

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

H278168710

FACILITY: Allied Motion Owosso		SRN / ID: H2781
LOCATION: 201 S Delaney Rd, OWOSSO		DISTRICT: Lansing
CITY: OWOSSO		COUNTY: SHIAWASSEE
CONTACT: Justin Bukovick , Manufacturing Engineer		ACTIVITY DATE: 08/23/2023
STAFF: Daniel McGeen	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced inspection of opt-out facility last inspected in 2019.		
RESOLVED COMPLAINTS:		

On 8/23/203 the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) conducted an unannounced, scheduled inspection of Allied Motion, formerly known as the Motor Products Division of Allied Motion Tech. A review was subsequently conducted of facility recordkeeping. These were Partial Compliance Evaluation (PCE) activities, conducted as part of a Full Compliance Evaluation (FCE).

Environmental contacts:

- Justin Bukovick, Manufacturing Engineer; 989-725-4807; justin.bukovick@alliedmotion.com
- Lisa Fisher, Materials Coordinator; 989-725-4803; lisa.fisher@alliedmotion.com

EGLE, AQD contact:

Dan McGeen, inspector; 517-648-7547; mcgeend@michigan.gov

Facility description:

This facility designs and manufactures custom electric motors.

Emission units:

Emission Unit* ID	Emission Unit Description	Flexible Group**	Permit to Install (PTI) No. or Rule	Federal regulation	Compliance status
EU-DEGREASER	Detrex VS2000 model batch vapor degreaser, with an electric chiller coil and a "no exhaust" system, uses trichloroethylene	FG-FACILITY	PTI 552-81C	40 CFR Part 63, Subpart T	Noncompliance
EU-COLDCLEANER		FG-FACILITY			

	Detrex custom-built cold cleaner that used a solvent containing methylene chloride		PTI 552-81C	40 CFR Part 63, Subpart T	Removed from site
EU-ZINC FURNACE	A furnace once used for melting zinc, removed from site long ago.	FG-FACILITY	PTI 552-81C	NA	Removed from site long ago
EU-VARNISH DIP	Varnish dip system used to coat motor shells prior to assembly.	FGCOATING SYSTEMS, FG-FACILITY	PTI 552-81C	NA	Removed from site
EU-SHWFRAMEPAINT	Spray paint booth with filters and natural gas-fired oven.	FGCOATING SYSTEMS, FG-FACILITY	PTI 552-81C	NA	Removed from site
EU-TRICKELVARNISH	Trickle varnish and epoxy resin varnish system used to apply varnish to armatures of motors.	FGCOATING SYSTEMS, FG-FACILITY	PTI 552-81C	NA	Compliance
Epoxy – induction heat	Hot melt adhesive application	FG-FACILITY	Rule 287 (2)(a) and/or (i)	NA	Compliance
Water-based parts washer	Water-based parts washer in CRC tool room, exhausting to in-plant environment.	FGFACILITY	Rules 281(2)(e) and/or 285(2)(r)(iv)	NA	Compliance

***An emission unit** is any part of a stationary source which emits or has the potential to emit an air contaminant.

****A flexible group** is used in a permit to install (PTI) or Renewable Operating Permit (ROP) to combine two or more emission units that have common or identical requirements.

Flexible Groups:

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Flexible Group ID	Emission Units Included in Flexible Groups
FG-COATINGSYSTEMS	EU-VARNISHDIP, EU-TRICKELVARNISH, EU-SHWFRAMEPAINT
FG-FACILITY	All equipment at the stationary source, including equipment covered by other permits, grandfathered equipment, and exempt equipment.

Regulatory overview:

This facility has a synthetic minor or opt-out permit, Permit to Install (PTI) No. 552-81C, which restricts the facility's potential to emit (PTE) for Hazardous Air Pollutants (HAPs), to keep it from becoming a major source of air emissions. The major source threshold for HAPs is a PTE of 10 tons per year (TPY) or more of a single HAP, or 25 TPY or more of total HAPs. A source that is not major for HAPs is called an *area source*.

This facility is considered a minor source for *criteria pollutants*, that is, those pollutants for which a National Ambient Air Quality Standard (NAAQS) exists. They include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds (VOCs), lead, particulate matter smaller than 10 microns (PM-10) in diameter, and particulate matter smaller than 2.5 microns in diameter (PM2.5). A major source for criteria pollutants has a PTE of 100 TPY or more for any one of the criteria pollutants.

Additionally, Allied Motion is subject to 40 CFR Part 63, Subpart T, *National Emissions Standards for Halogenated Solvent Cleaning*, because of their vapor degreaser, and cold cleaner, which use the chlorinated solvents trichloroethylene (TCE), and methylene chloride, respectively.

The federal regulation 40 CFR Part 63, Subpart JJJJJJ—*National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* was written for area sources of HAPs. There are no boilers, although there are 2 hot water heaters, which provide hot water for restrooms. One has previously been described as a 40-gallon electric heater, and the second as a natural gas-fired 60-gallon heater, to be replaced when it wears out with another 40-gallon electric heater. To meet the definition of a hot water heater in this area source Generally Achievable Control Technology (GACT) standard, the unit must be no more than 120 gallons in capacity. Pursuant to Section 63.11195(f), because the existing units and future unit are below 120 gallons each, they are, and will be, exempt from Subpart JJJJJJ. Additionally, because electric heaters do not combust fuel, electric heaters are exempt from that JJJJJJ, as well.

Fee status:

This facility is considered a category E fee source, because it has a Title V opt-out permit.

The facility reports annually to the Michigan Air Emissions Reporting System (MAERS).

Location:

- Address: 201 S. Delaney Road, Owosso, MI 48867
- Description: The facility is located in the north end of an industrial park, on the west side of Owosso. The nearest residences are about 1,200 feet to the northeast. The closest nearby structure appears to

be a storage building, roughly 75 feet to the south, followed by a number of industries further south. A factory is about 700 feet to the west, and to the east is undeveloped land, for 500 feet.

Most recent inspections:

- 9/12/2019: Noncompliance for vapor degreaser working mode cover/idling mode cover where door panels did not completely seal the opening in the middle, and where trim was crumbling.
- 8/27/2015: Compliance.
- 5/8/2013: Compliance.
- 9/22/2011: Compliance.
- 7/15/2009: Compliance.

Complaint history:

No complaints are on file, as far back as August of 1995. Older files were previously sent to the State of Michigan records center for storage.

Required safety attire:

Unknown, but safety glasses with side shields should be worn, and hearing protection should be brought in case needed.

Odor evaluation:

- Start time: 9:23 AM.
- Weather conditions: Overcast, humid, and 68 degrees F, with winds out of ESE 5-10 miles per hour.
- Route taken: West on M-21 then south on Delaney Rd, past Allied Motion, to Sequoia Trail. This was followed by returning to Delaney Rd. and driving north to Allied Motion itself.

Odors detected:

Location	Time	Odor Level	Odor Description	Comments
S. Delaney Rd.	9:24 AM	1	Too faint to ID	South of Allied Motion, in between Georgia- Pacific Corrugated LLC-Owosso Facility and Great Lakes Composite, LLC.

The 0 to 5 odor scale used by AQD reads as follows:

- 0 - Non-Detect
- 1 - Just barely detectable
- 2 - Distinct and definite odor
- 3 - Distinct and definite objectionable odor
- 4 - Odor strong enough to cause a person to attempt to avoid it completely
- 5 - Odor so strong as to be overpowering and intolerable for any length of time

The level 1 odor detected some distance south of Allied Motion was too faint to identify or assign a characteristic. This odor was not suspected to be from Allied Motion. It was determined to be insufficient at this time to constitute a violation of MAPC Rule 901(b), which prohibits unreasonable interference with the comfortable enjoyment of life and property.

Arrival:

- Arrival time: 9:27 AM.
- Odors: None.
- Visible emissions: None.

The plant office used to be at the front of the building, but that entrance is now closed. The new office entrance is at the back or east side of the plant, and can be spotted by the nearby visitor parking signs.

Upon arrival, D. McGeen met with Justin Bukovick, Manufacturing Engineer, and with Frank Fisher, who recognized him from a prior visit to the plant this year, when inspector credentials had been provided, and from previous years.

Inspection:

Opt-out facilities generally undergo a FCE once every 4 years, in accordance with AQD's Compliance Monitoring Strategy, pursuant to U.S. Environmental Protection Agency requirements. This was an unannounced inspection.

EU-DEGREASER, PTI No. 552-81C, 40 CFR Part 63, Subpart T:

The Detrex VS2000 model batch vapor degreaser was in downtime mode, that is, not operating at the time of the inspection. Use is reported to be about 3 times per month. It was said to have run most recently on 8/17. It is predicted to be gone sometime this fall. Years ago, they had said it would soon be removed, but there were subsequent testing programs which extended its service life here at the plant.

Note: Detrex is currently doing business as PCT, or Parts Cleaning Technologies, with offices in Detroit and Kentucky. Allied Motion is said to contact them for any issues involving the degreaser.

This trichloroethylene (TCE) degreaser is electrically heated, and uses an electric chiller coil, as well as an air-conditioned cooling system. It exhausts to the general, in-plant environment. Because it uses TCE, it is subject to Subpart T. The chiller coil contains a lockout to prevent use of the unit if the coil temperature is not maintained. They have a distiller which cleans the solvents.

An acid is added to the TCE as needed, to stabilize it. If acid levels get too high, the solvent would not be as effective. Freeboard temperature and water temperature are also checked weekly. If the water temperature gets too high, a monitor alerts them. The degreaser's capacity is said to be about 240 gallons of TCE.

A room was built around the degreaser, with walls most of the way to the ceiling. Creating a partial or complete enclosure around a degreaser is one of the techniques that may be used under the NESHAP to reduce room draft, or air flow, across the top of the freeboard area.

From atop an elevated access platform, it was possible to look down at the degreaser.

Notes on rolling cover:

- Degreaser cover: Closed, as required by Subpart T when not processing/loading/unloading parts.
- Design of cover: bi-parting, segmented rolling panels.
- Cover with relation to Subpart t requirements: This cover serves as the working mode cover, the idling mode cover, and the downtime mode cover, under Subpart T.
- Fit of rolling panels where they meet in the middle: Good.
- Fit and condition of seals/trim where door panels close: Good, said to have been replaced 2 weeks ago.
- Odors at cover: None, except for an extremely faint TCE odor when D. McGeen's face was so close to the cover as to be touching it. This odor was so minute that it did not appear to indicate a problem with the degreaser.
- Odors in room near degreaser: None.

When the rolling cover was opened, per D. McGeen's request, there were no solvent vapors visible inside the unit. There was a barely detectable TCE odor coming from the interior of the degreaser. It eventually became distinct and definite. J. Buckovick stated that this was a stronger odor than you would get when the degreaser is running, because then it would have the freeboard refrigeration device (FRD) operating. At the moment, the FRD was at room temperature.

Inside the degreaser, the upper coils lining the interior walls are refrigerated, and below them are the lower coils, which are chilled with glycol. The temperature of the upper refrigerated coils, which are filled with water, are said to be tracked tracked, and these values recorded on a form on the large recordkeeping board.

D. McGeen was shown how they measure the temperature of the chilled air blanket inside the degreaser, using a temperature probe whose length is such that they obtain a reading in the middle of the air blanket, from a vertical dimension. The mid-point is between the upper and lower coils, which appears consistent with the U.S. Environmental Protection Agency Applicability Determination Index M020011, on how to measure temperature for batch vapor degreasers.

There was a splotch of a whitish residue on the front side of the degreaser, near the top. D. McGeen asked if this was from TCE. He was informed that it was from a cleaning product they tried once and found unacceptable, due to the residue it left.

There were no odors near the TCE distiller. Nearby was a sealed 55-gallon drum for waste TCE and or sludges removed from the degreaser and/or chiller. It did not appear to be a source of TCE odors.

Photos (attached) of the operating records/charts posted next to the degreaser:

- IMG_0878.JPG: Degreaser acid acceptance chart.*
- IMG_0879.JPG: Duplicate image.
- IMG_0880.JPG: Degreaser freeboard temperature, with the last measurement on 3/2/2023.**
- IMG_0881.JPG: Degreaser water temperature chart, with the last measurement on 3/2/2023.***
- IMG_0882.JPG: Duplicate image.
- IMG_0883.JPG: Degreaser cleaning log, with entries for 2/14, 7/5, and 7/13/2023.
- IMG_0884.JPG: Form for conducting work on degreaser.
- IMG_0885.JPG: Duplicate image.

***Measuring acid levels on the acid acceptance chart appears to be a voluntary activity, not required by PTI 552-81C or Subpart T.**

****Degreaser freeboard temperature monitoring and recordkeeping is discussed in the compliance checklist tables for EU-DEGREASER in PTI 552-81C and Subpart T, later in this activity report.**

*****PTI No. 552-81C does not require the water temperature in the cooling coils to be monitored, nor does Subpart T. It appears to be a voluntary action.**

EU-COLDCLEANER; PTI No. 552-81C, 40 CFR Part 63, Subpart T:

The Detrex custom built cold cleaner has been removed from the plant, as verified by AQD. The PTI will not be voided, however, as other emission units covered by the permit are still in use.

EU-ZINCFURNACE; PTI No. 552-81C:

This zinc furnace was removed from the facility, prior to the 2011 inspection by AQD. The PTI will not be voided, however, as other emission units covered by the permit are still in use.

EU-VARNISHDIP; PTI No. 552-81C:

The varnish dip process has been removed since the 2019 inspection by AQD. The PTI will not be voided, however, as other emission units covered by the permit are still in use.

EU-SHWFRAMEPAINT; PTI No. 552-81C:

This spray paint booth, with particulate filters and a natural gas-fired curing oven, was removed from the facility, as of 1/24/2012. The PTI will not be voided, however, as other emission units covered by the permit are still in use.

EU-TRICKELVARNISH; PTI No. 552-81C:

The trickle varnish process had been running today, as the unit was still radiating heat, though cooling down. The curing oven was at about 185 degrees F, but actually operates at 00-425 degrees F.

The process operates as follows: Parts are preheated, and varnish is dripped onto them. The varnish secures wire armatures in place on the motors and provides protection against corrosion. Coated parts are cured in a pre-heat oven and a curing oven, both electrically powered. The curing process exhausts through the roof. The cleaning medium for the trickle varnish process is soapy water.

Water-based parts cleaner, Rule 285(r)(iv):

There is a new, "green" parts washing process, which appears to be using a water-based solvent, although that could not be confirmed.

Possible exemptions from the requirement of MAPC Rule 201 to obtain a PTI are MAPC Rules 285(2)(r)(iv), for metal cleaning processes which exhaust into the general, in-plant environment, and Rule 281(2)(e) for equipment used for washing or drying materials where the material itself cannot become an air contaminant, if no VOCs that have a vapor pressure > 0.1 ml of mercury at standard conditions are used and no oil or solid fuel is burned.

Hot melt adhesive process; MAPC Rule 287(i):

They have a small induction bonding process, which applies an epoxy adhesive to a shell, and applies heat, curing the adhesive instantly. This was operating, at the time of the inspection. No visible emissions were detected. The operating temperature can vary, depending on the specific part.

MAPC Rule 287(2)(i) exempts:

(i) Equipment that is used for the application of a hot melt adhesive.

Miscellaneous:

Their tool room has a number of metal working machines. These are used on a non-production basis, and exhaust to the indoor air. The MAPC Rule 285(2)(I)(vi)(A) or(B) exemptions apply to the following:

(I) The following equipment and any exhaust system or collector exclusively serving the equipment:

(vi) Equipment for carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, sand blast cleaning, shot blasting, shot peening, or polishing ceramic artwork, leather, metals, graphite, plastics, concrete, rubber, paper board, wood, wood products, stone, glass, fiberglass, or fabric which meets any of the following:

(A) Equipment used on a nonproduction basis.

(B) Equipment that has emissions that are released only into the general in-plant environment.

COMPLIANCE CHECK WITH SELECTED SPECIAL CONDITIONS OF PTI 52-81C, EU-DEGREASER:

Compliance check with special conditions (SC) for PTI 552-81C, EU-DEGREASER:

PTI 552-81C SC	Requirement	Comments	Complies?
EU-DEGREASER, SC 1.1	VOC emission limit of 800 lbs/month, over a 3-month rolling average as determined at the end of each calendar month.	The most recent 3-month rolling average, from July 2023, was 57.03 lbs, far below the limit. The degreaser is said to operate only about once per week.	Yes
EU-DEGREASER, SC 1.2	The permittee shall not use more than 65.5 gallons per month of solvent containing trichloroethylene, hereinafter "solvent", based on a 3-month rolling average as determined at the end of each calendar month. The amount of solvent used shall be determined on a "net usage" basis. "Net usage" is defined as the amount of solvent	The attached records showed that the maximum amount of solvent added per month was 47.49 gallons, in November of 2022. However, this was based on monthly data, and not a 3-month rolling average. The 3-month rolling average value for gallons should be added to the spreadsheet.	Yes

	added to EU-DEGREASER to bring the solvent levels up to starting levels less any amount of solvent removed as waste, and shall be measured at least once per month.		
EU-DEGREASER, SC 1.3	The permittee shall not operate EU-DEGREASER except in compliance with the overall emission limit requirements of 40 CFR 63.464(a)(1).	The monthly degreaser emissions as reported, 171.08 lbs in July 2023, appear to be in compliance with the applicable <i>Table 5- Emission Limits for Batch Vapor and In-Line Solvent Cleaning Machines With a Solvent/Air Interface</i> emission limit. This is 150 kg/month for batch vapor solvent cleaning machines. Table 5 is found in Section 63.464(a)(1) of Subpart T.	Yes
EU-DEGREASER, SC 1.4	The permittee shall comply with all provisions of the NESHAP as specified in 40 CFR Part 63, Subparts A and T, as they apply to degreaser.	Temperature records for the FRD had not been recorded since 3/2/2023, and reduced room draft measurements were not being kept, violating Sections 63.466 (a)(1) and (d) of Subpart T and therefore this permit condition.	No
EU-DEGREASER, SC 1.5	The permittee shall not operate EU-DEGREASER unless the freeboard chiller is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the freeboard chiller includes maintaining an average temperature of less than 50 degrees F.	Though the unit was not running this day, a FRD chart on the side of the unit (see attached photos) showed that a temperature ranging from 40-44 degrees F had previously been maintained, below the regulatory limit. However, the last recorded measurement was 3/2/2023. This is not a violation of SC 1.5, but a violation of Section 63.466(a)(1) of Subpart T.	Yes
EU-DEGREASER, SC 1.6	The permittee shall equip and maintain EU-DEGREASER with a temperature monitoring device on the primary condenser on the freeboard refrigeration system.	Though the degreaser was not running today, the temperature measuring device on the primary condenser was working, and it expressed the room temperature value of 67.4 degrees F.	Yes

EU-DEGREASER, SC 1.7	The permittee shall keep records for EU-DEGREASER as specified below. The records include, but are not limited to the items identified below:	See below.	See below
EU-DEGREASER, SC 1.7a	The dates and amounts of solvent that are added to and removed from EU-DEGREASER.	These are tracked on hardcopy forms. A photo of a representative record from April 2023 was emailed, showing that 13.5 gal of TCE were added to the degreaser on 4/5/2023.	Yes
EU-DEGREASER, SC 1.7b	The solvent composition of wastes removed from EU-DEGREASER using the procedure described in 40 CFR 63.465 (c)(2).	Section 63.465(c)(2) requires the total amount of halogenated HAP solvent removed from the solvent cleaning machine in solid waste, obtained as described in paragraph (c)(2) of this section, during the most recent monthly reporting period, by tests conducted using EPA reference method 25, or by engineering calculations included in a compliance report. J. Bukovick indicated that the solvent composition of their wastes is 100% TCE. Anything else mixed with it is acid, rust, or oils.	Yes
EU-DEGREASER, SC 1.7c	Net usage of solvent on a monthly and 3-month rolling average as determined at the end of each calendar month for EU-DEGREASER.	Gallons used and lbs used are determined on a monthly basis, and 3-month rolling average VOC emissions are shown on a monthly basis.	Yes
EU-DEGREASER, SC 1.7d	Calculation sheets showing how monthly and 3-month rolling average emissions as determined at the end of each calendar month for EU-DEGREASER were determined and the results of all calculations.	Fishbeck, their consultant, does these calculations based on the meter readings Allied Motion sends them. Allied Motion will contact them to ask for the calculation/equation.	Yes
EU-DEGREASER, SC 1.7e	The permittee shall submit reports to the AQD District	The company is submitting annual and semi-annual compliance reports, as required by Subpart T.	Yes

	Supervisor as specified in 40 CFR 63.468.	
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Compliance check with special conditions (SC) for PTI 552-81C, FG-COATING SYSTEMS:

PTI 552-81C SC	Requirement	Comments	Complies?
FG-COATINGSYSTEMS, SC 4.1	VOC emission limit of 10 TPY over a 12-month rolling time period as determined at the end of each calendar month.	The attached records show that in August 2022, 12-month rolling VOC values were 0.04 tons, but they gradually dropped to 0.00 tons as of July 2023.	Yes
FG-COATINGSYSTEMS, SC 4.2	The permittee shall not use more than 1,540 gallons per year of varnish including reducer in EUVARNISHDIP, 1,075 gallons per year of coating including thinner in EU-SHWFRAMEPAINT, nor 230 gallons per year of varnish in EU-TRICKELVARNISH. All limits are based on a 12-month rolling period as determined at the end of each calendar month.	The attached records show that the 12-month rolling value for throughput of varnish in EU-TRICKELVARNISH was 43.08 gallons as of July 2023, well below the maximum allowed 230 gallons/year.	Yes
FG-COATINGSYSTEMS, SC 4.5	The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, varnish, solvent, etc., including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer’s formulation data, or both. All records shall be kept on file for a period of at least five years and made available to the Department upon request.	This is being done for EU-TRICKELVARNISH, the last remaining coating line in FG-COATINGSYSTEMS. The attached records show the chemical composition, including weight percent of each coating, for 6180-S Polyester Resin and 6183-S Polyester Resin.	Yes

FG-COATINGSYSTEMS, SC 4.6	The permittee shall keep the following information on a monthly basis for FG-COATINGSYSTEMS:	See below.	See below
FG-COATINGSYSTEMS, SC 4.6a	Gallons of each coating, varnish, solvent, etc., used for each individual emission unit on a monthly basis.	The attached records show gallons of coatings used in EU-TRICKELVARNISH. Recent months included: <ul style="list-style-type: none"> • July 2023: 0.0 gal of 6183-S • June 2023: 1.27 gal of 6183-S • May 2023: 2.76 gal of 6183-S • April 2023: 1.74 gal of 6183-S 	Yes
FG-COATINGSYSTEMS, SC 4.6b	Gallons of each coating, varnish, solvent, etc., used for each individual emission unit per 12-month rolling time period as determined at the end of each calendar month.	The attached records show this is being done.	Yes
FG-COATINGSYSTEMS, SC 4.6c	VOC content of each coating, varnish, solvent, etc., as applied.	VOC content of each coating was shown, with the 6183-S content being 3.53 lbs/gal.	Yes
FG-COATINGSYSTEMS, SC 4.6d	VOC mass emission calculations determining the monthly emission rate in tons per calendar month.	The monthly emission rate is being provided in lbs, but this can easily be converted to tons.	Yes
FG-COATINGSYSTEMS, SC 4.6e	VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.	The attached records show this is being done.	Yes
FG-COATINGSYSTEMS, SC 4.7f	The stack SVTRICKLEVARNISH exhausting EU-TRICKELVARNISH shall have a maximum diameter	The process and exhaust stack had been relocated together within the geographic footprint	Yes

	<p>of 10 inches and a minimum height above ground level of 27.7 feet.</p>	<p>of the plant, which is allowable under MAPC Rule 285(2)(a), and the stack dimensions reportedly did not change. The stack could not be seen from ground level, but was believed to be 30 feet, taller than the minimum required height of the stack.</p>	
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Subpart T requirements applicable to EU-DEGREASER:

As of today's date, the Detrex vapor degreaser used TCE, and was subject to 40 CFR Part 63, Subpart T, the NESHAP for halogenated solvent cleaning. A halogenated solvent is one which contains chlorine, bromine, or fluorine. Although many different halogenated compounds exist, Subpart T applies only to solvent cleaning machines using 6 specific halogenated compounds, including TCE.

40 CFR Part 63, Subpart T classifies batch vapor cleaning machines according to Solvent Air Interface (SAI) size. Under Subpart T, this vapor degreaser is classified as a *large machine*, because at 26.52 ft² or 2.38m² it is over the *large* threshold of or 13 ft² 1.21 m². Under Subpart T, it is classified as an existing unit, because it was manufactured before 11/29/1993.

The Detrex vapor degreaser uses a Freeboard Refrigeration Device (FRD), to create a chilled air blanket within the degreaser, to reduce the level of vapors which may be emitted. This is a compliance option allowed under 40 CFR Part 63, Subpart T. The NESHAP's Section 63.463(e)(2) requires that the chilled air blanket temperature, where a FRD is used to comply with Subpart T, is no greater than 30% of the solvent's boiling point. For TCE, with a boiling point of 188.06 degrees F, 30% corresponds to 56.4 degrees F.

Table of 40 CFR Part 63, Subpart T requirements for Detrex VS2000:

Section of Subpart T	Requirement	Comments	Complies?
	<p>(a) Except as provided in §63.464 for all cleaning machines, each owner or</p>	<p>The degreaser conforms to the design requirements overall,</p>	<p>Yes, overall</p>

Section 63.463 (a)	operator of a solvent cleaning machine subject to the provisions of this subpart shall ensure that each existing or new batch vapor or in-line solvent cleaning machine subject to the provisions of this subpart conforms to the design requirements specified in paragraphs (a)(1) through (7) of this section. (Note: subsequent language for a web cleaning machine does not apply.)	although wind speed measurements have not been conducted.	
Section 63.463 (a)(1)(i)	<p>(1) Each cleaning machine shall be designed or operated to meet the control equipment or technique requirements in paragraph (a)(1)(i) or (a)(1)(ii) of this section.</p> <p>(i) An idling and downtime mode cover, as described in §63.463(d)(1)(i), that may be readily opened or closed, that completely covers the cleaning machine openings when in place, and is free of cracks, holes, and other defects.</p>	The degreaser has a cover which functions as idling and downtime mode cover (and working mode cover), which could readily be opened and closed, completely covered the degreaser opening, and was free of cracks, holes, and other defects.	Yes
Section 63.463 (a)(1)(ii)	<p>(ii) A reduced room draft as described in §63.463(e)(2)(ii).*</p> <p>* This sets an indoor wind speed limit of 15.2 meters per minute or 50 feet per minute.</p>	The facility was not measuring wind speed, so it could not be confirmed that they were meeting the indoor wind speed limit.	Unknown
Section 63.463 (a)(2)	(2) Each cleaning machine shall have a freeboard ratio of 0.75 or greater.	Unknown. Per Section 63.461, Definitions, freeboard ratio means the ratio of the solvent cleaning machine freeboard height to the smaller interior dimension (length, width, or diameter) of the solvent cleaning machine. Freeboard height means the distance from the solvent/air interface (SAI), as measured during the idling mode, to the top of the cleaning machine. The SAI is the mid-line height of the primary condenser coils.	Unknown

Section 63.463 (a)(3)	(3) Each cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.	The hoist for raising and lowering parts was reported to be built so the automated hoist speed can never exceed the maximum allowed by Subpart T.	Yes
Section 63.463 (a)(4)	(4) Each vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils. This requirement does not apply to a vapor cleaning machine that uses steam to heat the solvent.	J. Bukovick confirmed their unit is so equipped.	Yes
Section 63.463 (a)(5)	(5) Each vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.	J. Bukovick did not think their unit is so equipped, but will double check.	No?
Section 63.463 (a)(6)	(6) Each vapor cleaning machine shall have a primary condenser.	The Detrex VS2000 has a primary condenser.	Yes
Section 63.463 (a)(7)	(7) Each cleaning machine that uses a lip exhaust shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of paragraph (e)(2)(vii) of this section.	NA, as the Detrex VS2000 does not have a lip exhaust.	NA
Section 63.463 (b)(1)(i)	The requirements of Section 63.463(b)(1)(i) Table 1 are not discussed here, because they only apply to batch vapor cleaning machines with a Solvent/Air Interface (SAI) of less than 1.21 square meters. The Detrex VS2000 unit has a SAI of 2.38 square meters and is not	NA	NA

	subject. It is classified as a large machine under the NESHAP.		
Section 63.463 (b)(1)(ii)	(ii) Demonstrate that their solvent cleaning machine can achieve and maintain an idling emission limit of 0.22 kilograms per hour per square meter (0.045 pounds per hour per square foot) of solvent/air interface area as determined using the procedures in §63.465(a) and appendix A to this part.	NA, as the SAI of their batch vapor cleaning unit, at 2.38 square meters, is greater than 1.21 square meters.	NA
Section 63.463 (b)(2)(i)	<p>(2) Each owner or operator of a batch vapor cleaning machine with a solvent/air interface area greater than 1.21 square meters (13 square feet) shall comply with the requirements specified in either paragraph (b) (2)(i) or (b)(2)(ii) of this section.</p> <p>(i) Employ one of the control combinations listed in table 2 of this subpart or other equivalent methods of control as determined using the procedure in §63.469, equivalent methods of control.</p> <p><i>Table 2—Control Combinations for Batch Vapor Solvent Cleaning Machines With a Solvent/Air Interface Area Greater than 1.21 Square Meters (13 Square Feet)</i></p> <p><i>Option</i></p> <p><i>Control combinations</i></p> <p><i>1 Freeboard refrigeration device, freeboard ratio of 1.0, superheated vapor.</i></p> <p><i>2 Dwell, freeboard refrigeration device, reduced room draft.</i></p> <p><i>3 Working-mode cover, freeboard refrigeration device, superheated vapor.</i></p> <p><i>4 Freeboard ratio of 1.0, reduced room draft, superheated vapor.</i></p> <p><i>5 Freeboard refrigeration device, reduced room draft, superheated vapor.</i></p> <p><i>6 Freeboard refrigeration device, reduced room draft, freeboard ratio of 1.0.</i></p> <p><i>7 Freeboard refrigeration device, superheated vapor, carbon adsorber.</i></p> <p>Note: Unlike most of the control techniques</p>	<p>With a Solvent/Air Interface of 2.38 square meters, Section 63.463(b)(2) (i) applies to Allied Motion’s batch vapor degreaser. Under Table 2, out of Options 1-7, Allied Motion appears to have chosen either Option 2 (Dwell, freeboard refrigeration device, reduced room draft), or Option 6 (freeboard refrigeration device, reduced room draft, and freeboard ratio of 1.0), as every other option involves superheated vapor, and their degreaser is <u>not</u> a superheated vapor unit.</p> <p>NOTE: Because they have previously tracked freeboard refrigeration temperature and have limited their part dwell time via a hoist which is designed to comply with Subpart T, Option 2 rather than 6 may potentially be the option which was chosen.</p>	Yes

	<p>available for complying with this rule, carbon adsorbers are not considered to be a pollution prevention measure. Use of such units may impose additional cost and burden for a number of reasons. First, carbon adsorption units are generally more expensive than other controls listed in the options. Second, these units may present cross-media impacts such as effluent discharges if not properly operated and maintained, and spent carbon beds have to be disposed of as hazardous waste. When making decisions about what controls to install on halogenated solvent cleaning machines to meet the requirements of this rule, all of these factors should be weighed and pollution prevention measures are encouraged wherever possible.</p>		
Section 63.463 (b)(2)(ii)	<p>(ii) Demonstrate that their solvent cleaning machine can achieve and maintain an idling emission limit of 0.22 kilograms per hour per square meter (0.045 pounds per hour per square foot) of solvent/air interface area as determined using the procedures in §63.465(a) and appendix A of this part.</p>	<p>NA, as Allied Motion did not choose to achieve and maintain an idling emission limit as their option under Subpart T.</p>	<p>NA</p>
Section 63.463 (c)	<p>Section 63.463(c) requirements are not listed in this report, as they only apply to in-line cleaning machines.</p>	<p>NA, as the Allied Motion' batch vapor degreaser is not an in-line cleaning machine.</p>	<p>NA</p>
Section 63.463 (d)(1)(i)	<p>(d) Except as provided in §63.464 for all cleaning machines, each owner or operator of an existing or new batch vapor or in-line solvent cleaning machine shall meet all of the following required work and operational practices specified in paragraphs (d)(1) through (12) of this section as applicable. The owner or operator of a continuous web cleaning machine shall comply with the requirements of paragraph (g) or (h) of this section, as appropriate, in lieu of complying with this paragraph.</p>	<p>The solvent cleaning machine had a cover which was in place during the downtime mode, i.e. as seen on 8/23/2023. This same cover also serves as the idling mode cover and the working mode cover.</p>	<p>Yes</p>

	<p>(1) Control air disturbances across the cleaning machine opening(s) by incorporating the control equipment or techniques in paragraph (d)(1)(i) or (d)(1)(ii) of this section.</p> <p>(i) Cover(s) to each solvent cleaning machine shall be in place during the idling mode, and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover(s) to not be in place.</p>		
Section 63.463 (d)(1)(ii)	(ii) A reduced room draft as described in §63.463(e)(2)(ii).	Although Allied Motion has built a wall around the degreaser and its work area which reaches almost to the ceiling, they are not measuring wind speed per Section 63.463(e)(2)(ii)(A), and an exterior building door is reported to be used at times for ventilation. This could cause increased room draft.	No
Section 63.463 (d)(2)	(2) The parts baskets or the parts being cleaned in an open-top batch vapor cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.	The degreaser was not operating today. Noncompliance is not suspected, based on past inspections here.	Yes
Section 63.463 (d)(3)	(3) Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).	Any spraying is down below the barrier, J. Bukovick said, referring to the barrier for solvent vapors..	Yes

Section 63.463 (d)(4)	(4) Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from any solvent cleaning machine unless an equally effective approach has been approved by the Administrator.	The degreaser was not operating today. Noncompliance is not suspected, based on past inspections here.	Yes
Section 63.463 (d)(5)	(5) Parts baskets or parts shall not be removed from any solvent cleaning machine until dripping has stopped.	The degreaser was not operating today. Noncompliance is not suspected, based on past inspections here.	Yes
Section 63.463 (d)(6)	(6) During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater.	AQD was informed that they follow this.	Yes
Section 63.463 (d)(7):	(7) During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.	AQD was advised in 2019 that they do this.	Yes
Section 63.463 (d)(8)	(8) When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.	Threaded connectors, like a hydraulic line.	Yes
Section 63.463 (d)(9)	9) Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been	Following either manufacturer's guidance or state regulations.	Yes

	demonstrated to the Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.		
Section 63.463 (d)(10)	(10) Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning procedures in appendix A to this part if requested during an inspection by the Administrator.	NA, as AQD did not administer this test. However, AQD reserves the right to administer this test, having been delegated authority by EPA to implement the provisions of Subpart T.	NA
Section 63.463 (d)(11)	(11) Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.	Waste solvent and sediment from the bottom of the degreaser and/or distillation unit were being stored in a sealed, 55-gallon drum.	Yes
Section 63.463 (d)(12):	(12) Sponges, fabric, wood, and paper products shall not be cleaned.	Only metal.	Yes
Section 63.463 (e)(2)(i):	(e) Each owner or operator of a solvent cleaning machine complying with paragraph (b), (c), (g), or (h) of this section shall comply with the requirements specified in paragraphs (e)(1) through (4) of this section. (1) Conduct monitoring of each control device used to comply with §63.463 of this subpart as provided in §63.466. (2) Determine during each monitoring period whether each control device used to comply with these standards meets the requirements specified in paragraphs (e)(2)(i) through (xi) of this section.	The NESHAP requirement is that the freeboard refrigeration device (FRD) temperature is no greater than 30% of the boiling point of the solvent used. AQD's Hawley's Condensed Chemical Dictionary Twelfth Edition indicates the boiling point of TCE is 86.7 deg. C, or 188.06 deg. F. The 30% limit corresponds to 56.4 deg. F. A FRD temperature chart photographed (see attached) near the unit showed that temperatures were between 40-44 degrees F, meeting the temperature requirement. However, the most recent temperature check was	Yes

	(i) If a freeboard refrigeration device is used to comply with these standards, the owner or operator shall ensure that the chilled air blanket temperature (in ° F), measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point.	3/2/2023, so the company has not been doing the weekly recordkeeping required by Section 63.466(a)(1).	
Section 63.463 (e)(2)(ii)	(ii) If a reduced room draft is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(ii)(A) and (e)(2)(ii)(B) of this section.	See below. Reduced room draft appears to be required pursuant to Section 63.463(d)(1)(ii).	See below
Section 63.463 (e)(2)(ii) (A)	(A) Ensure that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at any time as measured using the procedures in §63.466(d).	Allied Motion does not appear to be ensuring that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine is not exceeding the wind speed limit, as they are not measuring wind speed.	No
Section 63.463 (e)(2)(ii) (B)	(B) Establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in §63.466(d).	Allied Motion is not measuring wind speed, and therefore it is unknown if they are maintaining past compliant operating conditions. It is unknown if at some point in the past, the wind speed limit was demonstrated to have been met, as old AQD Lansing District files for this facility have been sent to the record center. An exterior building door is reported to be open at times for ventilation, and this could potentially increase wind speed.	No
Section 63.463	(iii) If a working-mode cover is used to comply with these standards, the owner or operator shall comply with the	See below.	See below

(e)(2)(iii)	requirements specified in paragraphs (e)(2)(iii)(A) and (e)(2)(iii)(B) of this section.		
Section 63.463 (e)(2)(iii)(A)	(A) Ensure that the cover opens only for part entrance and removal and completely covers the cleaning machine openings when closed.	The working mode cover, which is the same as the downtime cover and the idling mode cover, was closed, as the unit was not operating. It completely covered the cleaning machine opening.	Yes
Section 63.463 (e)(2)(iii)(B)	(B) Ensure that the working-mode cover is maintained free of cracks, holes, and other defects.	The cover was maintained free of cracks, holes, and other defects.	Yes
Section 63.463 (e)(2)(iv)	(iv) If an idling-mode cover is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(iv)(A) and (e)(2)(iv)(B) of this section.	See below.	See below
Section 63.463 (e)(2)(iv)(A)	(A) Ensure that the cover is in place whenever parts are not in the solvent cleaning machine and completely covers the cleaning machine openings when in place.	The idling mode cover (same as the working mode cover and downtime mode cover) completely covered the cleaning machine openings.	Yes
Section 63.463 (e)(2)(iv)(B)	(B) Ensure that the idling-mode cover is maintained free of cracks, holes, and other defects.	The idling mode cover was free of cracks, holes, and other defects.	Yes
Section 63.463 (e)(2)(v)	(v) If a dwell is used to comply with these standards, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(v)(A) and (e)(2)(v)(B) of this section.	The hoist for the degreaser was built so as to always stay below a speed which would comply with the dwell time requirement.	Yes

Section 63.463 (e)(2)(v) (A):	(A) Determine the appropriate dwell time for each type of part or parts basket, or determine the maximum dwell time using the most complex part type or parts basket, as described in §63.465(d).	J. Bukovick indicated their parts basket loads are very consistent, as they always do the same kind of parts.	Yes
Section 63.463 (e)(2)(v) (B)	(B) Ensure that, after cleaning, each part is held in the solvent cleaning machine freeboard area above the vapor zone for the dwell time determined for that particular part or parts basket, or for the maximum dwell time determined using the most complex part type or parts basket.	J. Bukovick indicated their parts basket loads are very consistent, as they always do the same kind of parts.	Yes
Section 463(e) (2)(vi)	Section 463(e)(2)(vi) is nonapplicable and has not been included in this report, because it addresses superheated vapor systems, which this unit does not have.	NA	NA
Section 63.463 (e)(2) (vii)	Section 63.463(e)(2)(vii) is nonapplicable and has not been included in this report, because it references a carbon adsorber, which the batch vapor degreaser does not have.	NA	NA
Section 463(e) (2)(viii)	Section 463(e)(2)(viii) is nonapplicable and has not been included in this report, because it addresses continuous web cleaning units with a superheated part system. The batch vapor degreaser is not a web cleaning unit, nor does it have a superheated part system.	NA	NA
Section 463(e) (2)(ix)	Section 463(e)(2)(ix) is nonapplicable and has not been included in this report, because it addresses continuous web cleaning units with a squeegee system. The batch vapor degreaser is not a web cleaning unit, nor does it have a squeegee system.	NA	NA

Section 463(e)(2)(x)	Section 463(e)(2)(x) is nonapplicable and has not been included in this report, because it addresses continuous web cleaning units with an air knife system. The batch vapor degreaser is not a web cleaning unit, nor does it have an air knife system.	NA	NA
Section 463(e)(2)(xi)	Section 463(e)(2)(xi) is nonapplicable and has not been included in this report, because it addresses continuous web cleaning units using a combination squeegee and air knife system. The batch vapor degreaser is not a web cleaning unit, nor does it have a combination squeegee and air knife system.	NA	NA
Section 466(a)(1)	<p>Except as provided in paragraph (g) of this section, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the equipment standards in § 63.463(b)(1)(i), (b)(2)(i), (c)(1)(i), (c)(2)(i), (g)(1), or (g)(2) shall conduct monitoring and record the results on a weekly basis for the control devices, as appropriate, specified in paragraphs (a)(1) through (5) of this section.</p> <p>(1) If a freeboard refrigeration device is used to comply with these standards, the owner or operator shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode.</p>	Weekly recordkeeping of the temperature measured at the center of the chilled air blanket was not being done, for the FRD, although the actual measurements were believed to be taken by the operator.	No
Section 466(d)	Except as provided in paragraph (g) of this section, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the equipment	Monitoring and recordkeeping of reduced room draft was not being done.	No

standards in § 63.463 (b)(1)(i), (b)(2)(i), (c)(1)(i), or (c)(2)(i) using a reduced room draft shall conduct monitoring and record the results as specified in paragraph (d)(1) or (d)(2) of this section.

(1) If the reduced room draft is maintained by controlling room parameters (i.e., redirecting fans, closing doors and windows, etc.), the owner or operator shall conduct an initial monitoring test of the windspeed and of room parameters, quarterly monitoring of windspeed, and weekly monitoring of room parameters as specified in paragraphs (d)(1)(i) and (d)(1)(ii) of this section.

(i) Measure the windspeed within 6 inches above the top of the freeboard area of the solvent cleaning machine using the procedure specified in paragraphs (d)(1)(i)(A) through (d)(1)(i)(D) of this section.

(A) Determine the direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located.

(B) Orient a velometer in the direction of the wind current at each of the four corners of the machine.

(C) Record the reading for each corner.

	<p>(D) Average the values obtained at each corner and record the average wind speed.</p> <p>(ii) Monitor on a weekly basis the room parameters established during the initial compliance test that are used to achieve the reduced room draft.</p> <p>(2) If an enclosure (full or partial) is used to achieve a reduced room draft, the owner or operator shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of the windspeed within the enclosure using the procedure specified in paragraphs (d)(2)(i) and (d)(2)(ii) of this section and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes and other defects.</p> <p>(i) Determine the direction of the wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located.</p> <p>(ii) Record the maximum wind speed.</p>		
<p>Section 63.463 (e)(3)</p>	<p>(3) If any of the requirements of paragraph (e)(2) of this section are not met, determine whether an exceedance has occurred using the criteria in paragraphs (e)(3)(i) and (e)(3)(ii) of this section.</p> <p>(i) An exceedance has occurred if the requirements of paragraphs (e)(2)(ii)(B), (e)(2)(iii)(A), (e)(2)(iv)(A), (e)(2)(v), (e)(2)(vi)(B), (e)(2)(vi)(C), (e)(2)(vii)(B), or (e)</p>	<p>Allied Motion reported no exceedances for the unit in the most recent annual solvent consumption report required by the NESHAP.</p>	<p>Yes</p>

	<p>(2)(vii)(C) of this section have not been met.</p> <p>(ii) An exceedance has occurred if the requirements of paragraphs (e)(2)(i), (e)(2)(ii)(A), (e)(2)(iii)(B), (e)(2)(iv)(B), (e)(2)(vi)(A), or (e)(2)(vii)(A) of this section have not been met and are not corrected within 15 days of detection. Adjustments or repairs shall be made to the solvent cleaning system or control device to reestablish required levels. The parameter must be remeasured immediately upon adjustment or repair and demonstrated to be within required limits.</p> <p>(4) The owner or operator shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in §63.468(h).</p>		
Section 63.463 (f)	Section 63.463(f) is not applicable, and has not been included in this report, because it relates to batch vapor or in-line solvent cleaning machines which are using the compliance option of complying with the idling emission limit emission standards specified in Section 63.463(b)(1)(ii) and b(2)(ii), (c)(1)(ii), or (c)(2)(ii).	Allied Motion did not select the compliance option of complying with the idling emission standards.	NA
Section 63.463 (g)	Section 63.463(g) is not applicable, and has not been included in this report, because it relates to continuous web cleaning machines.	NA, as the batch vapor degreaser is not a continuous web cleaning machine.	NA
Section 63.463 (h)	Section 63.463(h) is not applicable, and has not been included in this report, because it relates to a remote reservoir continuous web cleaning machines.	NA, as the batch vapor degreaser is not a remote reservoir continuous web cleaning machine.	NA
			Yes

Section 63.468 (h)	Requires each owner or operator of a batch vapor cleaning machine to submit an exceedance report to the Administrator semiannually, whether or not there has been an actual exceedance. If there has been an actual exceedance, these reports are required to be submitted quarterly, until a request to reduce reporting frequency is made under paragraph 63.468(i) and approved.	No exceedances have been reported in the semiannual reports.	
Section 63.471 (b)(1)	Each owner or operator of an affected facility must maintain a log of solvent additions and deletions for each solvent cleaning machine.	They are doing this, although the unit is so infrequently used, that it is rare to make additions or deletions to the unit. A photo of a representative record has been requested.	Yes
Section 63.471 (2)	<p>(2) Each owner or operator of an affected facility must ensure that the total emissions of perchloroethylene (PCE), trichloroethylene (TCE) and methylene chloride (MC) used at the affected facility are equal to or less than the applicable facility-wide 12-month rolling total emission limit presented in Table 1 of this section as determined using the procedures in paragraph (c) of this section.</p> <p>Note: This sets an annual emission limit of 14,100 kilograms (kg) for TCE, which equates to 31,085.18 lbs, or 15.54 tons.</p>	Annual TCE emissions from the degreaser were 0.086 TPY as of July, 2023, per the attached spreadsheet from Allied Motion. This is far below the annual 14,100 kg limit.	Yes

Compliance concerns:

- Not ensuring that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at any time as measured using the procedures in §63.466(d). This violated PTI 552-81C, EU-DEGREASER SC 1.4 (which requires compliance with all provisions of Subpart T), and Subpart T Section 63.463(e)(2)(ii)(A).

- Wind speed not being measured to determine and record reduced room draft for degreaser, in violation of PTI 552-81C, EU-DEGREASER, SC 1.4, and Subpart T Section 63.466(d).
- Last date that degreaser freeboard temperature was recorded, was 3/2/2023, despite being operated as recently as July 2023, in violation of PTI 552-81C, EU-DEGREASER SC 1.4 and Subpart T, Section 63.466(a)(1).
- It was believed that the degreaser does not have a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser. This is required by Subpart T, Section 63.463(a)(5). J. Bukovick will double check on this.

Conclusion:

For the TCE batch vapor degreaser, most of the requirements were currently being met by Allied Motion. Noncompliance was identified for failing to determine and record reduced room draft, and for failing to record degreaser freeboard temperature, as required by 40 CFR Part 63, Subpart T, and PTI 552-81C. The company will check to see if there is a vapor level control device to shut off sump heat if vapor level in the degreaser rises above a certain point, per Subpart T.

NAME DATE 9/28/2023SUPERVISOR RB