FY 2015 Insp

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

N720231488

FACILITY: Adept Plastic Finishing, Inc. (Plant #3)		**SRN / ID:** N7202
LOCATION: 29883 Beck Road, WIXOM		**DISTRICT:** Southeast Michigan
CITY: WIXOM		**COUNTY:** OAKLAND
CONTACT:		**ACTIVITY DATE:** 09/16/2015
STAFF: Iranna Konanahalli	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: FY 2015 inspection of Adept Plastic Finishing, Inc. ("Adept") located at 29883 Beck Road, Wixom.		
RESOLVED COMPLAINTS:		

N7202_SAR_2015 09 16

Adept Plastic Finishing, Inc. – Plant No. 3 (N7202)
29883 Beck Road
(fka 29895 Beck Road)
Wixom, Michigan 48393-2835
Phone: (248) 669-0077 or (248) 374-5870 Ext. 204
Fax: (248) 669-0106 or (248) 374-5878
E-mail: dsadoway@adeptfinish.com

PSD, LAER, ROP & MACT Synthetic Minor PTI #243-02 dated January 29, 2003 (ROP Opt-out) Rule 331.1702 BACT.

PTI Voids: 115-07 (for Adept Plastic Finishing [N7809] - Decorative Chromium Plating) and 285-02A (for Muskegon Casting Corp.2325 S Sheridan Road, Muskegon – 3,500 pounds per hour Melt Furnace Replacement). Both permits were mistakenly assigned to N7202. The mistakes have been corrected.

VOC Control: Booth and oven (Rotary Zeolite Adsorption Concentrator plus Catalytic Oxidizer) – overall 97.5 percent control efficiency with presumptive 100 percent capture (not Permanent Total Enclosure [PTE] but Non-fugitive Enclosure Capture [NEC])

Not subject to: 40 CFR Part 63, Subpart PPPP: National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products (Federal Register / Vol. 69, No. 75 / Monday, April 19, 2004 / Rules and Regulations / Final Rule). Adept opted out of Major Source NESHSP / MACT via PTI #243-02 (PTI No. 243-02, FG-Facility, SC 2.1a and 2.1b: 9 tpy single HAP and 22.5 tpy Aggregate HAPs)

Not subject to: Area Source NESHAP / MACT 6H, 40 CFR, Part 63, Subpart HHHHHH, National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources; Final Rule (Page 1738 Federal Register / Vol. 73, No. 6 / Wednesday, January 9, 2008 / Rules and Regulations / Final Rule). The NESHAP is for area sources engaged in paint stripping, surface coating of motor vehicles and mobile equipment, and miscellaneous surface coating operations. Adept does NOT use Target HAPs (Cr, Pb, Mn, Ni, Cd) containing coatings.

Annual Maintenance (Rotary Zeolite Adsorption Concentrator plus Catalytic Oxidizer): Munters Corporation (Swidish), Air Treatment Americas, 79 Monroe Street, Amesbury, MA 01913 (www. Munters.us). Field Service Tech: Mike Whelan (E-mail: Mike.Whelan@Munters.com;. Cell: 209-482-6598; Phone: 800-890-9877-ext. 1148; Fax: 978-

241-1222). Contact: Andrea at 210-249-3840.

On May 14 (with AQD EQA Kerry Kelly), July 10 (Munters annual preventive maintenance) and September 16, 2015, I conducted a level-2 self-initiated annual inspection of Adept Plastic Finishing, Inc. ("Adept") located at 29883 Beck Road, Wixom, Michigan. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules; ROP Opt-Out PTI No. 243-02; and NESHAP / MACT 4P & 6H.

During the inspection, Mr. David Sadoway (Phone: 248-374-5870 ext. 204; Fax: 248-374-1778; E-mail: dsadoway@adeptfinish.com) assisted me. Mr. Sadoway is responsible for keeping VOC and HAP records for two plants on Beck Road (N7202) and Andersen Court (N1581), Wixom; he does not keep records for hexavalent chromium plating plant (Plant No. 4; Plant No. 2 is sold). Mr. David Connell (Phone: 248-374-5870 ext. 206 Fax: 248-374-1778; E-mail: dconnell@adeptfinish.com), President, was also present. Mr. John Cole, Maintenance Manager, also assisted with equipment and maintenance.

Adept is a job-shop for plastic parts painting facility for predominantly automotive plastic parts. Domestic and foreign automobile (cars and trucks) manufacturers are chief customers. The painting is done in three robotic paint spray booths (Primer, Basecoat, and Clearcoat – three booths in all) known as EU-COATINGLINE. Each booth is equipped with a back-draft water wash system (water curtain at back wall) for paint overspray particulate matter control. EU- COATINGLINE, the coating line, consists of a prime / adhesion promoter booth with two robots (robotic applicators), a basecoat booth with four robots and a clearcoat booth with four robots; ten (10) robots in all. The coating line is equipped with a non-fugitive enclosure to capture VOC from the paint booths. The captured VOC from the booths, via an exhaust recirculating system, are controlled by a Rotary Zeolite Concentrator for booth exhaust and a Catalytic Oxidizer for bake oven and stripped VOC from Concentrator (all control equipment from Munters). The oven VOC emissions are directly controlled by the Rotary Catalytic Oxidizer. Each booth is equipped with SATA HVLP (high volume low-pressure) guns. Occasionally, non-production manual coating is also done depending upon testing needs. A Monorail System (MS) conveys plastic parts through all three coating booths (Prime, BC, CC). Between basedcoat and clearcoat booths is a flash-off zone (60-feet tunnel). After each coating application, VOC are flashed off in an area called flash-off tunnel. The painted plastic parts are cured in a curing oven, which has a temperature-monitoring device. No baking between any of coating processes: Primer, BC, CC; all baking is done after clearcoat (CC) application, a final coating step. None of the paint application uses electrostatic technology, which could increase transfer efficiency (TE). Paint and solvent Purge Capture System (PCS) is present and waste disposal records are kept via RCRA Manifest. Purge is captured in 5-gallon pail. All evaporative losses from purge and clean-up are emitted within a presumptive Permanent Total Enclosure (PTE) and controlled by the control system (Rotary Zeolite Adsorption Concentrator plus Catalytic Oxidizer).

All coatings are solvent based; water-based coatings damage the control system.

It takes approximately three hours to complete the entire process: loading the parts on the racks, prime / adhesion promoter application, basecoat application, clearcoat application, curing paint in an oven (45 minutes) and unloading finished product.

The coating of plastic parts is accomplished in three booths:

1. Booth No. 1: Two robotic applicators for adhesion promoter or primer
2. Booth No. 2: Four robotic applicators for basecoat only
3. Booth No. 3: Four robotic applicators for clearcoat only

All robots are not used all times depending upon parts.

All plastic parts coatings are solvent-based coatings (i.e. water-based coatings are not used at all). Miscellaneous metal parts are not coated at this facility. Oven temperature is monitored to classify air dried (low bake) versus baked (high bake) curing using 194 degrees Fahrenheit as cut off (Rule 336.1101(g): Air-dried coating). The parts are cured in an oven for 45 minutes (low-bake or air dried and not high-bake: T < 194 °F)

The facility coats both interior and exterior plastic automotive / truck parts (plastics parts only). It also coats small amount of nonautomotive plastic parts for consumer electronics components (e.g. Bose speakers, remote controls, VCR cabinets, medical equipment, etc.)

Natural gas combustion units (two [< 1 million BTU / Hour] boilers, parts washer, water dry-off oven, cure oven zone 1, cure oven zone 2, four air make-up units, nine HVAC units) account for less than 30 million BTU per hour at rated capacity.

The parts are washed in a six-stage washing system with municipal, Ion Exchange (DI) and Reverse Osmosis (RO) water:

Stage 1: 67 degrees Fahrenheit (ambient), 10-30 psi prewash.
Stage 2: 57-67 degrees Celsius, 10-30 psi wash (1-5% Polytex Phosphate wash).
Stage 3: 67 degrees Fahrenheit, 10-30 psi city rinse (0.25% Polytex Phosphate wash).
Stage 4: 67 degrees Fahrenheit, 10-30 psi city rinse (0.25% Polytex Phosphate wash).
Stage 5: Recirculated RO water 10-30 psi, ambient temperature, < 75 micro-mhos conductivity
Stage 6: Virgin RO water 10-30 psi, ambient temperature, < 10 micro-mhos conductivity

Reverse Osmosis (RO) water is recycled using RO membranes. This is a US Filter RO system; now known as Siemens (since 2008). Water from parts is dried in dry-off oven after warm air blow-off.

The process sequence is: wash parts → blow off dryer → dry-off oven → 2 ABB robots primer → 60' flash-off → 4 ABB robots basecoat → 60' flash-off → 4 ABB robots clearcoat → 60' flash-off → bake oven. The parts are baked for 45 minutes. Total time for the entire process is 3 hours.

Each booth is equipped with a back-draft water wash system (water curtain at back wall) for paint overspray particulate matter control. The water wash systems prevent contamination due to dry filter changes. All coatings are applied using automatic robotic paint spray systems. Non-production, test coatings may be applied manually.

All booths use air from a booth air recirculating system, which facilitates booth VOC capture and destruction. The recirculated gases laden with VOC are dehumidified (relative humidity is decreased by heating using a heat exchanger (HE) that recovers heat from catalytic oxidizer exhaust) and filtered to remove any particulate matter, which must be removed to ensure high quality paint finish. Permanent Total Enclosure (PTE) facilitates recirculation of air. In order to maintain recirculating gases below 25 percent of Lower Explosion Limit (LEL), the gases are purged.

Purged recirculating gases (approximately 20 percent) are ducted to a Rotary Zeolite Adsorption Unit (ZDU) to control VOC before venting to atmospheric air. Desorption gases (stripped VOC) from the Zeolite (1/8 of Rotor) are combusted in a catalytic oxidizer; 1/8 of Rotor is in cooling phase after stripping VOC using hot air from Catalytic Oxidizer. Equal amount of outside air (purge air = incoming air) is filtered and introduced to the recirculating air.

The permit (PTI No. 243-02) refers to this PTE as Non-fugitive Enclosure Capture (NEC) because it does not meet the five criteria set forth in US EPA Reference Method 204. In this document, however, terms may used interchangeably.

Outside air (fresh air) is filtered using an elaborate filter system consisting of two banks of filters: pre-filter and final 95% filter. Pressure differential (ΔP) monitors are present; one for each bank. While pre-filters are changed once per month, 95% final filters are changed once per year; pre-filters protect expensive 95% final filters. The filtration system uses pleated design to reduce pressure drop (ΔP). 20 percent fresh air goes directly to the booths.

Recirculation air has its own dedicated filter system as well. One pre-filter bank is present. Pre-filters are power washed once per week (weekend) using only well water. Water goes to water treatment system. In addition, there are three (3) stages of pleated filters to remove paint particulate. At each stage, the filters are replaced based upon pressure drop (ΔP).

All booth exhaust gases arrive at Rotary Zeolite Adsorption Concentrator: 1/8 adsorption mode, 1/8 cooling mode, 6/8 adsorption mode. Cooler temperatures favor adsorption. 80% air from Rotary Zeolite Adsorption Concentrator is returned booths upon filtration. Rest 20% air is exhausted to outside ambient air. Zeolite was changed about 2013. This is first complete change of zeolite after startup (2003). Eight pies of zeolite are present and the change cost $30,000.00

VOC abatement system (Muenters Model IZC-3500-CT) consists of a Rotary Zeolite Adsorption Unit (a Concentrator, Inlet: 22,000 acfm) and a Catalytic Oxidizer (6,950 acfm at 226 deg F) for desorption gases from the Concentrator. While bake oven VOC go directly to Catalytic Oxidizer, VOC from the recirculating air system (from booth exhaust) as result of purge, after filtration to protect Zeolite, go to Zeolite Adsorption Unit. 1/8 of Zeolite (rotary design of Muenters) is in desorption mode, 1/8 of Zeolite is cooling mode and the rest (6/8) is in VOC adsorption mode. Hot air from catalytic oxidizer is used as to strip (desorb) VOC from Zeolite. Booth air is filtered at each pass. Matching purged air removal, a fresh atmospheric air is filtered and added to the recirculating air.

Zeolite stripping air is maintained at 200 °F to prevent damage. Exhaust gases from Oxidizer and exhaust from Adsorber are mixed to maintain this temperature. An actuator controls this

mixture to maintain 200 °F. Photophilic pressure monitor is present to measure pressure drop at Oxidizer Catalyst.

July 15, 2011, annual maintenance

Adept's John Cole (248-374-5870-ext. 217), Maintenance Manager, coordinates the annual maintenance. During the maintenance Mr. Cole sends entire catalyst to manufacturer for reconditioning. Such reconditioning takes place every quarter.

Mike Wheelan, Field Service Tech (800-890-9877-ext. 1148) performed the maintenance work. Ms. Cheryl Thibault (Phone: 978-241—1163; Cell: 978-660-3243; E-mail: thibault@muenters.com) is an application engineer. Mr. Wheelan opened the catalytic oxidizer, replaced burner sensor, cleaned nozzles, replaced oxidizer and desorption thermocouples. He inspected flame sensor. 1/8 of Zeolite (rotary design of Muenters) is in desorption mode, 1/8 of Zeolite is cooling mode and the rest (6/8) is in VOC adsorption mode. The Zeolite Concentrator was installed in 2003. The concentrator exhaust (180 °F) mixes with the bake oven exhaust (180 °F). Oven exhaust cannot be over 350 °F; it never exceeds this temperature. Oven and concentrator exhaust gases thus mixed is heated to 450 °F using a heat exchanger. Catalytic Oxidizer provides the required heat. Catalyst (Platinum, Rhodium, and Palladium) fins are present to provide highest surface area per unit volume. Thus mixed exhaust gases (the bake oven and the concentrator) are oxidized in the catalytic oxidizer.

Filtration System

Air filtration for air handling system has several stages:

1. Stage 1 filter: Pressure drop less than 2.5 inches of water. Filters replaced every week.

2. Stage 2 filter: Filters are replaced depending upon pressure drop ($\Delta P \leq 1.5$ inches of water)

3. Stage 3 filter: Filters are replaced depending upon pressure drop ($\Delta P \leq 1.5$ inches of water)

4. Stage 4: Gases are dehumidified (decrease in relative humidity) by heating to 360 °F using a heat exchanger; absolute humidity is not changed. Cat. Oxidizer provides the required heat.

Filtered and dehumidified air goes to all booths. Air is heated because incoming fresh air cools the entire air mixture.

Fresh make-up air is filtered in three stages.

1. Pre-filters that are changed once a month

2. Primary filters that are changed once in 12 months

3. Secondary filters (pleated) that are changed every 12-18 months

June 26, 2012, annual maintenance

AQD did not observe this maintenance. According to John Cole, spark plug, flame sensor, oxidizer & catalyst thermocouples were replaced.

July 10, 2015, annual maintenance

Adept's John Cole (248-374-5870-ext. 217), Maintenance Manager, coordinates the annual maintenance. During the maintenance Mr. Cole sends entire catalyst to manufacturer for reconditioning. Such reconditioning takes place every quarter.

Mike Wheelan, Field Service Tech (800-890-9877-ext. 1148) performed the maintenance work. His technical notes are as follows:

This visit was for the annual preventative maintenance on the unit. All the concentrator access panels were removed and the rotor and seals were inspected. The hub, desorption / cooling seal, desorption, cooling radial arm seals and the desorption / cooling circumference seal were all replaced. The concentrate and remaining circumference seals were fine after one year of operation. The internal plenums were vacuumed and the access doors re-installed. The rotor is tight with no run out and looks good after two years of operation. A new customer supplied catalyst inlet temperature control thermocouple was installed. A new customer supplied desorption temperature control thermocouple was installed. The chart recorder thermocouple wires were cut and stripped at the termination points on the recorder. The oxidizer access door for the catalyst and chamber were not opened as the catalyst and bed guard were recently replaced. All the wiring and controls in the control cabinet were inspected, no issues found. The burner nozzle was removed and inspected, there was a slight amount of carbon on the nozzles gas diffuser. A wire brush was used to clean off the carbon and clean the face of the nozzle. The combustion tube was in good shape. A new ignitor and flame sensor were installed; both were supplied by the customer. The combustion blower filter was replaced removed and replaced with a new filter. The gear oil was drained and re-filled to the correct level. The following burner safety faults were checked: low gas, high gas, flame failure, main gas valve proving, main gas valve closure, oxidizer blower low pressure, combustion blower low pressure, catalyst high pressure, catalyst inlet high temperature and catalyst outlet high temperature. All the faults worked to design and recorded correctly on the Panelmate touchscreen. The unit was started and was brought on-line and temperatures and pressures were recorded. The unit was then put in cool down and left off-line. Job complete.

May 10, 2004 tests

Initial performance test on the abatement system was conducted on June 16, 2004. On May 10, 2004, AQD received the test plan for Zeolite Concentrator and Catalytic Oxidizer. MDEQ-AQD's Tom Maza approved the plan on June 6, 2004, and reviewed the test results. The concentrator removal efficiency (RE) was 97.7% and catalytic oxidizer destruction efficacy (DE) was 99.85. Consequently, overall control efficiency was 97.7% (0.977*9985*100)

assuming 100 percent capture efficiency (CE) of PTE (aka NEC). 97.7 percent overall control efficiency satisfies **SC 1.7**, which requires 90.25 percent (minimum).

Derenzo and Associates, Inc. (Robert Harvey, Andrew Rusnak, Robert Shrier & Benjamin Kroeger, Livonia (734-464-3880)) conducted sampling on June 16, 2004.

Maza is satisfied that the enclosure performs as Permanent Total Enclosure (PTE) based upon smoke tests. PTE provided 100 percent capture of VOC.

Emission Unit Identification

Emission Unit ID	Emission Unit Description	Stack Identification
EU-COATINGLINE	A plastic parts (automobile and non-automobile parts) coating line equipped with a non-fugitive enclosure and controlled by a zeolite concentrator and a catalytic oxidizer. The coating line consists of a prime booth, two topcoat (basecoat/clearcoat) booths, two flash off tunnels, and a natural gas fired bake oven. Also included in the emission unit are purge and cleanup activities.	SVCONC – Zeolite Concentrator Stack SVCATOX – Catalytic Oxidizer Stack
Changes to the equipment described in this table are subject to the requirements of R336.1201, except as allowed by R336.1278 to R336.1290.		

Flexible Group Identification

Flexible Group	Emission Units Included in Flexible Group	Stack Identification
FG-FACILITY	All equipment at the stationary source including equipment covered by other permits, grand-fathered equipment and exempt equipment.	**N/A**

EU-COATINGLINE Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
1.1	VOCs	EU-COATINGLINE	19.4 tpy	12-month rolling time period as determined at the end of each calendar month	SC 1.14 & SC 1.15	R336.1702(a)

8.519 tons of VOC per year (5.465 tpy from coatings plus 3.054 tpy from clean-up) are emitted per CY2014 records (PTI No. 243-02, SC EU-COATINGLINE, 1.1 limit: 19.4 tpy); 219 tons / year before abatement. Overall control efficiency assumed was 97.5% (May 2004 stack

test). During Dec CY 2014, 0.373 tons of VOC per month emitted; 14.902 tons of VOC per month before abatement.

The coatings, thinners, cleanup solvents, purge solvents are kept in closed containers (PTI No. 243-02, SC EU-COATINGLINE, 1.2). 3.054 tons of VOC per year emitted per CY 2014 records from purge & cleanup. The preventive maintenance plan for the abatement was received by AQD on September 15, 2004 but the plan was not approved (PTI No. 243-02, SC EU-COATINGLINE, 1.3, 1.10, 1.11). The plan has deficiencies.

One water wash control system serving three coating booths is present and is operating properly (PTI No. 243-02, SC EU-COATINGLINE, 1.4). Due to harm to paint finish, coating operation cannot be operated without water wash system. All the guns are HVLP type and no electrostatic painting (PTI No. 243-02, SC EU-COATINGLINE, 1.5). HVLP gun caps are present. SATA pressure testing device for HVLP guns known as Test Cap is readily available. Non-fugitive enclosure is present and two natural draft openings (NDO) are tested twice a year (PTI No. 243-02, SC EU-COATINGLINE, 1.6, 1.12). These NDO tests are known as biannual smoke test. Most recent smoke test was performed on NA. An auto-shut-off device is present to shut the process down when the abator malfunctions; during a malfunction alarm sounds (PTI No. 243-02, SC EU-COATINGLINE, 1.7). During the May 2004 performance test, it was determined that Zeolite Concentrator outlet temperature was not to exceed 92 degree Fahrenheit and that minimum required catalytic bed inlet temperature was 684 degree Fahrenheit. Therefore, minimum required catalyst bed temperature is 684 degree Fahrenheit and not 550 degree Fahrenheit (PTI No. 243-02, SC EU-COATINGLINE, 1.7). Adept picked incorrectly Zeolite outlet temperature to be 102 degree Fahrenheit in the Preventive Maintenance Plan (PMP); it should have been 92 degree Fahrenheit as determined during the May 2004 performance test.

VOC data is based upon Environmental Data Sheets (EDS) provided by the coating suppliers (PTI No. 243-02, SC EU-COATINGLINE, 1.8, 1.13). Hazardous Air Pollutant (HAP) information is also based upon EDS. An alternative method to EPA Reference Method 24 has been approved by MDEQ-AQD (Apr 5, 2012, Mar 08, 2007, letters). Initial performance test on the abatement system was conducted on May 10, 2004 (PTI No. 243-02, SC EU-COATINGLINE, 1.9). MDEQ-AQD's Tom Maza reviewed the test results. The concentrator removal efficiency (RE) was 97.7% and catalytic oxidizer destruction efficacy (DE) was 99.85. Consequently, overall control efficiency was 97.7% (0.977*9985*100) assuming 100 percent capture efficiency (CE). 97.7 percent overall control efficiency satisfies PTI No. 243-02, SC EU-COATINGLINE, 1.7, which requires 90.25 percent (minimum).

Adhesion promoter and primer are solvent based. Adhesion promoter contains on an average 6.3 pounds of VOC per gallon. PTI No. 243-02, EU-COATINGLINE, does not restrict VOC in terms of pounds of VOC per gallon of coating. Such a limit is not necessary because 98 percent of VOC from the coating process are controlled.

Temperature of curing oven is monitored and temperature charts are maintained. Same oven is used for air-dried and high bake paints. Water wash systems were operating properly (PTI No. 243-02, SC EU-COATINGLINE, 1.4). All the guns are HVLP type and no electrostatic painting (PTI No. 243-02, SC EU-COATINGLINE, 1.5). VOC data is based upon Environmental Data Sheets (EDS) provided by the coating suppliers. Hazardous Air Pollutant (HAP) information is also based upon EDS. Pursuant to PTI No. 243-02, SC EU-COATINGLINE ,1.14 (coatings), 1.15 (purge and cleanup) and 2.3 (HAP), VOC and HAP

records kept and emission calculations are performed using custom VOC & HAP spreadsheets, which were developed by NTH consultants.

According to it's the PMP plan, adept performs a quarterly maintenance check, an annual maintenance check, an annual maintenance by Munteers Service Operations (1-888-349-4335), 79 Monroe Street, Amesbury, MA 01913. Per my advice, Adept maintains a catalyst bed inlet and outlet temperature difference, which is close to zero when the plant starts and about one hundred when VOC build up in the air circulating system.

Paint kitchen emissions

Based upon April 26, 2012, inspection, the fugitive emissions from paint kitchen room are captured using five ventilation suction devices. Thus captured emissions are discharged via roof-top stack (2 feet above the roof). On Apr 26, I did not detect odor near the discharge stack. Therefore, paint kitchen emissions are not a source of nuisance odor in the neighborhood.

Paint sludge plant

The paint sludge plant collects all paint contaminated water from all three booths (Primer, BC, CC). The sludge plant is 16,000-gallon pit. Poly-d-570 dectfier (paint kill) is added to the pit. PDT-plus is also added to facilitate paint suspension so that the centrifuge can separate paint solids and liquid (mostly water). The liquid is recirculated to the pit. The filtered water from the pit supplies water to the water wash system for all three booths. Make-up water is added to the pit to maintain water level; make-up water is needed to account for evaporative losses. The pit has no exhaust. Pit is cleaned of sludge once per year.

US Centrifuge Supermatic 362 centrifuge is used to remove solids from the pit's water. Three separate streams of contaminated water (one from each booth, BC, CC, Primer) pour into the 16,000-gallon pit. Dewatered sludge from the centrifuge is collected in the sludge hopper, which is transferred to the sludge waste bin located outside. The bin's sludge is disposed of twice a month as a non-hazardous waste via Waste Management Company.

All emissions from the sludge plant stay indoors. I did not any VOC odor near the pit. Therefore, sludge plant is not a nuisance odor source in the neighborhood. Brighton Analytical, LLC of Brighton (810-229-7575) conducts analysis of the sludge for ignitability and paint kill.

NESHAP / MACT 4P

Pursuant to 40 CFR Part 63, Subpart PPPP, § 63.4481 (Am I subject to this subpart?), Adept is not subject to this NESHAP / MACT 4P because it is not a major source (ROP, MACT opt-out PTI No. 243-02) and the coating process is not located in a major source of MACT. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year or any combination of HAP at a rate of 22.68 Mg (25 tons) or more per year. You do not need to include coatings that meet the definition of non-HAP coating contained in § 63.4581 in determining whether you use 378 liters (100 gallons) per year, or more, of coatings in the surface coating of plastic parts and products.

NESHAP / MACT 6H

Not subject to: NESHAP / MACT 6H, 40 CFR, Part 63, Subpart HHHHHH, National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources; Final Rule (Page 1738 Federal Register / Vol. 73, No. 6 / Wednesday, January 9, 2008 / Rules and Regulations / Final Rule).

The NESHAP / MACT 6H is for area sources engaged in paint stripping, surface coating of motor vehicles and mobile equipment, and miscellaneous surface coating operations. AQD has decided not to take delegation of these standards and therefore no attempt has been made evaluate Adept's compliance with NESHAP / MACT 6H. However the MACT 6H appears to apply only for coating facilities that perform spray application of coatings that contain the target HAP, as defined in § 63.11180, to a plastic and/ or metal substrate on a part or product.

Target HAP containing coating: Spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor.

According to David Sadoway's June 22, 2011, e-mail Adept's coatings do NOT contain Target HAPs (Cr, Pb, Mn, Ni, Cd).

Tax Exemption TE No. 1-3082

AQD approved Tax Exemption TE No. 1-3082 for $1,466,300.00 for an enclosure, Zeolite Rotor Concentrator and Catalytic Oxidizer.

CONLUSION

Adept picked incorrectly Zeolite outlet temperature to be 102 degree Fahrenheit in the Preventive Maintenance Plan (PMP); it should have been 92 degree Fahrenheit as determined during the June 2004 performance test. Adept is in compliance with PTI No. 243-02.

NAME JS Unamakali DATE 09/28/2015 SUPERVISOR CTE