## Cooley, James

From:

Hoffman, Kathy < KHoffman@sterigenics.com>

Sent:

Wednesday, September 18, 2019 6:34 PM

To:

Cooley, James

Cc: Subject: Wagner, Kevin RE: Requested Info - Leak Estimates

Attachments:

Atlanta EO Leak Incidents - 2014 to present - Estimate Description.pdf

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As requested, attached is a table that documents how the EO amounts from each event were estimated.

Let me know if you have any further questions or requests.

Regards,

Kathy

From: Cooley, James [mailto:James.Cooley@dnr.ga.gov]

Sent: Thursday, September 12, 2019 2:03 PM

**To:** Hoffman, Kathy **Cc:** Wagner, Kevin

Subject: [EXTERNAL] RE: Requested Info - Leak Estimates

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Thank you for the description. This helped my understanding; however, after looking at all the information provided, I still need to see the documentation on how each one of these releases were calculated. I will be glad to discuss this further if you need.

Thank you for your assistance in the matter.

James Cooley
Director of District Operations
404-651-7807



**From:** Hoffman, Kathy [mailto:KHoffman@sterigenics.com]

Sent: Thursday, September 5, 2019 2:59 PM

**To:** Cooley, James **Cc:** Wagner, Kevin

**Subject:** Requested Info - Leak Estimates

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jim:

As requested, following is a description on how we estimate EO quantity from some of the small leaks or releases at our Atlanta facility:

Whenever there is an actual EO leak in a facility we immediately perform an estimate of the leaked amount. The estimate is typically based on readings from our monitoring devices and other known factors from equipment in the process. If a monitoring device detected a leak, we can estimate the amount based on the reading, duration and affected size of the area. We also use handheld devices to measure EO concentrations during the investigations.

If the leak came from an EO drum, we often will know the leak amount based on the scale weights and plant records, and when necessary we can simply reweight the drum on a scale to determine the amount leaked.

If any of the estimates indicate an amount greater than one pound, we typically will involve our engineering group to use additional methods to determine the exact amount. In any case, if the estimated amount cannot be determined or is suspected of exceeding reporting quantities, we will notify agencies as required.

As I mentioned yesterday, I will be out of the office the next week. I will be checking emails and phone messages but may not be immediately available to provide any further details to this investigation. I am copying Kevin Wagner on this email. If you could copy him on any further requests or questions, he will be able to assist with the response.

Regards, 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

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## EO Leak or Release Incidents - Sterigenics Atlanta Facility 2014 through 2019 (as of 29-Aug-2019)

Incident Date	Description	Release Amount (lbs)	Source Area	Method for Amount Determined	Investigation Conducted	Incident Status
2/3/2015	Area evacuation ( LEL 25 - 2/3/2015 Chamber 6 Vacuum pump)	0.1	Leak from Chamber 6 vaporizer	Estimate based on monitor reading, duration and size of affected area.	Yes	Closed
11/11/2015	11/11/2015 Area Evacuation	90.0	Leak from Chamber 4 vacuum pump site glass	Estimate based on monitor reading, duration and size of affected area.	Yes	Closed
11/17/2015	Area evacuation ( SRI Channel 11/17/2015 4-Retort room)	0	Elevated reading from Channel 4 retort room. No leak identified and reading returned to normal within 2 minutes.	Estimate based on monitor reading, duration and size of affected area.	Yes	Closed
1/31/2017	Area evacuation ( SRI Channel 1/31/2017 4-Retort room)	0.06	Elevated reading from Channel 4 retort Estimate of fugitive amount based on room. No leak identified but some monoitor reading, duration and size o levels of fugitive emissions found.	Estimate of fugitive amount based on monoitor reading, duration and size of affected area.	Yes	Closed
6/11/2017	6/11/2017 Drum Leak	0.1	Drum Leak	Drum weight reading taken from scale	Yes	Closed
4/2/2018	4/2/2018 Area evacuation (SRI port # 6)	2.6	Leak from Chamber 10 vacuum pump discharge line	Calculation based on cycle data, gas concentration, flow, and opening size.	Yes	Closed
7/10/2018	7/10/2018 Chamber Deflagration	1	Leak into chamber resulting in deflagration	Investigation determined majority of gas consumed in deflagration.	Yes	Closed
7/17/2018	7/17/2018 Area Evacuation	0.1	Leak from Chamber 3 vacuum pump	Estimate based on monitor reading, duration and size of affected area.	Yes	Closed
4/10/2019	4/10/2019 Area Evacuation	90.0	Leak during Chamber 7 drum change	Drum weight reading taken from scale	Yes	Closed
7/31/2019	7/31/2019 Area Evacuation	5.6	Leak following drum change	Drum weight reading taken from scale	Yes	Closed
Totals		9.68	from 2014 until 29-Aug-2019			The second second