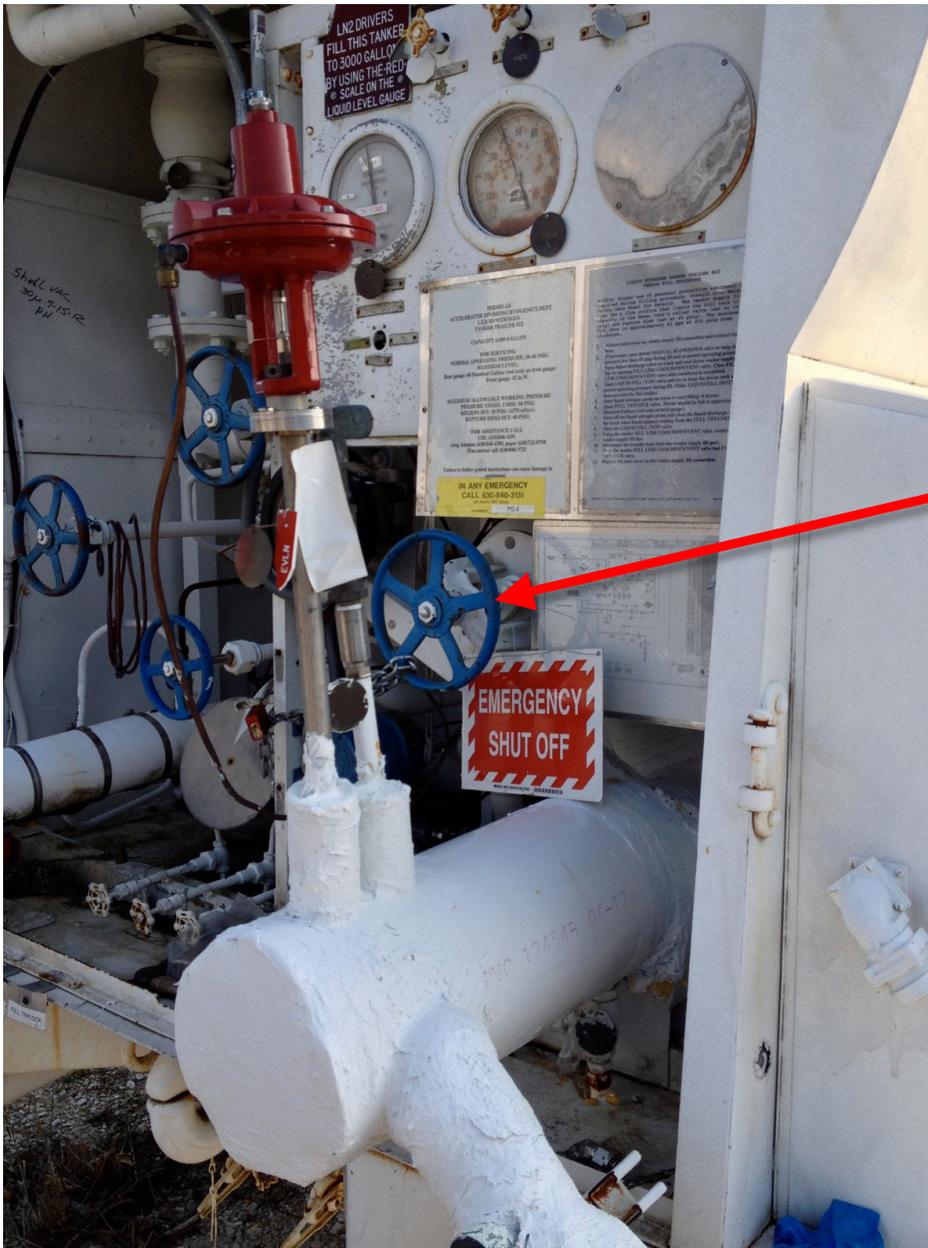
630.840.8226



**PC4 External Emergency Shutoffs**

Liquid Nitrogen Trailer #22 parked next to PS4 on Road C supplies liquid nitrogen to PC4. The liquid nitrogen is piped across the berm. The emergency shut off valve is located at the back of the trailer and shown on the next page.





Close this manual valve located at the back of LN2 Trailer #22 to stop the flow of liquid nitrogen into PC4. This valve is tagged as HV-494.

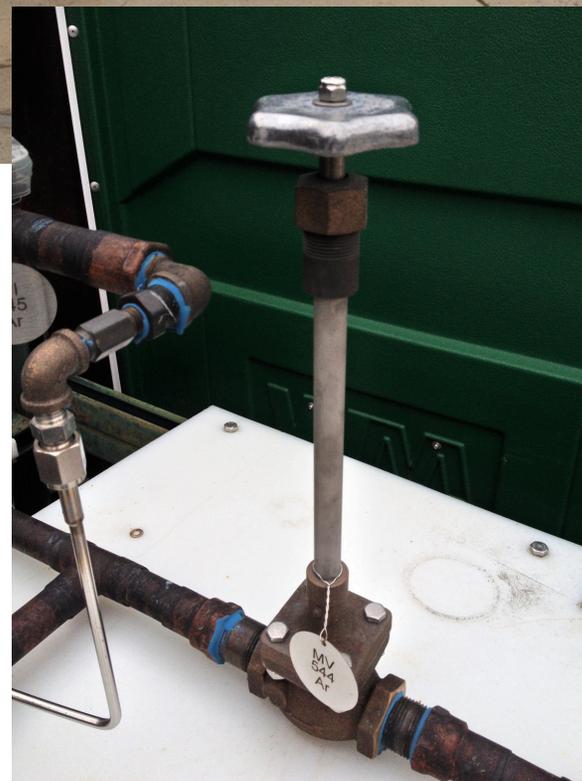


To stop the flow of Argon gas from the gas shed dewars/bottles and non-flammable Argon/Hydrogen mixture from the tube trailer into PC4 close valves MV-230-HAr and MV-238-Ar. These valves are located on the backside of the gas shed and are accessible from the boardwalk.





When a liquid argon supply trailer is connected to the end of the piping, MV-544-Ar is the emergency shutoff to prevent the flow of liquid argon into PC4.





Liquid argon tank liquid withdrawal isolation at the tank southeast corner. Close to stop the flow of liquid argon from the tank to the piping north (downstream) of the tank. This valve is tagged as MV-368-Ar.

Inside PC4



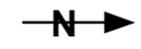
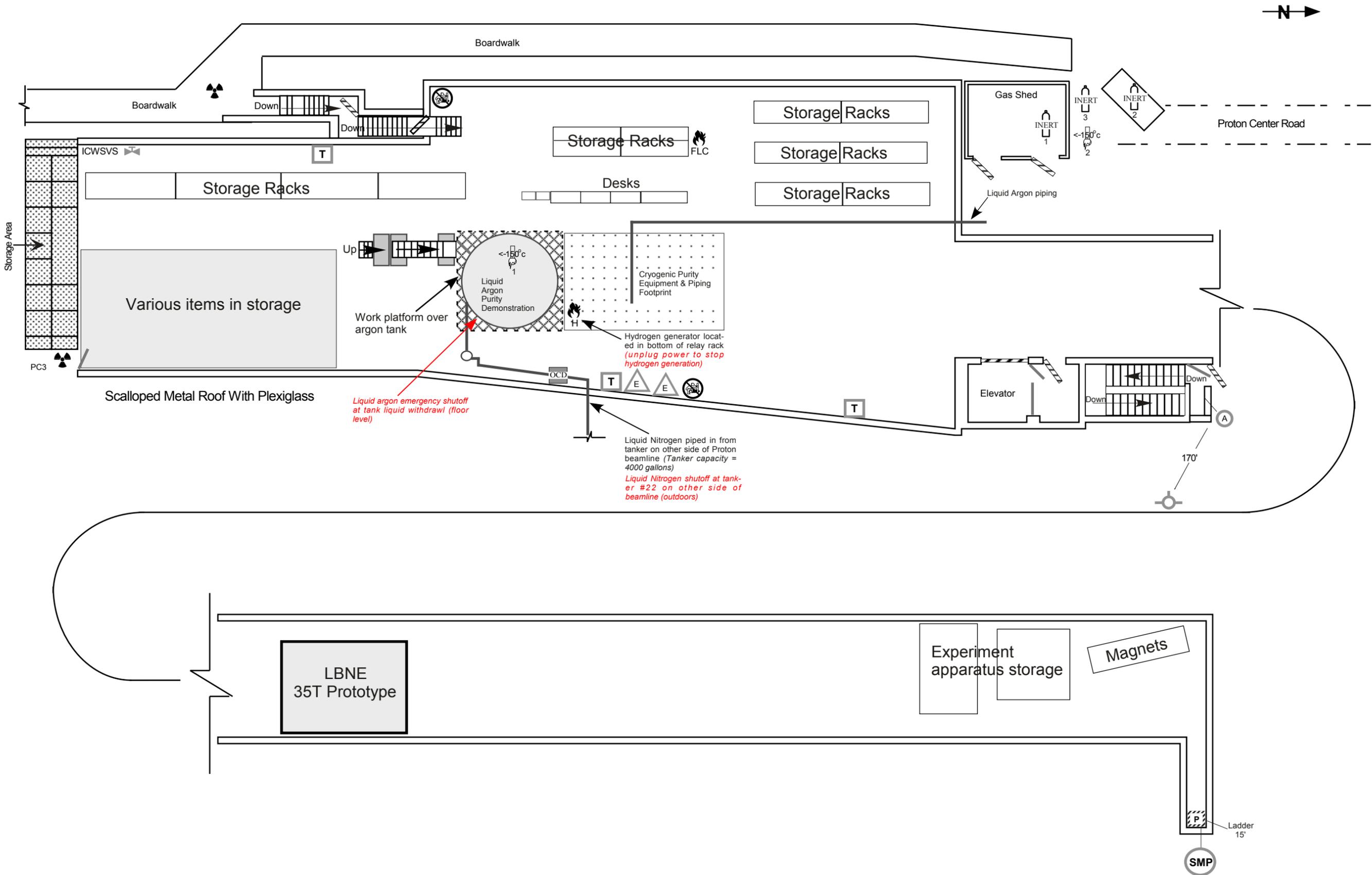
Inside PC4

Hydrogen generator emergency shutoff. Unplug the 120 VAC cord labeled Hydrogen Generator Disconnect. This cord is plugged into the power strip on the side of the relay rack immediately north (downstream) of the liquid argon tank.

The two fixed ODH head readouts are on the west side of the tank at the south end of the desks. Only the two left ODH heads are active for LAPD Run 2.



Inside PC4



**PD / PC4 Enclosure**  
 Hazard Map Page 1 of 1  
 Address (or location)  
 Proton Center Road  
 FIMS no. Occupancy Roof Type  
 701030125 0 Metal  
 SCALE 0 7.5' 15' 1"  
 Overall Dimensions 69' Wx 332' L

**SYMBOL KEY**

	Area Ventilation Control		Gate (oriented in direction of travel)
	Confined Space		Inert Gas Bottle(s)
	Cryogenic Hazard		Overhead Crane Disconnect
	Door (oriented in direction of travel)		Radiological Hazard
	Electrical Panel (480V)		Roof Hatch (personnel)
	Fire Panel		Sump Pit
	Fire Hydrant		Transformer
	Flammable Material		Valve

**HAZARDOUS MATERIALS**

	Argon UN 1006	9 cylinders
	Argon (97.5%)/ Hydrogen (2.5%)	Tube trailer 40,000 scf
	Flammable Liquids Cabinet	
	Hydrogen generator	Makes hydrogen on demand (less than 100 cc/min flow)
	Inert gases, assorted	12 cylinders
	Liquid Argon UN 1951	6500 gallons
	Liquid Argon UN 1951	4-160 liter dewars

Layers shown  
 ■ Structural  
 ■ Hazards