Cooley, James

From: Hoffman, Kathy <KHoffman@sterigenics.com>

Sent: Friday, August 30, 2019 6:16 PM

To: Cooley, James

Subject: Sterigenics Atlanta Facility - Requested Reports

Attachments: REDACTED - 180402 Release_Redacted.pdf; REDACTED - 180710 Injury

Release_Redacted.pdf; REDACTED - 180717 LEL Evac_Redacted.pdf; REDACTED - 190410

GC Evac_Redacted.pdf; REDACTED - 190731 Area Evac_Redacted.pdf; REDACTED - 150203 Area Evac_Redacted.pdf; REDACTED - 151111 Area Evac_Redacted.pdf; REDACTED - 170131 Area

Evac_Redacted.pdf; REDACTED - 170611 Area Evac_Redacted.pdf

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Jim:

As requested, attached are the redacted incident investigations for the EO Release Incidents from the past 5 years.

Sincerely, Kathy

Kathleen Hoffman

Senior Vice President - Global Environmental, Health & Safety and Technical Services Sterigenics, A Sotera Health Company 2015 Spring Road, Suite 650 Oak Brook, IL 60523

Office: 630.928.1758 khoffman@sterigenics.com



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EHS Management

MSDS/Chemical Management

Home

Add New

Monitor

Admin

Incident (CLOSED)

Reopen Incident

IN-20180402-002

Leak/Spill/Release, LEL/GC/Evacuation

First Report

Area evacuation (SRI port #6 read 240.3 ppm).

Investigation

Corrective Actions

Attachments

Email Notifications

Audit Trail

Description

DESCRIPTION

On 02-April-2018 @ 9:05am est, SRI port #6 detected rogue levels in the area reading 240ppm. Maintenance / Operations donn the proper PPE and handhelds and began surveying the area and found levels near the exhaust pipe for the booster pump for chamber 10. The chamber was then stopped. Maintenance went to investigate and when the piping was touched, it detached Maintenance completed the repair before the chamber was allowed to complete the after vacuum phase. Initial review by EHS

What

Injury Occupational Illness Explosion

Emission Control Upset Radiation Safety Event

Non Work-Related Injury

Leak/Spill/Release

Motor Vehicle Accident Property Damage

Radiation Exposure

Powered Industrial Truck EO/Chemical/Hazardous

Security LEL/GC/Evacuation

Exposure

LEL/GC/Evacuation Additional Information

METER READING

240.30

ppm

AREA EVACUATED

Area

Where

LOCATION OF INCIDENT

Atlanta

Sterigenics / EO U.S/Canada

TECHNOLOGY

ΕO

OCCURRED ON COMPANY PREMISES?

Yes

SPECIFIC LOCATION OF OCCURRENCE

Chamber Area

When

DATE OF OCCURRENCE

2018-04-02

TIME OF OCCURRENCE

9:05 AM

EHS Management MSDS/Cher**With O**nagement Massan Involvedid New Monitor Admin Incident (CLOSED) Reopen Incident RELATIONSHIP OF PERSON INVOLVED Employee IN-20180402-002 Leak/Spill/Release, LEL/GC/Evacuation SUPERVISOR OF PERSON INVOLVED First Report DATE SHIFT BEGAN Investigation 2018-04-02 Corrective Actions TIME SHIFT BEGAN Attachments 7:00 AM **Email Notifications** Audit Trail Witnesses WITNESS RELATIONSHIP OF WITNESS Employee **Internal Reporting** REPORTED BY DATE REPORTED 2018-04-02 **Follow Up Responsibilities** RESPONSIBLE FOR INCIDENT INVESTIGATION

First Report

IN-20180710-001

Description

Title

Chamber Deflagration

Description

Employee was loading the first pallet into chamber 7 and upon backing out of

chamber, there was a chamber deflagration

What

Injury Explosion

Where

Location of Incident

Sterigenics / EO U.S/Canada /

Technology

EO

Occurred on

Company Premises?

Yes

Atlanta

Specific Location of Occurrence

Chamber 7 located in chamber

room

When

Date of Occurrence

2018-07-10

Time of Occurrence

3:11 AM

Who

Person Involved



Relationship of Person Involved **Employee**

Supervisor of Person Involved

Date Shift Began

2018-07-10

Time Shift Began

7:00 PM

Witnesses

Witness



Relationship of Witness

Employee

Internal Reporting

Reported By

Daryl Mosby

Date Reported

2018-07-16

Follow Up Responsibilities

Responsible For Incident

Daryl Mosby

Investigation

Investigation

Investigation Team

Team



Event Details

Task or Activity at Employee was backing out of the chamber after placinf the first pallet into chamber 7

Time of Incident

Object/Substance EO ignition

That Directly Injured or Made

Person Ill

Physical or

EO leak in chamber and an ignition source

Immediate Causes

of Incident

Immediate Action Call fire department and 911

Taken

Agency

External Reporting Injury/Illness

Recordable

Yes

Injury/Illness?

OSHA

Specific Agency

OSHA; NRC: Georgia EPD; and

and Contact

Cobb County Emergency

Response

Date Reported

2018-07-10

External Report

1217951

Number

Privacy Case

False

Privacy Case Explanation

Treatment Provided

First Aid

Medical Treatment

First Aid Responder

Description of Treatment

Provided

n/a

Medical Treatment

Was injured person treated in an emergency

or Health Care

Professional

Name of Physician n/a

room?

Yes

Was injured person hospitalized overnight?

Yes

Healthcare Facility Grady Hospital Name and Address 80 Jesse Hill Jr Drive

Atlanta, Ga. 30303

Lost Days

True

Estimated Lost

180

Days

Date Returned

2019-12-31

First Lost Day # Lost Days

180

2018-07-10

Fatality

False

Incident Details

Injury/Illness

Type

Thermal Burn

Body Part

Back

Side of Body

Body Part

Chest/Rlbs

Side of Body

Body Part

Side of Body

Accident Type

Exposed to fire/explosion

Other

Accident Agent

Chemical

Personal Information

Gender

Home Address



Date of Birth Home Phone



Employment Information

Job Title

Certified Operator

Safe Work Practices

Was PPE Worn?

Yes

PPE Worn

Safety Glasses

Steel Toed Boots

Describe PPE

Worn

Alcohol Test Performed?

No

Drug Test Performed? No

Safe Work Practices

External Reporting Fire/Explosion

Reportable Fire/Explosion Yes

Agency

Emergency Response

Specific Agency and Contact

NRC

2018-07-10

External Report

1217951

Number

Fire Information

Date Reported

Ignition Source

Mechanical Spark

Extinguish Method Portable Fire Extinguisher

Time to Extinguish 1 Minutes

Fire

Weather Conditions

Weather

Clear

Conditions Wind Speed

Wind Direction

Insurance Reporting

Insurance Group

Notified

Yes

Claims Handler

Sentry

Contact

Information

Date Reported 2018-07-10 **Insurance Claim**

Number

Root Cause Analysis

Root Cause

Fire or Explosion Hazard Hazardous Substances Defective Tools/Equipment

Follow Up Responsibilities

Responsible For

Daryl Mosby

Incident Investigation Review

Follow Up Responsibilities

Responsible For Incident Closure Daryl Mosby

Corrective Actions

Corrective Actions

Corrective Action

Add 3rd EO Valve to Chamber

Plan Title

Corrective Action Plan Description

Add 3rd EO Valve to chamber to add redundancy.

Person Responsible



Due Date

2018-12-28

Priority

High

Targeted Root

Cause

Defective Tools/Equipment (Equipment)

Email Notifications

Notifications Log

Recipients (EHS Director); (EHS Director)

Parameters

Trigger

Days Sent

Category: Incident; Incident Type: Injury; Occupational Illness; Reportability/Recordability:

Reportable/Recordable

Incident reported

Incident reported

2018-07-16 11:53 AM

2018-07-16 11:53 AM

(EHS Director); (EHS Director); (EHS Director); (Executive)

Category: Incident; Incident Type: Injury; Occupational Illness; Reportability/Recordability: Reportable/Recordable

Recipients	Parameters	Trigger	Days Sent
Director); (EHS Director)	Category: Incident	Incident reported	2018-07-16 11:38 AM
(EHS Director); (EHS Director); (EHS Director); (Executive)	Category: Incident	Incident reported	2018-07-16 11:38 AM
Daryl Mosby (Responsible for Incident Investigation		Incident reported	2018-07-16 11:38 AM

Audit Trail

Status Log	
2019-08-29 12:39	Changed Status FROM [Investigation] TO [Review]
2018-07-16 11:29 Daryl Mosby	Changed Status FROM [Draft] TO [Investigation]
2018-07-16 11:29 Daryl Mosby	Created with Status: Draft
Edit Log	
2019-08-29 12:39	Saved
2019-08-20 16:18 Daryl Mosby	
2019-08-20 15:59 Daryl Mosby	
	Created Action: Add 3rd EO Valve to Chamber
2019-01-10 17:42	Saved
2019-01-10 17:38	Saved
2019-01-08 16:42	Saved
2019-01-07 13:42 Daryl Mosby	
2019-01-07 13:36 Daryl Mosby	
2019-01-07 13:36 Daryl Mosby	
2019-01-07 13:35 Daryl Mosby	
2018-12-20 07:32 Daryl Mosby	
	Changed Injury Classification FROM [None] TO [Lost Work]
2018-07-16 11:46 Daryl Mosby	
	Changed Responsible for Incident Closure TO [Daryl Mosby]
	Changed Responsible for Incident Review TO [Daryl Mosby]
	Changed Explosion Reportable FROM [Undetermined] TO [Yes]
	Changed Injury Recordable FROM [Undetermined] TO [Yes]
	Were there any unusual events contributing to exposure changed FROM
[Undetermined] TO [Yes]	
	Unusual events contributing to the EO exposure changed FROM
[Undetermined] TO [Yes]	

First Report

IN-20180717-001

Description

Title

Area Evacuation

Description

LEL 33 read 11% at 22:58 GMT and read as high as 16%. This LEL is located near chamber 3 vacuum pump. Operations donned the proper PPE and went to the vacuum pump and determined where the leak was occurring using a PID and

reconnected the fitting.

What

LEL/GC/Evacuation

LEL/GC/Evacuation Additional Information

Meter Reading

16 %LEL

Area Evacuated

Area

Where

Location of

Sterigenics / EO U.S/Canada /

Technology

EO

Incident

Occurred on Company

Atlanta Yes

Specific Location of Occurrence

CHAMBER AREA

Premises?

When

Date of Occurrence

2018-07-17

Time of Occurrence

6:58 PM

Who

Person Involved

Relationship of Person Involved **Employee**

Supervisor of

Person Involved

Daryl Mosby

Date Shift Began

2018-07-17

Time Shift Began

7:00 AM

Witnesses

Witness

Relationship of Witness

Employee

Internal Reporting

Reported By

Daryl Mosby

Date Reported

2018-07-17

Follow Up Responsibilities

Responsible For

Daryl Mosby

Incident Investigation

Investigation

Investigation Team

Team



Event Details

Task or Activity at chamber was in after vacuum phase

Time of Incident

Physical or

loose fitting on vacuum pump secondary polisher

Immediate Causes

of Incident

Immediate Action reconnect fitting on secondary polisher Taken

Safe Work Practices

Insurance Reporting

Insurance Group Notified

Undetermined

Root Cause Analysis

Root Cause

Inadequate Equipment

Follow Up Responsibilities

Responsible For

Incident

Daryl Mosby

Investigation

Review

Follow Up Responsibilities

Responsible For Incident Closure **Daryl Mosby**

Corrective Actions

Corrective Actions

Corrective Action

Reconnect fitting

Plan Title

Corrective Action

Plan Description

Convert quick connects on secondary polisher to compression fitting

Person Responsible

Due Date

2018-08-27

Priority

High

Targeted Root Cause

Inadequate Equipment (Equipment)

Email Notifications

Notifications Log			
Recipients	Parameters	Trigger	Days Sent
Daryl Mosby (Responsible for Incident Closure)		Incident is ready for closure	2018-07-26 03:55 PM
	Category: Incident; Incident Type: LEL/GC/Evacuation	Incident reported	2018-07-17 09:37 PM
Director); (EHS Director)	Category: Incident	Incident reported	2018-07-17 09:37 PM
(EHS Director); (EHS Director); (EHS Director); (EHS	Category: Incident	Incident reported	2018-07-17 09:37 PM
	Category: Incident; Incident Type: Emission Control Upset; LEL/GC/Evacuation	Incident reported	2018-07-17 09:37 PM
Daryl Mosby (Responsible for Incident Investigation)		Incident reported	2018-07-17 09:37 PM
Daryl Mosby (Responsible for Incident Review)		Incident investigation completed	2018-07-17 09:37 PM

Audit Trail Status Log

2018-07-26 16:35	Daryl Mosby	Changed Status FROM [Pending Closure] TO [Closed]
2018-07-17 21:32	Daryl Mosby	Changed Status FROM [Review] TO [Pending Closure]
2018-07-17 21:31	Daryl Mosby	Changed Status FROM [Investigation] TO [Review]
2018-07-17 21:24	Daryl Mosby	Changed Status FROM [Draft] TO [Investigation]

2018-07-17 21:24 Daryl Mosby Created with Status: Draft

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2018-07-26 16:35	Daryl Mosby	Saved
2018-07-17 21:32	Daryl Mosby	Saved
2018-07-17 21:31		
2018-07-17 21:31	Daryl Mosby	Created Action: Reconnect fitting
2018-07-17 21:31	Daryl Mosby	Changed Responsible for Incident Closure TO [Daryl Mosby]
2018-07-17 21:31	Daryl Mosby	Changed Responsible for Incident Review TO [Daryl Mosby]
2018-07-17 21:31	Daryl Mosby	Were there any unusual events contributing to exposure changed FROM
[Undetermined] TO	[Yes]	
2018-07-17 21:31	Daryl Mosby	Unusual events contributing to the EO exposure changed FROM
[Undetermined] TO	[Yes]	

First Report

IN-20190410-001

Description

Title

Area Evacuation

Description

During a drum change on CH #7, when disconnecting the EO Whipline after the nitrogen purge there was a brief spray of EtO liquid. Shortly after that, an Area Evacuation Alarm occurred. The SRI Port near the drum (CH #6 Area / Port #5)

detected 77.5ppm @ 2:16am this morning.

What

LEL/GC/Evacuation

LEL/GC/Evacuation Additional Information

Meter Reading

77.5 ppm

Area Evacuated

Area

Where

Location of

Sterigenics / EO U.S/Canada /

Technology

EO

Incident

Occurred on Company

Yes

Atlanta

Specific Location of Occurrence

Chamber # 6 / SRI port # 5

Premises?

When

Date of Occurrence

2019-04-10

Time of Occurrence

2:16 AM

Who

Person Involved



Relationship of Person Involved Employee

Supervisor of Person Involved



Date Shift Began

2019-04-09

Time Shift Began

7:00 PM

Witnesses

Witness

Relationship of Witness

Employee

Internal Reporting

Reported By

2010 01 10

Date Reported

2019-04-10

Follow Up Responsibilities

Responsible For Incident Investigation



Investigation

Investigation Team

Team



Event Details

Task or Activity at Tank change on chamber # 7.

Time of Incident

Physical or

NA

Immediate Causes

of Incident

Immediate Action Investigated the source with handheld and PID and found no traces of levels.

Taken

Safe Work Practices

Insurance Reporting

Insurance Group

Notified

No

Root Cause Analysis

Root Cause

Unnecessary Haste

Costs

Cost Type

Other

Amount

0 USD

Description

Follow Up Responsibilities

Responsible For

Daryl Mosby

Incident Investigation

Review

Follow Up Responsibilities

Responsible For Incident Closure Daryl Mosby

Corrective Actions

Corrective Actions

Corrective Action

Drum change

Plan Title

Corrective Action Plan Description

Remind all operators the need to use the timing device when purging the lines during a drum change.

Person Responsible Due Date

erson Responsible

Priority

High

Targeted Root Cause Unnecessary Haste (Employee Actions)

Attachments

Files



Name

Copy of SRI Port 5_CH 6 Area 04102019.xlsx

Description

2019-05-24

Email Notifications

Notifications Log

3			
Recipients	Parameters	Trigger	Days Sent
Daryl Mosby (Responsible for Incident Closure)		Incident is ready for closure	2019-05-23 06:44 PM
Daryl Mosby (Responsible for Incident Review)		Incident investigation completed	2019-05-21 04:15 PM
	Category: Incident; Incident Type: LEL/GC/Evacuation	Incident reported	2019-04-10 05:16 PM
Director) (EHS	Category: Incident	Incident reported	2019-04-10 05:16 PM
(EHS Director); (EHS Director); (EHS Director); (EHS Director); (Executive)	Category: Incident	Incident reported	2019-04-10 05:16 PM
	Category: Incident; Incident Type: Emission Control Upset; LEL/GC/Evacuation	Incident reported	2019-04-10 05:16 PM
(Responsible for Incident Investigation)		Incident reported	2019-04-10 05:16 PM

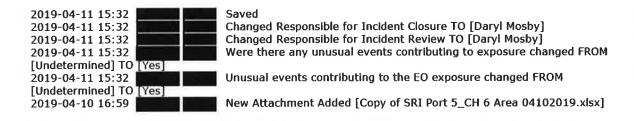
Audit Trail

Sta	tus	Loa
Ju	LUS	LUU

2019-05-29 12:05	Daryl Mosby	Changed Status FROM [Pending Closure] TO [Closed]
2019-05-21 16:21	Daryl Mosby	Changed Status FROM [Review] TO [Pending Closure]
2019-05-21 16:06		Changed Status FROM [Investigation] TO [Review]
2019-04-10 16:59		Changed Status FROM [Draft] TO [Investigation]
2019-04-10 16:59		Created with Status: Draft

Edit Log

East Log		
2019-05-29 12:05	Daryl Mosby	Saved
2019-05-21 16:21	Daryl Mosby	Saved
2019-05-21 16:06		Saved
2019-05-21 16:06		Created Action: Drum change



First Report

IN-20190731-001

Description

Title

Area Evacuation

Description

A operator performed a drum change and did not close the EO valve completely on the empty drum. Due to the temperature in the chamber room it eventually caused the EO valve to leak and generated the area evacuation alarm on two SRI ports. We

calculated we lost 5.6 lbs. during this time.

What

LEL/GC/Evacuation

LEL/GC/Evacuation Additional Information

Meter Reading

314 ppm

Area Evacuated

Area

Where

Location of

Sterigenics / EO U.S/Canada /

Technology

ΕO

Incident

Occurred on

Company Premises? Yes

Atlanta

Specific Location of Occurrence

Chamber Room

When

Date of Occurrence

2019-07-31

Time of Occurrence

7:15 AM

Who

Person Involved



Relationship of Person Involved Employee

Supervisor of Person Involved



Date Shift Began

2019-07-30

Time Shift Began

7:00 PM

Witnesses

Witness



Relationship of Witness

Employee

Internal Reporting

Reported By



Date Reported

2019-07-31

Follow Up Responsibilities

Responsible For Incident Investigation



Investigation

Investigation Team

Team



Event Details

Task or Activity at Drum change **Time of Incident**

Physical or of Incident

Upon investigation it was found that the drum plugs were not installed along with the

Immediate Causes valve not fully closed after drum change.

Taken

Immediate Action Closed the valve and installed drum plugs. An email was sent out to all operators making them aware of the incident and reminding the proper order of steps during a

drum change. The operator involve was counseled on the error.

Safe Work Practices

Insurance Reporting

Insurance Group Notified

Undetermined

Root Cause Analysis

Root Cause

Unsafe Acts

Improper Work Technique

Costs

Cost Type

Other

Amount

0 USD

Description

NA

Follow Up Responsibilities

Responsible For

Daryl Mosby

Incident **Investigation** Review

Follow Up Responsibilities

Responsible For Incident Closure

Daryl Mosby

Corrective Actions

Corrective Actions

Corrective Action

Operator Counsuled

Plan Title

Corrective Action Plan Description

The operator involved was counseled.

Person Responsible



Due Date

2019-08-21

Priority

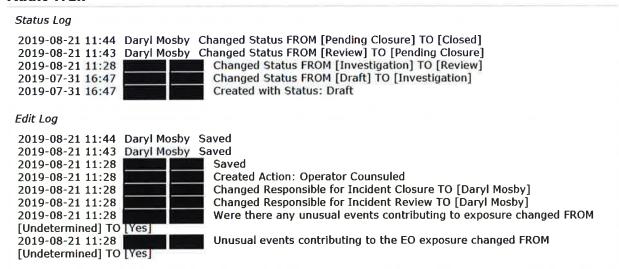
Medium

Targeted Root Cause Improper Work Technique (Process)
Unsafe Acts (Employee Actions)

Email Notifications

Notifications Log			
Recipients	Parameters	Trigger	Days Sent
Daryl Mosby (Responsible for Incident Review)		Incident investigation completed	2019-08-21 11:35 AM
	Category: Incident; Incident Type: LEL/GC/Evacuation	Incident reported	2019-07-31 05:03 PM
Director) (EHS	Category: Incident	Incident reported	2019-07-31 05:03 PM
(EHS Director); (EHS Director); (EHS Director); (Executive)	Category: Incident	Incident reported	2019-07-31 05:03 PM
	Category: Incident; Incident Type: Emission Control Upset; LEL/GC/Evacuation	Incident reported	2019-07-31 05:03 PM
(Responsible for Incident Investigation)		Incident reported	2019-07-31 05:03 PM

Audit Trail



First Report

IN-20150203-001

Description

Title

Area evacuation (LEL 25 - Chamber 6 Vacuum pump read 10 % for 1 minute).

Description

At 1:56 GMT LEL sensor 25 read 10% for approximately 1 minute. Operators on duty donned proper PPE, and determined it was coming from the feed line to chamber 6

vaporizer.

What

LEL/GC/Evacuation

LEL/GC/Evacuation Additional Information

Meter Reading

10 %LEL

Area Evacuated

Area

Where

Location of Incident

Sterigenics / EO U.S/Canada /

Technology

EO

Occurred on

Company

Atlanta Yes

Specific Location of Occurrence

Chamber Area

Premises?

When

Date of **Occurrence** 2015-02-03

Time of **Occurrence** 1:00 AM

Who

Person Involved

Relationship of Person Involved **Employee**

Supervisor of **Person Involved**

Date Shift Began

2015-02-02

Time Shift Began

7:00 PM

Witnesses

Witness

Relationship of Witness

Employee

Internal Reporting

Reported By

Date Reported

2015-02-03

Follow Up Responsibilities

Responsible For Incident **Investigation**



Investigation

Investigation Team

Team



Event Details

Task or Activity at Routine processing

Time of Incident

Physical or

Fittings were found to be loose on flange to the vaporizer.

Immediate Causes

of Incident

Immediate Action Turned off gas valve from chamber 6 gas drum as a precaution.

Taken

Safe Work Practices

Insurance Reporting

Insurance Group

No

Notified

Root Cause Analysis

Root Cause

Defective Tools/Equipment

Costs

Cost Type

Production Loss

Amount

0 USD

Description

Maintenance had to inspect chamber at the end of the cycle.

Follow Up Responsibilities

Responsible For

Incident

Investigation

Review

Daryl Mosby

Follow Up Responsibilities

Responsible For

Daryl Mosby

Incident Closure

Corrective Actions

Corrective Actions

Corrective Action Plan Title

Review of chamber.

Corrective Action

Plan Description

At the end of the routine cycle , a purge cycle was completed. Maintenance inspected the chamber and determined the fittings on the flange to the vaporizer needed to be

replaced.

Person Responsible

Due Date

2015-02-03

Priority

High

Targeted Root

Cause

Defective Tools/Equipment (Equipment)

Email Notifications

Notifications Log			
Recipients	Parameters	Trigger	Days Sent
(Responsible for Incident Investigation)		Incident reported	2015-02-03 12:08 PM
Daryl Mosby (Responsible for Incident Review)		Incident investigation completed	2015-02-03 12:08 PM
Director) (EHS	Category: Incident	Incident reported	2015-02-03 12:08 PM
Director); (EHS Director); (EHS Director); (EHS Director); (Executive)	Category: Incident	Incident reported	2015-02-03 12:08 PM

Audit Trail

First Report

IN-20151111-001

Description

Title

Area Evacuation

Description

LEL #33 had a reading of 12%. This LEL is located in the retort room. The operator evacuated the affected area and contacted their Manager. The operators donned their appropriate PPE, SCBA and PID and went to the affected area. The cause of the alarm was a leaking site glass from the vacuum pump for chamber 4. This is located in close proximity to LEL #33. The leak was secured and an all clear signal was deemed.

What

LEL/GC/Evacuation

LEL/GC/Evacuation Additional Information

Meter Reading

12 %LEL

Atlanta

Yes

Area Evacuated

Агеа

Where

Location of Incident

Sterigenics / EO U.S/Canada /

Technology

EO

Occurred on

Company

Specific Location of Occurrence

Retort Room

Premises?

When

Date of Occurrence 2015-11-11

Time of **Occurrence** 2:00 AM

Who

Person Involved

Relationship of Person Involved Employee

Supervisor of

Person Involved

Date Shift Began

2015-11-10

Time Shift Began

7:00 PM

Witnesses

Witness

Relationship of Witness

Employee

Internal Reporting

Reported By

Daryl Mosby

Date Reported

2015-11-11

Follow Up Responsibilities

Responsible For Incident **Investigation**

Daryl Mosby

Investigation

Investigation Team

Team

Event Details

Task or Activity at Time of Incident

Physical or **Immediate Causes**

Leaking sight glass on chamber 4

of Incident

Immediate Action Repaired sight glass

Taken

Safe Work Practices

Insurance Reporting

Insurance Group Notified

Undetermined

Root Cause Analysis

Root Cause

Defective Tools/Equipment

Costs

Cost Type

Other

Amount

0 USD

Description

Follow Up Responsibilities

Responsible For

Daryl Mosby

Incident Investigation Review

Follow Up Responsibilities

Responsible For **Incident Closure** Daryl Mosby

Corrective Actions

Corrective Actions

Corrective Action

Sight glass on affected vacuum pump

Plan Title

Repair sight glass on chamber 4 vacuum pump

Corrective Action Plan Description

Person Responsible

Due Date

2015-11-11

Priority

High

Targeted Root

Cause

Defective Tools/Equipment (Equipment)

Email Notifications

Notifications Log			
Recipients	Parameters	Trigger	Days Sent
Director)	Category: Incident	Incident reported	2015-11-11 12:54 PM
Director); (EHS Director); (EHS Director); (EHS Director); (Executive)	Category: Incident	Incident reported	2015-11-11 12:54 PM
	Category: Incident; Incident Type: Emission Control Upset; LEL/GC/Evacuation	Incident reported	2015-11-11 12:54 PM
Daryl Mosby (Responsible for Incident Investigation)		Incident reported	2015-11-11 12:54 PM
Daryl Mosby (Responsible for Incident Review)		Incident investigation completed	2015-11-11 12:54 PM

Audit Trail Status Log

	, ,	Changed Status FROM [Pending Closure] TO [Closed] Changed Status FROM [Review] TO [Pending Closure]
2015-11-11 12:52	Daryl Mosby	Changed Status FROM [Investigation] TO [Review]
2015-11-11 12:48	Daryl Mosby	Changed Status FROM [Draft] TO [Investigation]
2015-11-11 12:44	Daryl Mosby	Created with Status: Draft
Edit Log		
2015-11-11 12:55	Daryl Mosby	Saved
2015-11-11 12:53	Daryl Mosby	Saved

2015-11-11 12:52 Daryl Mosby Saved
2015-11-11 12:52 Daryl Mosby Saved
2015-11-11 12:52 Daryl Mosby Created Action: Sight glass on affected vacuum pump
2015-11-11 12:52 Daryl Mosby Changed Responsible for Incident Closure TO [Daryl Mosby]
2015-11-11 12:52 Daryl Mosby

First Report

IN-20151117-002

Description

Title

Area evacuation (SRI Channel 4-Retort room)

Description

At approximately 2:25 pm est., an area evacuation alarm sounded. The operator in the control room viewed the panel view and noticed channel 4(retort room) on the SRI system read 57.1 ppm. No one was in the area at this time. Operations notified their manager and maintenance. Operators Donned the appropriate PPE & PID and check the retort room for levels. No levels were detected. Within 2 minutes the stack

light for this area went to green.

What

LEL/GC/Evacuation

LEL/GC/Evacuation Additional Information

Meter Reading

57.1 ppm

Area Evacuated

Агеа

Where

Location of Incident

Sterigenics / EO U.S/Canada /

Technology

EO

Occurred on

Occurred on Company Yes

Atlanta

Specific Location of Occurrence

Retort Room

Premises?

When

Date of Occurrence

2015-11-17

Time of Occurrence

2:00 PM

Who

Person Involved



Relationship of Person Involved

Employee

Supervisor of Person Involved



Date Shift Began

2015-11-17

Time Shift Began

7:00 AM

Witnesses

Witness



Relationship of Witness **Employee**

Internal Reporting

Reported By

Date Reported

2015-11-17

Follow Up Responsibilities

Responsible For Incident Investigation



Investigation

Investigation Team

Team

Event Details

Task or Activity at Chamber 4 was in the after vacuum phase.

Time of Incident

Physical or

Unknown

Immediate Causes

of Incident

Taken

Immediate Action Operators did not detect any levels in the area. Port was monitored during the next

vacuum phases and no levels were detected.

Safe Work Practices

Insurance Reporting

Insurance Group Notified

No

Root Cause Analysis

Root Cause

Incident/Accident Analysis Inconsistent

Costs

Cost Type

Other

Amount

0 USD

Description

NA

Follow Up Responsibilities

Responsible For

Incident

Investigation

Review

Daryl Mosby

Follow Up Responsibilities

Responsible For

Daryl Mosby

Incident Closure

Corrective Actions

Corrective Actions

Corrective Action

Determine reason for reading.

Plan Title

Maintenance will continue to investigate the potential reason for the reading.

Corrective Action Plan Description

Person

Daryl Mosby

Responsible Due Date

2015-11-18

Priority

High

Targeted Root

Cause

Email Notifications

Notifications Log			
Recipients	Parameters	Trigger	Days Sent
Daryl Mosby (Responsible for Incident Review)		Incident investigation completed	2015-12-04 08:08 AM
Director) (EHS	Category: Incident	Incident reported	2015-11-17 04:09 PM
(EHS Director); (EHS Director); (EHS Director); (EHS Director); (Executive)	Category: Incident	Incident reported	2015-11-17 04:09 PM
	Category: Incident; Incident Type: Emission Control Upset; LEL/GC/Evacuation	Incident reported	2015-11-17 04:09 PM
(Responsible for Incident Investigation)		Incident reported	2015-11-17 04:09 PM

Audit Trail

Status Log	
2015-12-04 08:14	Daryl Mosby Changed Status FROM [Pending Closure] TO [Closed]
2015-12-04 08:14	Daryl Mosby Changed Status FROM [Review] TO [Pending Closure]
2015-12-04 08:05	Changed Status FROM [Investigation] TO [Review]
2015-11-17 16:00	Changed Status FROM [Draft] TO [Investigation]
2015-11-17 16:00	Created with Status: Draft
Edit Log	
2015-12-04 08:14	Daryl Mosby Saved
2015-12-04 08:14	Daryl Mosby Saved
2015-12-04 08:05	Saved
2015-11-17 16:26	Saved
2015-11-17 16:25	Saved
2015-11-17 16:23	Saved
2015-11-17 16:23	Created Action: Determine reason for reading.
2015-11-17 16:23	Changed Responsible for Incident Closure TO [Daryl Mosby]
2015-11-17 16:23	Changed Responsible for Incident Review TO [Daryl Mosby]

First Report

IN-20170131-001

Description

Title

Area evacuation (SRI Channel 4-Retort room)

Description

At approximately 12:02 est., an area evacuation alarm sounded. The operator in the control room viewed the panel view and noticed channel 4(retort room) on the SRI system read 69.9 ppm. No one was in the area at this time. The shift supervisor then notified the operations manager and maintenance supervisor. Operators donned the appropriate PPE & PID and check the retort room for levels. After several samples from the PID, the levels were found to be around 0.5 ppm. Investigation is ongoing.

Relationship of

Witness

Employee

What

LEL/GC/Evacuation

LEL/GC/Evacuation Additional Information **Meter Reading** 69.9 ppm **Area Evacuated** Area Where Sterigenics / EO U.S/Canada / EO Location of **Technology Incident** Atlanta Occurred on Yes Specific Location Retort Room Company of Occurrence Premises? When Date of 2017-01-31 Time of 12:00 AM Occurrence **Occurrence** Who Relationship of **Person Involved** Employee Person Involved Supervisor of **Person Involved Date Shift Began** 2017-01-31 Time Shift Began 7:00 PM Witnesses Witness Relationship of **Employee** Witness

Internal Reporting

Witness

Reported By

Date Reported

2017-01-31

Follow Up Responsibilities

Responsible For Incident Investigation



Investigation

Investigation Team

Team



Event Details

Task or Activity at Routine processing

Time of Incident

Physical or

Oil fill port for chamber 3 vacuum pump not seating properly.

Immediate Causes of Incident

Immediate Action The vacuum pump oil fill port was replaced and tested for leaks.

Taken

Safe Work Practices

Insurance Reporting

Insurance Group

Notified

No

Root Cause Analysis

Root Cause

Defective Tools/Equipment

Costs

Cost Type

Other

Amount

100 USD

Description

Replacement cost.

Follow Up Responsibilities

Responsible For

Daryl Mosby

Incident **Investigation**

Review

Follow Up Responsibilities

Responsible For

Daryl Mosby

Incident Closure

Corrective Actions

Corrective Actions

Corrective Action Plan Title

Replace oil fill port on chamber 3.

Corrective Action Plan Description

Replace with like for like parts.

Person

Person Responsible

Due Date

2017-01-31

Priority

High

Targeted Root Cause

I Root Defective Tools/Equipment (Equipment)

Email Notifications

Notifications I	Log
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Recipients	Parameters	Trigger	Days Sent
Daryl Mosby (Responsible for Incident Closure)	2	Incident is ready for closure	2017-02-01 11:21 AM
Daryl Mosby (Responsible for Incident Review)	9	Incident investigation completed	2017-01-31 05:32 PM
	Category: Incident; Incident Type: LEL/GC/Evacuation	Incident reported	2017-01-31 04:02 PM
Director) (EHS	Category: Incident	Incident reported	2017-01-31 04:02 PM
(EHS Director); (EHS Director); (EHS Director); (EHS Director); (EXECUTIVE)	Category: Incident	Incident reported	2017-01-31 04:02 PM
	Category: Incident; Incident Type: Emission Control Upset; LEL/GC/Evacuation	Incident reported	2017-01-31 04:02 PM
(Responsible for Incident Investigation)		Incident reported	2017-01-31 04:02 PM

Audit Trail

Status Log

	Daryl Mosby	Changed Status FROM [Pending Closure] TO [Closed] Changed Status FROM [Review] TO [Pending Closure] Changed Status FROM [Investigation] TO [Review] Changed Status FROM [Draft] TO [Investigation] Created with Status: Draft
Edit Log		

Edit Log		
2017-02-01 11:23	Daryl Mosby S	Saved
2017-01-31 17:36	Daryl Mosby	Saved
2017-01-31 17:25		Saved
2017-01-31 17:25		Created Action: Replace oil fill port on chamber 3.
2017-01-31 17:25		Changed Responsible for Incident Closure TO [Daryl Mosby]
2017-01-31 17:25		Changed Responsible for Incident Review TO [Daryl Mosby]
2017-01-31 17:25 2017-01-31 17:25 2017-01-31 17:25		Saved Created Action: Replace oil fill port on chamber 3. Changed Responsible for Incident Closure TO [Daryl Mosby]

2017-01-31 17:25 [Undetermined] TO [Yes] 2017-01-31 17:25 [Undetermined] TO [Yes]

Were there any unusual events contributing to exposure changed FROM

Unusual events contributing to the EO exposure changed FROM

First Report

IN-20170611-001

Description

Title

Drum Leak

Description

LEL #34 had a reading of 13%. This LEL is located on the west wall of the chamber room. The operators evacuated the affected area and contacted their Manager. The operators then donned their appropriate PPE(SCBA and LEL) and went to the

affected area.

What

LEL/GC/Evacuation

LEL/GC/Evacuation Additional Information

Meter Reading

13 %LEL

Area Evacuated

Area

Where

Location of

Sterigenics / EO U.S/Canada /

Technology

EO

Incident

Occurred on

Yes

Atlanta

Specific Location of Occurrence

West Wall

Company

Premises?

When

Date of

Occurrence

2017-06-11

Time of **Occurrence** 7:00 PM

Who

Person Involved

Relationship of **Person Involved** **Employee**

Supervisor of Person Involved

Date Shift Began

2017-06-11

Time Shift Began

7:00 AM

Witnesses

Witness

Relationship of Witness

Employee

Internal Reporting

Reported By

2017-06-13

Date Reported

Follow Up Responsibilities

Responsible For Incident **Investigation**

Investigation

Investigation Team

Team



Event Details

Taken

Task or Activity at Drum change

Time of Incident

Physical or

Valve not completely closed during drum change. The plug was also found to be hand

Immediate Causes tightened. of Incident

Immediate Action

Upon the operators arriving in the affected area using the handheld LEL, the operators detected levels of approximately 11% around the plug and valve of the empty drum. The operator tightened the valve and plug causing the levels to

dissipate in the effected area.

Safe Work Practices

Insurance Reporting

Insurance Group

Notified

Undetermined

Root Cause Analysis

Root Cause

Unnecessary Haste

Costs

Cost Type

Other

Amount

0 USD

Description

Follow Up Responsibilities

Responsible For Incident Investigation Review



Follow Up Responsibilities

Responsible For

Daryl Mosby

Incident Closure

Corrective Actions

Corrective Actions

Corrective Action Awareness Training

Plan Title

Corrective Action Plan Description

Make employees aware of the incident in the next plant meeting, and remind operators to make sure all valves are closed and plugs are properly tightened.

Responsible

Due Date

2017-06-22

Priority

High

Targeted Root

Cause

Unnecessary Haste (Employee Actions)

Email Notifications

Notifications	Log
Recipients	

Recipients	Parameters	Trigger	Days	Sent
Daryl Mosby (Responsible for Incident Closure)		Incident is ready for closure		2017-06-21 11:44 AM
	Category: Incident; Incident Type: LEL/GC/Evacuation	Incident reported		2017-06-13 03:08 PM
	Category: Incident; Incident Type: Emission Control Upset; LEL/GC/Evacuation	Incident reported		2017-06-13 03:08 PM
(Responsible for Incident Review)		Incident investigation completed		2017-06-13 03:08 PM
Director)	Category: Incident	Incident reported		2017-06-13 11:38 AM
Director); (EHS Director); (EHS Director); Director); (Executive)	Category: Incident	Incident reported		2017-06-13 11:38 AM
(Responsible for Incident Investigation)		Incident reported		2017-06-13 11:38 AM

Audit Trail

Status Log

2017-06-21 12:54 2017-06-21 11:23 2017-06-13 14:50 2017-06-13 11:24 2017-06-13 11:24	Changed Status FROM [Pending Closure] TO [Closed] Changed Status FROM [Review] TO [Pending Closure] Changed Status FROM [Investigation] TO [Review] Changed Status FROM [Draft] TO [Investigation] Created with Status: Draft
Edit Log	

Edit Log

2017-06-21 12:54 Daryl Mosby 2017-06-21 11:23 2017-06-13 14:50 2017-06-13 14:50 2017-06-13 14:50 2017-06-13 14:50 [Undetermined] TO Yes]	Saved Saved Saved Created Action: Awareness Training Changed Responsible for Incident Closure TO [Daryl Mosby] Changed Responsible for Incident Review TO Were there any unusual events contributing to exposure changed FROM
2017-06-13 14:50 [Undetermined] TO [Yes]	Unusual events contributing to the EO exposure changed FROM

2017-06-13 14:50 Changed Incident Type FROM [Leak/Splll/Release] TO [LEL/GC/Evacuation]