

April 24, 2020 Update on Part 1: Measures to minimize delivery of iodinated waste to Covanta Essex

Purpose:

Prepared by Covanta Essex for NJDEP as an update on efforts to prevent delivery of iodinated waste to Covanta Essex


Overview

- Continue data search for potential generators
- Opacity event on April 7, 2020 enabled detailed evaluation of one generator

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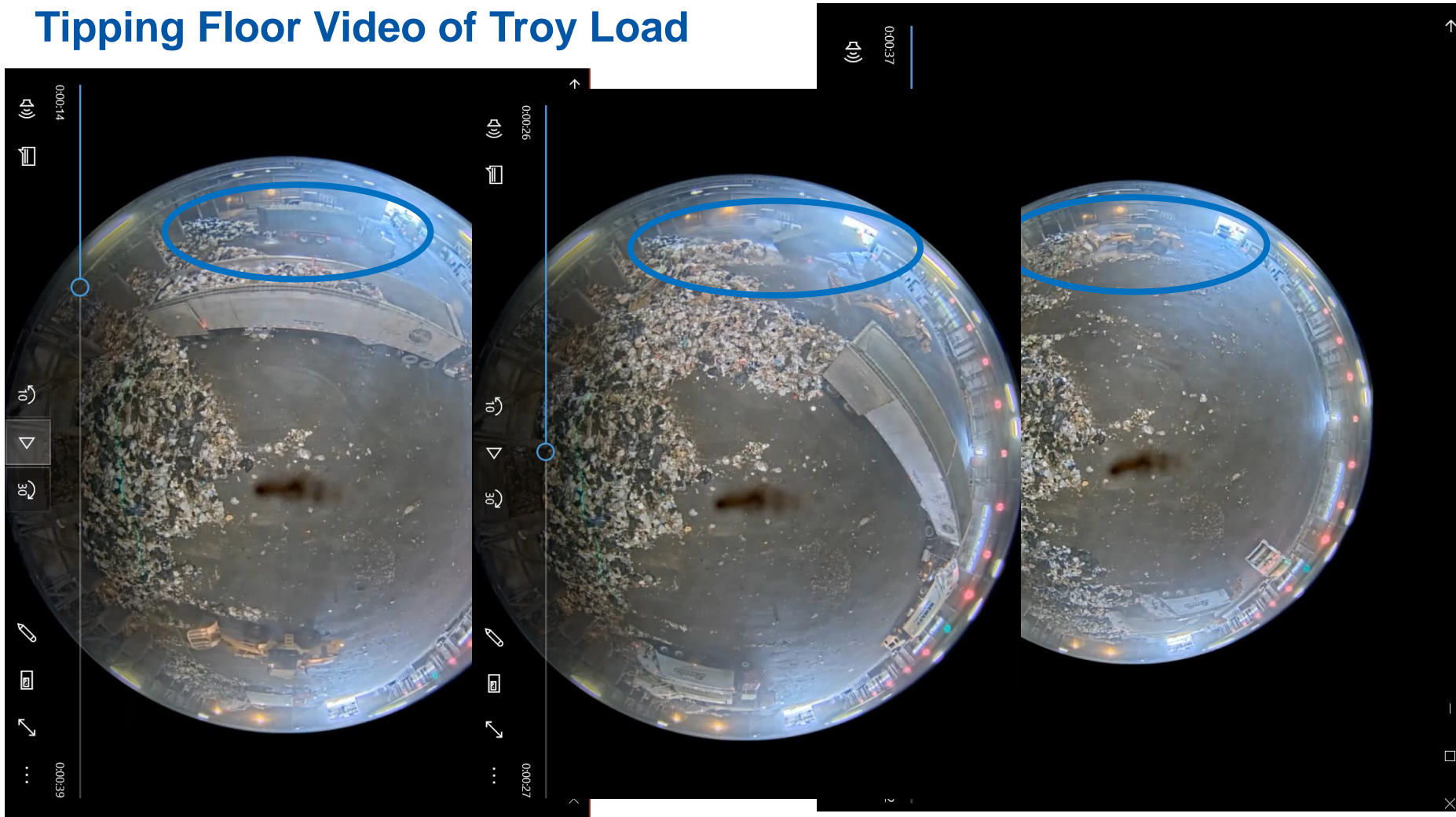
Opacity Event on 4/7/20, 1:24pm to 1:54pm

- Identified deliveries received prior to the event.
- Compactor received from Troy Chemical, Newark, NJ at 12:08pm.
 - Compactor is scheduled for every other week delivery
 - Troy Chemical was previously identified as a potential source earlier in the year.
 - Several attempts to contact Troy Chemical were unsuccessful.
- Reviewed video of Troy load received via high definition tipping floor camera showing dusty material in the compactor.

Data Summary Report		
Company:	Covanta Essex	
Data Group:	Newark, NJ	
Report Name:	U-1>6 Min Computed	
Start of Report:	No Title	
End of Report:	04/07/2020 12:00	Validation: Valid Data Only
	04/07/2020 15:00	
Group#-Channel#	06-C1	
Long Descrip.	U-1 Opaci	
Short Descrip.	U1-6mnOpac	
Units	%	
Range	0-100	
04/07/2020 12:00	1	
04/07/2020 12:06	1	
04/07/2020 12:12	1	
04/07/2020 12:18	1	
04/07/2020 12:24	1	
04/07/2020 12:30	1	
04/07/2020 12:36	1	
04/07/2020 12:42	1	
04/07/2020 12:48	1	
04/07/2020 12:54	1	
04/07/2020 13:00	1	
04/07/2020 13:06	1	
04/07/2020 13:12	1	
04/07/2020 13:18	1	
04/07/2020 13:24	4	
04/07/2020 13:30	13	
04/07/2020 13:36	17	
04/07/2020 13:42	15	
04/07/2020 13:48	14	
04/07/2020 13:54	10	
04/07/2020 14:00	5	
04/07/2020 14:06	5	
04/07/2020 14:12	5	
04/07/2020 14:18	5	
04/07/2020 14:24	4	
04/07/2020 14:30	3	
04/07/2020 14:36	3	
04/07/2020 14:42	2	
04/07/2020 14:48	2	

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Tipping Floor Video of Troy Load



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Troy Products & Solutions Offer the Performance Advantage in the Metal Processing Industry.

About Troy

Troy Corporation is a global leader in the research, manufacture, and marketing of antimicrobials and specialty chemicals. With strategically located manufacturing sites on three continents, microbiological testing, research laboratories, and global regulatory support, Troy is well-positioned to provide the products and technical services manufacturers need to succeed in their markets.

Visit www.troycorp.com for more information, or contact a Troy Metal Processing Fluids representative using the information on the back cover of this brochure.

The Troy Advantage

Troy's Metal Processing Fluid Additives Division offers advanced product technology, fully supported by expert technical service. Troy offers unique solutions, enabling manufacturers to overcome system challenges and achieve performance and market objectives. Detailed in this brochure is Troy's complete line of bactericides, fungicides, and performance additives specifically engineered for metal processing fluids. Troy Mergal[®], Polyphase[®], Troyshield[®], and Grotan[®] preservatives, as well as Troykyd[®] defoamers, are renowned in the industry for providing class-leading performance, compliance, and cost-effectiveness.

Application	Products	Active	Use-Level In Dilute	Soluble Oil		Semi-Synthetic		Synthetic	
				Concentrate	Tankside	Concentrate	Tankside	Concentrate	Tankside
Bactericides	Grotan [®]	Hexahydrotriazine (HHT)	1500	•	•	•	•	•	•
	Mergal [®] 186	Dimethylloxazolidine (DMO)	1000 - 3000	•	•	•	•	•	•
	Mergal [®] 192	Dimethylloxazolidine (DMO)	1000 - 3000	•	•	•	•	•	•
	Mergal [®] 393	Dimethylhydantoin (DMDMH)	500 - 3100	•	•	•	•	•	•
	Mergal [®] 930	DBNPA	250		•		•		•
	Mergal [®] 680	BIT, DMDMH	1500 - 3000	•	•	•	•	•	•
	Mergal [®] 738	BIT, CIT/MIT	2000 - 3000		•		•		•
	Mergal [®] BIT20	Benzisothiazolinone (BIT)	500 - 1500	•	•	•	•	•	•
	Mergal [®] BIT20X	Benzisothiazolinone (BIT)	500 - 1500	•	•	•	•	•	•
	Mergal [®] K20X	Benzisothiazolinone (BIT)	500 - 1500	•	•	•	•	•	•
	Mergal [®] K10N	Benzisothiazolinone (BIT)	500 - 5000	•	•	•	•	•	•
	Mergal [®] MC14	Concentrated CIT/MIT	100 - 150		•		•		•
	Mergal [®] CM1.3	CIT/MIT	250 - 1000		•		•		•
	Troyshield [®] B00	Polymeric cationic surfactant	500 - 1000		•		•		•
Fungicides	Troyshield [®] FX40	Iodo-propynyl-butyl carbamate (IPBC)	150 - 400	•	•	•	•	•	•
	Polyphase [®] P20T	IPBC	250 - 1000		•		•		•
	Troyshield [®] FSP40	Sodium pyridinethione	Up to 1250	•	•	•	•	•	•
Additives	Troykyd [®] D330	Synthetic wax/hydrocarbon dispersion	100 - 300	•	•	•	•	•	•
	Troykyd [®] P5071M2	Siloxane-based antifoam	75 - 150	•	•	•	•	•	•
	Troykyd [®] D290	Siloxane-based antifoam	75 - 150	•	•	•	•	•	•
	Troykyd [®] EB77	Polymeric cationic surfactant	100 - 1000		•		•		•
	Troykyd [®] C13	Formulated amine-based pH buffer	1000 - 2000	•	•	•	•	•	•
Test Kits	B-F Indicator™ Dip Slides	10 per box		•		•		•	

• Broad Application • Formula Specific

Website Information

- Troy Chemical is a manufacturer of iodinated products



Metal Processing Fluids

PRODUCT DATA

Troy Corporation
www.troycorp.com

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EPA Registration No. 5383-77
Product Code: 10216

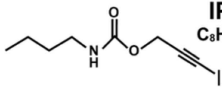
TROYSHIELD[®] FX40

Liquid fungicide for Metalworking Fluid Applications

Description

A major source of product failure in soluble oil, semi-synthetic and synthetic metalworking fluids is contamination from fungi (molds and yeast). These microorganisms may cause fluid degradation and the growth of biomass, which can adhere to interior surfaces, fluid delivery systems and reservoirs. This in turn can create malodors, diminish fluid performance and system efficiency, which can increase costs, decrease tool life, reduce productivity and cause machine shut-down. The use of Troyshield[®] FX40, a proven preservative to control fungal growth, will help maintain product functionality and increase the life of the metalworking fluid.

Active Substance

30%	3-Iodo-2-propynyl butyl carbamate	 <p>IPBC C₈H₁₂INO₂</p>
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Communication Log

- Covanta Essex has reached out to manufacturer to better understand products and associated waste management practices

Troy Chemical Co.
1 Avenue L
Newark, NJ 07105

COMMUNICATION LOG

Date	Spoke to	Notes
1/23/2020	P	P in customer service in Florham Park suggested FE at the Newark plant (x 3310)
1/23/2020		Left message for FE
2/5/2020		Left message for FE
3/30/2020		Left message for FE
4/8/2020		Called and left message for customer service. Emailed troyorderdesk@troycorp.com
4/9/2020	TM	Called TM from customer service. TM advised I should speak with EH at the Newark Plant. TM wouldn't give me EH cell phone but would forward my info to EH.
4/9/2020		Emailed LO, Technical Service
4/9/2020		Called and left a message for GH, Technical Service
4/9/2020	LZ	Called and spoke with LZ, Director of Sales. LZ said the person I should speak with is TC. I left a voicemail and emailed TC.
4/14/2020	LZ	Called and spoke with LZ and advised I have not received a call from anyone at Troy. I stressed that it is urgent I speak with someone. LZ would call TC and again and would call me back in a half hour. No call back received.

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Opacity Events Log vs Troy Chemical Deliveries

- Review of deliveries from manufacturers waste hauler were compared to opacity events in 2018, 2019 and 2020

Essex Opacity Events and Troy Chemical Deliveries

Opacity Event Date	Day of Week	Boiler	Time of Exceedance	Troy Delivery Date	Scale Out Time	Box Decal
5/30/2018	Wed	2	16:30 - 16:42	5/30/2018	15:19	201971
9/4/2018	Tues	1	15:24 - 15:54	9/4/2018	13:49	201971
12/6/2018	Thurs	3	15:12 - 15:30	12/6/2018	13:11	201971
1/14/2019*	Mon	3	16:18 - 16:36	1/14/2019	Multiple	Multiple
1/14/2019*	Mon	2	16:18 - 18:06	1/14/2019	Multiple	Multiple
1/28/2019	Mon	3	17:18 - 18:30	1/28/2019	16:02	201971
5/2/2019	Thurs	2	16:06 - 16:12	5/2/2019	14:52	218154
6/3/2019	Mon	2	19:30 - 21:12	6/3/2019	17:12	218154
6/16/2019**	Sun	1	4:12 - 4:24	6/14/2019	13:31	218154
6/19/2019	Wed	2	12:18 - 14:30	6/19/2019	11:22	218154
6/19/2019	Wed	3	12:24 - 14:06	6/19/2019	11:22	218154
6/24/2019w	Mon	2	1:24 - 1:42	6/19/2019	11:22	218154
6/24/2020w	Mon	1	5:12 - 5:30	6/19/2019	11:22	218154
8/7/2019	Wed	3	9:48 - 10:12	8/7/2019	8:35	218154
9/20/2019	Fri	3	18:12 - 18:24	9/20/2019	16:33	218154
10/10/2019◇	Thurs	1	14:48 - 15:24	10/9/2019	15:24	218154
2/5/2020	Wed	1	19:00 - 19:06	2/5/2020	10:06	218154
4/7/2020	Tues	1	13:30 - 13:54	4/7/2020	12:44	218154

* Multiple hauler deliveries received that day, unclear which delivery was Troy Chemical.

** Troy delivery received on Friday 6/14/19

w This event was believed to have been caused by feeding material in the same area as the 6/19 event.

◇ Troy delivery received on Wednesday 10/9/19

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Action by Covanta Essex to avoid manufacturers waste

- Manufacturers waste stream diverted to WM Julia Street Transfer Station, Elizabeth, NJ.
- Coordinated effort with Essex County to ensure that future loads from manufacturer are diverted from Covanta Essex in the event a new hauler is procured.

Next Steps

- Monitor progress of Iodine Mitigation System at Covanta - Lancaster in order to respond to NJDEP concerns regarding Environmental Improvement Pilot Test (EIPT) application previously withdrawn by Covanta - Essex.
- Share results of Essex investigation with Covanta – Lancaster and other Covanta facilities.
- Continue informational flyers regarding the disposition of Iodinated materials.