

Notable Event Report (See <u>ES&H Manual Chapter 5200 Appendix T1 Event</u> <u>Investigation and Causal Analysis</u> for Instructions)

#### **Notable Event Report**

Title of Event	Title of Event							
<b>Event Title:</b>	Event Title: Propane Torch Caught Fire Around Bottle Neck, Requiring Use of Fire Extinguisher							
Date and Time Occurrence:	e of	05/31/2016	Notable Event Number:	PHY-16-0531				
Event Locatio	n:	Hall B, Near Entrance	Date Notable Event Report is Due*:	06/30/2016				

\*The Notable Event Report is due to the ESH&Q Reporting Officer with 30 days of the Initial Fact Finding Meeting unless an extension is requested.

Summary of Event and / or Injuries, including Initial Fact Finding Meeting information: determine the chain of events and timeline. Use attachment as necessary.

On May 31, 2016 around 1:30 an employee was attempting to use a hand held propane torch in Hall B when the neck of the tank caught on fire. After attempting to install one Trigger-Start Torch head, he noticed that it was significantly misshapened, and he discarded that one. He grabbed another one and installed the head. Once installed he partially unscrewed the head and tightened it down again. After lighting the propane torch he noticed that the flame was rather small. He then noticed a flame around the neck of the bottle. After several attempts to extinguish the flame, he put down the propane torch and called for assistance.

An employee walking into the area, grabbed a fire extinguisher from the wall and put out the fire.

Notes:

- During the investigation it was noted that they were using MAPP gas instead of propane gas. The manufacturer's instructions state that you should only use propane gas with this torch.
- This particular hand held self-starter torch has been discontinued.

Causal Analysis	Causal Analysis: (Use attachment as necessary)						
Direct Cause:	A4 Management Problem, B1 Management Methods LTA, C09 Corrective actions for previously identified problem or event was not adequate to prevent reoccurrence. (PHY-14-0228). The lessons learned were entered into the database and the event was shared at several meetings. 1690 emails were sent to applicable personnel expressing the need to follow manufactures guidance before using this device. It appears that over time, the lesson learned was diluted and not applied before the use of this device.						
Root Cause:	There was a failure to follow previously identified corrective actions and lesson learned which were to follow manufacturer's guidelines before using the hand held propane torch with Trigger-Start Torch. Specifically the manufacturer's guideline states to attach the torch device and check for leaks with soapy water before igniting the propane torch for use.						
<b>Contributing</b> <b>Causes:</b> (List as many as apply.)	<ul> <li>A2 Equipment Material Problem, B3 Inspection/testing LTA -The incident investigation determined that the cause of the fire was a worn insertion pin on the torch which allowed propane to leak between the bottle and the torch. The manufacturer's instructions states that after the bottle is attached to the torch "With valve closed, without lighting, test all connections with soapy water. If bubbles appear, gas is leaking and the torch must be repaired or replaced.</li> <li>A5 Communication LTA, B4 Verbal Communication LTA, C01 Communication between work groups LTA: Communication between Hall Coordinator and other qualified personnel was LTA Less than adequate. When the employee asked if there was a hot work permit, there was no dialogue or read back</li> </ul>						

For questions or comments regarding this form contact the Technical Point-of-Contact Tina Johnson

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Causal Analysis	Causal Analysis: (Use attachment as necessary)					
	to ensure that the work that was being done matched the permits and the users that are indicated on the permits.					
	A4 Management Problem, B3 Work Organization and Planning LTA, C11 Inadequate work package preparation. The Hot work Permit procedure was not followed entirely. The hot work permit did exist. However it did not cover open flame work nor did it cover this particular worker. The employee failed to follow Hot work processes and procedures which decreased his preparedness for this type of work.					
	A3 Human Performance LTA, B1 Skill Based Error, C04 Infrequently performed steps were performed incorrectly. The employee does not typically perform this type of work. The project is behind schedule and manpower from other areas is being used to supplement the workforce.					
	A3 Human Performance LTA, B1 Skill Based Error, C04 Previous success in use of rule reinforced continued use of rule. Previous experience with this device gave the employee the confidence use the device for the task of softening epoxi.					

Extent of Condition Check			JLab CATS Number		Target Date	Action Owner
All Halls will inspect all Prop and torches for damage and di suspect bottles and torches an back to the Division Safety O Evidence of completion: List from extent of condition	ane bottles iscard any d report fficer. of results	S	NE-2016-			Ed Folts, Bob Sperlazza, Bob May, Paul Collins,
Does this event involve failed equipment?	Y N	V	Is there similar equipment in other areas?	Ŋ	Y N	** If yes, assign extent of condition check to the appropriate DSO(s).

Corrective Action(s)	JLab CATS Number	Target Date	Action Owner
Share the Lessons learned from this event within the local and DOE Lessons Learned Databases. Evidence of Completion: Snap shot of the entry in the database.	NE-2016-12-01	06/30/2016	Tina Johnson/ Mary Jo Bailey
Torches that do not have factory labels for the type of gas to be use will be discard and replaced with ones that do Evidence of completion: Picture of the items with labels.	NE-2016-12-01	09/09/2016	Ed Folts
Provide a punchlist of items to do before using a propane torch. This punchlist should be posted on the cabinets where the items are stored within the hall	NE-2016-12-01	09/09/2016	Ed Folts

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Corrective Action(s)	JLab CATS Number	Target Date	Action Owner
Evidence of completion: Pictures of the cabinets with signs posted			
Conduct meetings in each of the halls to share this event and the expectations for the future handling of such devices.	NE-2016-12-01	09/09/2016	Ed Folts
Evidence of completion: Powerpoint			

Lessons Learned (Confer with Lessons Learned Coordinator) (Use attachment as necessary)	<u>Lessons</u> <u>Learned</u> <u>Number</u>
Although you may be semi familiar with a piece equipment (use it at home from time to time), you should consider investing a few extra minutes into re-familiarizing yourself with that equipment and recommended uses of the equipment before using it.	958

Witness Accounts: (Use attachments as necessary. Box will expand as necessary)



Records, Documents, Pictures, and Other References: (Copy and paste, use attachments or document links as necessary)

### Hall-B Fire Incident Fire Protection Narrative May 31, 2016 Final Version Tim Minga/Fire Protection

On May 31, 2016 at 13:33 hours, Calvin Mealer from Hall-B made contact with this office to report a small fire that had just occurred in Hall-B.

At 13:40 hours, this investigator attempted to make contact with Mr. Mealer by cell phone without success.

At 13:45 hours, this investigator did make contact with Doug Tilles to determine the extent of the fire. Mr. Tilles advised a small propane cylinder with torch head attached caught fire while trying to ignite it. The fire was out and both torch and cylinder would be outside the truck access door for examination.

At 13:46 hours, this investigator made contact with (DSO) Ed Folts to advise there was a small fire in Hall-B. Mr. Folts advised he would meet me on scene.

At 14:00 hours, this investigator arrived on scene and meet up with Ed Folts to start a preliminary investigation.

At 14:10 hours, this investigator interviewed Dave Kashy (torch operator) to determine what happened to cause the fire. Mr. Kashy advised he removed a small propane cylinder from the storage bin located on the south wall of Hall-B. He attempted to attach the torch head and realized the head was old and needed replacing. He threw the torch head into the trash can. Mr. Kashy retrieved another torch head and screwed it onto the cylinder. At this time, he attempted to light the torch before using it on a job he had on the second level. Once the torch ignited, flames came out from around the threads of the cylinder. Mr. Kashy then dropped the cylinder on the floor. At this time, Mr. Elliott Smythe entered the hall through the labyrinth entrance and saw the fire. He immediately retrieved a dry chemical extinguisher and extinguished the fire.

At 14:24 hours, this investigator attempted to contact ESH&Q without success.

At 14:30 hours, this investigator spoke with Calvin Mealer concerning his active Hot Work Permit. After reviewing the permit, it was determined the permit was for Tig welding and grinding only, not for propane torch work. I advised all pertinent individuals in Hall-B that in the future to request hot work permits for all types of work that may be needed. Further investigation revealed that Mr. Kasy was not listed on the hot work permit as a hot work operator and did not perform the responsible duties of a hot work operator as listed in ES&H Manual 6900 Appendix T1, Section 3.1. Therefore, he was not authorized to perform hot work in Hall-B.

At 14:35 hours, Mr. Folts and I contacted Jennifer Williams (IH) to determine the most appropriate way to clean up the discharged dry chemical extinguisher agent that was discharged. She advised HEPA vacuum with hooded respirator. Calvin Mealer was tasked with cleaning up the agent.

At 14:40 hours, it was determined that the propane cylinder and torch would be packaged as evidence and stored in the CMSA's flammable locker. See Jennifer Williams for access to this locker. Photographs were taken of the cylinder and torch head for further investigation.

At 14:45 hours, this investigator left the scene.

Further investigation needs to be conducted to determine if the Teflon seal in the cylinder or the cork washer in the torch head were damaged before use. It appeared one of the two failed.

On June 2, 2016 at 15:00 hours, this investigator retrieved the propane cylinder and torch head from storage. I screwed the torch head onto the cylinder until it bottomed out. Sprayed soapy water where the torch meets the cylinder and observed a significant leak. I removed the torch head and examined the Teflon seal and rubber O-ring in the cylinder. The Teflon seal appeared to be intact, although the rubber O-ring showed signs of wear.

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**Records, Documents, Pictures, and Other References:** (Copy and paste, use attachments or document links as necessary)

On June 3, 2016 at 09:00 hours, to eliminate the cylinder as the cause of the fire, I attached the torch head to a new cylinder and it leaked as well. I spoke with the manufacturer and they advised the torch head in question (Benzomatic TS300) has been discontinued since 2012. We also discussed what could have caused the gas to leak by and cause the fire. Their representative suggested thorough examination of the torch stem for scaring and the possibility of it being bent. This investigator took the stem to our machine shop to determine if the stem was bent or scared. It was determined the stem had a heavy scar which caused the soft brass stem to develop a ridge buildup preventing the stem from sealing with the O-ring in the cylinder. Therefore, this investigator has determined the scared torch stem to be the cause of the fire. It also needs to be mentioned that because of the success of the Combustible Loading Program, the fire was limited to the immediate area on the floor where the cylinder and torch was dropped. The fire did not spread outside the area of origin. See pics provided of scarring of the stem.

### Statement from Elliott Smythe



### Hi Tina,

On Tuesday May 31, 2016 at approximately 1330 Joshua Tomason and myself was entering Hall B to retrieve a turbo pump and a laptop. Upon entering the hall we notice Dave Kashy yelling for help and a hand held torch was on fire on the floor near the entrance of the hall. Several fire extinguishers were mounted on a board in front of the entrance to the hall.I grab a fire extinguisher and put the fire out.

Elliott Smythe



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A DAMESH  This torch is used with a flammable product, failure to comply with these Warnings and Instructions may result are acploador on the flut may cause properly damage, serious personal injury of death.  Read and comply with the instructions and warnings periodically to maintain awareness. Do not ty to operate before reading instructions.  Tarbes are to be used with program only. Use only with Hand Heid Propane Cylinders specifically designed for use with tarbes. (D) T-39 or TC-39M (cylinders) <b>A WARNINE</b> Methods used in the compluction of the device may contain leads, a chemical known and the complexity of the complexity of the instructions on the State of California to cause cancer, this deeds, of the reproduction larm, and the complexity of the complexity with these Warnings and Instructions to cause cancer, this deeds, of the reproduction larm, and the complexity of the complexity of the complexity of the instructions.  A weak the complexity of the complexity of the device may contain chemicals known to the State of California to cause cancer, this deeds, of entry errordschen larm, and the complexity of the broch is the reproduction larm, and the complexity of the broch is the reproduction larm, and the complexity of the broch is the reproduction larm, and the complexity of the broch is the complexity of the trans in the device may contain chemicals known to the State of California to cause cancer, the trans and expressive of the result of the device of the trans of the indexity of the trans.  With the system with the trans at the complexity of the trans in the device may contain the analysis of the trans of the indexity of the trans.  With the system with the toris result of the device may contain the device may contain the system with the device may contain the device may	A Bernz <b>om</b> atic	INSTRUCTION MANUAL Trigger-Start Torch Model: TS3000
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Keep brich out of reach of children and anyone who has not read instructions. Do not point broch bawards face, other persons or frammable clipics. Never attempts to use brich as a cliparelle lightic:     Boconrect Opinder when not not use.     Here attempt to modify the tool contributions on summy or windy days. Bright aun makes it impossible to see the borch's flame.     Word many carry the brich's hout back bawards you or driver areas not intended to be headed. Windy conditions may also cause systems to be blown into other areas will controls the induction of drop, throw, or otherwise abuse.     Do not use a leaking, damaged or matinuction to drop, throw, or otherwise abuse.     Do not use a leaking damaged or matinucting to ch.     The attribe thore you would areas will be conducted to adjoining surfaces that may be combustible or become pressurized when heated. Always check to make sure no unintended parts or materials are being heated.     Work only in well-writided areas. How the formation the form store throw, throw the second to the beated by fling or another well-well and the duals.     Work only in well-writided areas throm thus, each acade part in the lot or instructed parts or materials are being heated.     Work only in well-writided areas for materials are being heated.     Work only in well-writided areas active the function of adjoining surfaces that may be combustible or become pressurized when heated. Always check to make sure no unintended parts or materials are being heated.     Work only in well-writided areas active the function of adjoining surfaces that may be combustible and each acade part in bracks.     Be aware that the tip of the tork charge approximation and galvanized metal- remove these coatings in the area to be heated by fling or another and part behaved to be adjoining use face analysis to any adjointed to the store and adjointed to the store and adjointed to a discling the order and the material.     Never leave that the tip of the tork charge approximation durin unot ve	Materials used in the cor to the State of California     Combustion by-products cause cancer, birth defer	struction of this device may contain brass (which may contain lead), a chemical known to cause birth defects or other reproductive harm. produced when using this device contain chemicals known to the State of California to ts, or other reproductive harm.
200 Old Wilson Bridge Road Columbus, OH USA 43085 06/24/15 (866) 928-2657 worthingtoncylinders.com I bernzomatic.com	<ul> <li>Trainmable objects. Never:</li> <li>Disconnect cylinder when</li> <li>Never attempt to modify the usin when usin when the torch's sparks to be blown into ot</li> <li>Treat the torch as you wou</li> <li>Do not use a leaking, damn</li> <li>Radiant energy can harm i operation as indicated, bra heavy welding (5-8).</li> <li>Never use torch to strip pa</li> <li>Heating a surface may can heated. Always check to m</li> <li>Work only in well-ventilate especially careful to avoid by filing or sanding prior to</li> <li>Always ware safety glasses</li> <li>Be avare that the tip of th accidental burns.</li> <li>Never use torch or or in beware of hidden fuel line:</li> <li>Always make certain the tip over. Be sure the torch on or in beware of hidden fuel line:</li> <li>Always make certain the tip over. Be sure the torch and in the</li></ul>	Ittempt to use torch as a cigarette lighter. In the use. If the torch construction and Never use unapproved accessories or fuels. g the torch outdoors on summy or windy days. Bright sum makes it impossible to see the torch's flame. I heat back towards you or other areas not intended to be heated. Windy conditions may also cause er areas with combustible materials. Ig d any fine tool or instrument. Do not drop, throw, or otherwise abuse. Ig dor maffunctioning torch. our eyes. Wear goggles having ANSI 287.12979 shade lens number appropriate to the torch zing and light cutting (3 or 4), medium cutting and light welding (4 or 5), heavy cutting and medium/ int. se heat to be conducted to adjoining surfaces that may be combustible or become pressurized when alse sure no unifnended parts or materials are being heated. d areas. Avoid the furmes from fluxes, lead-based paint, and all metal heating operations. Be turnes from cadmium plating and galvanized metal- remove these coatings in the area to be heated heating. skin or eyes. s, protective gloves and use proper bols to handle hot work. e torch can get extremely hot during use. Take precautions to protect yourself and others from rear combustibles. Be especially careful around motor vehicles or any gasoline-fired products and s not pointed in a direction which could cause nearby objects to ignite when the torch is set down. Ended when it. heat agasoline tank, a chemical drum an aerosol can, a compressed gas container that held any other chemical. Heating these is extremely dangerous, especially after they have been
		200 Old Wilson Bridge Road Columbus, OH USA 43085 06/24/15 (866) 928-2657 worthingtoncylinders.com I bernzomatic.com

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Interview       Josh Foyles/Calvin Mealer       Cell Phone:         Js Fire Watch Required? (IT "Fire" line name below)       x       X       YIS       N         Fire Watch Required? (IT "Fire" line name below)       x       YIS       N         Fire Watch Required? (IT "Fire" line name below)       x       YIS       N         Fire Watch Required? (IT "Fire" line name below)       If P10/28/15-AB10/28/15-TE2/24/16-MC7/26/16       MC7/26/16         Image: Second	Sta De Gr	ert Date: 05/03/2016 End scribe Hot Work to be performed: inding and TIG welding	Date: 05/31/2016 Building:	Hall B		Area: Sp	ace frame	
Fire Watch Name:         Jeff Price/Adam Bradshaw/Todd Ewing/Morga Cook/           SAF 108, or equivalent, Date Last Acquired:         IP10/23/15-AB10/28/15-TE2/24/16- MC7/26/16           INSPECTION CHECKLIST         CONSIDERATIONS (IT "YES" additional work control documents may be majored).           y         Sprinkler and fire alarm system(x) are operational.         y           y         Hor work control documents in satisfactory operating condition and in good received.         y           n         All flammable, combustible materials have been reducated at least 358 (11 m) away from proposed work area or property protected.         y           y         Potentially affected hazardnus processes have been reducted safe (rivogenics, electrical, games, etc.)? Note below:         y           Hazard         Control         Y           Flammable within 35'         Fire retardsant cloth and a fire watch         Y           Location of the seared fire alarm splating fire extinguisher provided         ABC		and the second	Is Fire Watch Required	tor to	Josh Foyles/Calv	in Mealer	Cell Phone:	N
SAF 198, or equivalent, Date Last Acquired:         JP10/28/15-AB10/28/15-TE2/24/16- MC7/26/16           INSPECTION CHECKLIST         CONSIDERATIONS OF "YES" additional work control documents may be required.           y         Sprinkler and fire alarm system(s) are operational.         y         Porentially affected persons notified.         Does the proposed work anvolve Prematized Systems           n         All flammable, combustible materials have been reducated at least 350 (11 m) away from proposed work area or property prosecul.         y         Vockies have proper Personal Protection Equipment.         Radioactive Materials           y         Potentially affected hazardous processes have been reducted safe (cryogenics, reterical, gases, etc.)? Note below:         Hazard         Y         Area has adequain ventilation.         Hazardous Chemicals           Flammable within 35°         Fire retardant cloth and a fire watch         Fire retardant cloth and a fire watch         Type of fire extinguisher provided         ABC           Location of the iteared fire alarm pull station:         By stairs down           Location of the iteared building fire extinguisher.         By stairs down			Fire Watch Name:			Jeff Price/Ada Cook/	n Bradshaw/Todd Ewing/M	organ
Image: Network         Displection         Consumation         Consumation         Consumation         Consumation         Construction         Pressure of the proposed work involve         Pressure of the proposed work i			SAF 108, or equivalent,	Date La	ant Acquired:	JP10	/28/15-AB10/28/15-TE2/24	16-
INSPECTION CHECKLIST       CONSIDERATIONS (If "YES" additional work commit documents may be required).         y       Sprinkler and fire alarm system(s) are operational.       y       y       Potentially affected persons notified.       Does the proposed work involve require         n       All flammable, combustible materials have been relevand at least 359 (11 m) away from proposed work area or properly protected.       y       Weekers have proper Personal Protection       Radioactive Materials         y       Potentially affected hazardous processes have been relevand.       y       Weekers have proper Personal Protection       Radioactive Materials         y       Potentially affected hazardous processes have been rendered safe (crytogenics, relevance)       y       Area has idequare ventilation.       Hazardous Obernicals         Flammable within 35'       Fire retardiant cloth and a fire watch       Type of fire extinguisher provided:       ABC         Location of the isaarest fire alarm pull station:       By stairs down         Location of nearest building fire extinguisher.       By stairs down	늗			_		MC	12030	=
y       Sprinkler and fire alarm systemic) are operational.       y       Potentially affected persons notified.       Does the proposed work involve requirement to be used is in satisfactory operating condition and in good requirement.       y       Potentially affected persons notified.       Does the proposed work involve requirement.         n       All flammable, combustible materials have been relocated at least 350 (11 m) away from proposed work area or properly protected.       y       Workers have proper Personal Protection.       Radioactive Maturials         y       Potentially affected haracdous processes have been relocated at least 350 (11 m) away from proposed work area or properly protected.       y       Workers have proper Personal Protection.       Radioactive Maturials         y       Potentially affected haracdous processes have been rendered safe (cryogenics, effective), gases, on.)? Note below.       y       Area has adequate ventilation.       Hazardous Obernicals         Flammable within 35'       Fire retardiant cloth and a fire witch       Fire extanguisher provided:       ABC         Location of the nearest fire alarm pull station:       By stairs down         Location of nearest building fire extinguisher.       By stairs down		INSPECTION	CHECKLIST		OF YES" add	CONSIDERA tomal work control	TIONS documents may be required).	
y     Hot work equipment to be used is in satisfactory operating condition and in good     Presented periods position     Presented Systems       n     All flammable, combustible materials have been relevand at least 350 (11 m) away from proposed work area or property protected.     y     Workers have proper Personal Protected Position     Radinactive Materials       y     Presentially affected harandous processes have been rendered safe (cryogenics, electrical, gases, cs.)?     y     Area has adequate ventilation.     Hazard     Hazard     Hazard     Hazard     Hazard     Hazard     Hazard     By stairs down       Flammable within 35°     Fire retardant cloth and a fire watch     Fire started fire alarm path station.     By stairs down       Location of the searest fire alarm path station.     By stairs down	y	Sprinkler and fire alarm system(s) are	operational.	y.	Presentially affected	errore erified	Does the proposed work in-	obe
n     All flammable, combusible materials have been relocated at least 35ft (11 m) away from proposed work area or properly protected.     y     Workers have proper Personal Protection. Equipment.     Radioactive Materials       y     Potentially affected hazardous processes have been rendered safe (cryogenics, electrical, gases, elec.)? Note below:     y     Area has adequate ventilation.     Hazardous Chemicals       y     Potentially affected hazardous processes have been rendered safe (cryogenics, electrical, gases, elec.)? Note below:     Y     Area has adequate ventilation.     Hazardous Chemicals       Flammable within 35'     Fire retardant cloth and a fire watch     Type of fire extinguisher provided:     ABC       Location of the searest fire alarm pull station:     By stairs down	y	Hot work equipment to be used is in a repair	atisfactory operating condition and in good		Potentiality intered	persons noonica.	Pressurized Systems	1
y     Presentially affected hazardous processes have been rendered safe (cryogenics, decrifical, gases, etc.)? Note below:     y     Area has adequate ventilation:     Hazardous Chemicals       Hazard       File manable within 35°     Fire retardant cloth and a fire watch       Type of fire extinguisher provided:       Location of the nearest fire alarm pull station:       By stairs down	n	All flammable, combustible materials away from proposed work area or pro-	have been relocated at least 35ft (11 m) perly protocated.	y	Workers have propy Equipment.	er Personal Protactio	m Radioactivo Materials	
Hazard         Control         FIRE SYSTEM SAFETY           Flammable within 35°         Fire retardant cloth and a fire watch         Type of fire extinguisher provided:         ABC           Location of the nearest fire alarm path station:         By stairs down         Location of nearest building fire extinguisher.         By stairs down	y	Potentially affected hazardous process electrical, pases, etc.y7. Note below:	ses have been rendered safe (cryogenics,	8	Area has adequate v	ventilation.	Hazardous Chemicals	
Flammable within 35°         Fire retardant cloth and a fire watch         Type of fire extinguisher provided:         ABC           Location of the nearest fire alarm pull station:         By stairs down           Location of nearest building fire extinguisher:         By stairs down		Harard	Control			FIRE SYSTEM	( SAFETY	
Location of the nearest fire alarm pull station:         By stairs down           Location of nearest building fire extinguisher:         By stairs down	Flar	mmable within 35'	Fire retardant cloth and a fire watch	Type	of fire extinguisher pr	ovidest: ABC		
Location of nearest building fire extinguisher: By stairs down				Locat	ion of the searest fire	alarm platt station:	By stairs down	
			and the second second	Locat	ion of nearest building	g fire extinguisher:	By stairs down	
	<u> </u>			1				-
	2	- in the state of			- Andrew			



Records, Documents, Pictures, and Other References: (Copy and paste, use attachments or document links as necessary)



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## **Notable Event Report**

Emergency Notifications Made (Subsequent to the Event):	Date	Time
Fire, Rescue & Emergency Medical: (9-911)		
Guard Post: x5822; 269-5822		
Occupational Medicine 269-7539		
ESH&Q Reporting Officer: 876-1750	05/31/2016	~1400
Crew Chief 630-7050		
Industrial Hygiene: 269-7863:		
Other:	06/01/2016	~1600

<b>Confirmation Review Distribution:</b>	It is asked that you review and provide comments to this document to the Lead
Investigation Team Members	Investigator (denoted on Page 1) within days. Your comments will be
Affected Division Managers	reviewed and incorporated as appropriate. Thank you for your consideration in
ESH&Q Reporting Officer	this matter.

#### Investigation Team Confirmation:

The below signees, confirm to the best of their knowledge, that the information presented in this document is accurate and complete.

Role	Print		Signature	Date
Lead Investigator	Ed Folts	Ê	Jak	7/25/16
ES&H	Tina Johnson	())118	idolan	7/29/16
SME	Tim Minga	Tai	Alea	8/2/16
			17	//
	Ace	ceptance/Acknowledgement of	Facts	
		Print	Signature	Date:
Associate Director/ I	Department Manger	Rifet	14	08/02/16

Upon confirmation submit document to the ES&H Reporting Officer for completion and distribution.						
Documentation of Findings: (To be Completed by ESH&Q Reporting Officer)						
Notable Event Number:	PHY-16-0531					
CATS Number:	NE-2016 - 12 -0 1					
Lessons Learned Number:	958					
ORPS Number:	N/A					
NTS Number:	N/A					
CAIRS Entry:	N A.					
DOE Cause Code:	AY Mgmt Problem BI Mgmt Methods LTA, COLE Previous industry.					

For questions or comments regarding this form contact the Technical Point-of-Contact Tine Johnson CLD. WOU NOT USECL to Page This document is controlled as an on line file. It may be printed but the print copy is not a controlled document. It is the user's responsibility to ensure that the document is 12 of 17 the same revision as the current on line file. This copy was printed on 7/25/2016.



	A4 Mgmt. Problem, B1 Mgmt. Methods LTA, C06 Previous Industry Exp. Was not used to
<b>DOE Cause Code:</b>	prevent re-occurrence.
ISM Code:	Perform Work Within Controls

#### Unless otherwise specified the following is to be completed by the **Lead Investigator**.

Step 1 Initial Fact-Finding Meeting (To be held as soon as reasonably possible following event(within 24 hours))									
Date:	06/02/2016	Time:	2:00 pm			Location:	CC F228		
Requ	ired Attendees: (Pr	rint Name	)		Optional Attendees: (Print Name) Present				
Lead Investigator:	Tina Johnson				Associat Director	e ::	Rolf Ent	Notified	
ESH&Q Representative	Tina Johnson				TJSO O	bserver:	Steve Neilson		
Supervisor of involved persons(s):					<b><u>Subject Matter Expert</u>(s), Facility/Equipment Owner as applicable:</b>				
Involved or im	Involved or impacted person(s): Dave Kashy				Tim Min	iga			
Witness(es):	Calvin Mealer								
	Elliott Smythe- Inv	ited							

Agenda (Ensure the pace of the meeting allows time for accurate note taking.)	√if Complete
1. Introduction – Provide Event Title, Date and Time of Occurrence, and Location:	$\checkmark$
2. Attendance - Are Required Attendees present.	$\checkmark$
3. Purpose of Initial Fact-Finding meeting.	$\checkmark$
4. Event Reconstruction – Use information to complete Section 3. <u>Summary of Event and/or Injuries</u> below.	$\checkmark$
a. Personnel and organizations involved in the event.	$\checkmark$
b. Conditions and actions preceding the event.	$\checkmark$
c. Chronology (timeline) of the event; and	$\checkmark$
d. Immediate actions taken in response to the event.	√
5. Clarify information – <u>Subject-Matter Expert</u> (SME) confirms work conditions.	$\checkmark$
6. <u>Stop Work</u> or the <u>Tag Out</u> Required? If "Yes" – establish the restart criteria and inform the affected Management chain.	N/A
7. Compensatory Actions Required? If "Yes" determine responsibility and include confirmation documentation.	N/A
8. Records or documentation required to confirm, clarify, or complete information (i.e., work plans, work control documents, photos, etc).	$\checkmark$
9. Other Questions or Concerns: Ask attendees if there are any other questions, concerns, or information that they wish to provide.	$\checkmark$
10. Obtain TJSO Observer feedback on conduct of fact finding meeting and potential improvements.	

For questions or comments regarding this form contact the Technical Point-of-Contact Tina Johnson

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Jefferson Lab

## **Notable Event Worksheet**

Step 2 Investigation Team:	Date Convened: (Within 24 hours of Fact Finding Meeting.)	06/06/2016		
Role	Name	Department/Group	Phone	
Lead Investigator	Tina Johnson	ESH&Q	7611	
DSO	Ed Folts	Physics	7857	
SME	Tim Minga	FM&L	7310	
TJSO Observer	Steve Neilson- Invited	TJSO	7215	

Environmental Aspects				
Type of Material Released:	Quantity:			
Source:	Time Flow was Halted or Controlled:			
For Investigation	<b>Team</b> (√ All That Apply):			
Reportable Quantity Impact Ground/Soil	Storm Water Channel/Drain Sanitary Sewer			

C	Categorization and Report To be completed by ESH	rting &O Repor	ting Officer within t	two hours – unle	ss essential	information is still pending)				
Č	ORPS Determination:	Date:	06/03/2016		Time:	0921				
0	6/03	_								
e	ORPS/NTS Determination: PHY-16-0531 Propane Torch Caught Fire Near Around the Neck, Requiring Use of Fire Extinguisher									
	From: Tina Johnson									
	To: Steve Neilson									
	Cc: Ed	Folts Ma	ary Logue							
	Steve,									
	As you know, on May 31, 2016 around 1:30 an employee was attempting to use a hand held propane torch in Hall B when the neck of the tank caught on fire. After attempting to install one self lighting heads, he noticed that it was significantly misshaped, and he discarded that one. He grabbed another one and installed the head. Once installed he partially unscrewed the head and tightened it down again. He attempted to test light the propane torch, and he noticed that the flame was rather small. He then noticed a flame around the neck of the bottle. After several attempts to extinguish the flame, he put down the propane torch and called for assistance.									
	An employee walking into the area, grabbed a fire extinguisher from the wall and put out the fire.									
	The Lab has determined that this is not ORPS/NTS reportable at this time and will process this event as a notable event and DOE Lessons Learned.									
	If you have any questions or concerns about this matter, feel free to contact me.									
	 Tina Johnson Reporting Officer/ Staff Administrator I									
1	0 CFR 851 Screen:	Date:	06/03/2016		Time:	0921				
N	Jegative: This event do	es not me	et the voluntary cr	iteria as a discr	eet progra	mmatic weakness.				



#### **Final Distribution**:

ES&H Reporting Officer (Original) Associate Director/Department Manager <u>Division Safety Officer</u> Investigation Team Members ESH&O Liaisons

ESH&Q Liai	sons							
Form Revision Summary								
Revision	$1.6 - 02/22/16 - \mathrm{U}_{I}$	dated form to reflect extent	of condition ensuring it o	covers failed equipme	ent per M	ЪА		
Revision	1.5 - 10/04/13 - Ch	anged COE to Lessons Lear	ned; updated links.					
Revision	1.4 - 09/06/12 - Qu	alifying Periodic Review. C	larification of content on	ly.				
Revision	$1.3 - 01/31/12 - U_{I}$	dated ESH&Q Reporting Of	ficer assignment from S	.Smith to C.Johnson	per M.Lo	gue		
	Ec	lited to clarify process steps.						
Revision	$1.2 - 10/20/11 - U_{II}$	dated ESH&Q Reporting Of	ficer assignment from J.	Kelly to S.Smith per	M.Logue			
Revision	1.1 - 05/24/11 - Ed	lited to clarify process steps.						
Revision	$1.0 - 11/23/10 - U_{\rm I}$	dated to reflect current labor	atory operations.					
FORM TECHNICAL								
ISSUI	NG AUTHORITY	POINT-OF-CONTACT	APPROVAL DATE	<b>REVIEW DATE</b>	REV.			
ES	H&Q Division	Tina Johnson	02/22/16	02/22/19	1.6			
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