

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

FCE Summary Report

Facility : DENSO Manufacturing Michigan, Inc.	SRN : N1192
Location : One Denso Road	District : Kalamazoo
	County : CALHOUN
City : BATTLE CREEK State: MI Zip Code : 49037	Compliance Status : Non Compliance
Source Class : MAJOR	Staff : Rex Lane
FCE Begin Date : 6/1/2015	FCE Completion Date : 6/7/2016
Comments :	

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
06/01/2016	Self Initiated Inspection	Non Compliance	Self Initiated Inspection
05/16/2016	MAERS	Compliance	<p>ROP certification report: MAERS Audit</p> <p>Denso became a synthetic minor source for HAP with issuance of PTI No. 68-03A on 12/15/15. Source form HAPs field status updated to reflect issuance of this PTI. Revised MAERS report to update VOC content of SAT2400 and Palene 1010 used in RG-SURFACECOAT for Evaporator Area from 14% to aggregated value of 5.87% in order to match report VOC emissions. Actual VOC content of SAT2400 is 5.36% and 0.18% for Palene 1010. Changes were discussed with Jody Smith at Denso. No other changes were made to MAERS report.</p>

Activity Date	Activity Type	Compliance Status	Comments
03/30/2016	ROP SEMI 2 CERT	Compliance	<p>ROP semi-annual certification report: 7/1/15 - 12/31/15</p> <p>Certification contains an original dated signature by the facility's responsible official. Facility reports three types of deviations that have been reported previously. Reported deviations include removal of equipment since issuance of the original ROP which results in obsolete conditions; stack/vent restrictions in the original ROP that now contradict conditions in PTI revisions; and lack of mechanically assisted covers on heated aqueous parts washers as required by Rule 707. The facility switched to non-heated solvent in April 2015 which negates the need to install mechanically assisted covers for their aqueous parts washers. -RIL</p>
03/30/2016	ROP Annual Cert	Compliance	<p>ROP annual certification report: 1/1/15 - 12/31/15</p> <p>Certification contains an original dated signature by the facility's responsible official. Facility reports three types of deviations that have been reported previously. Reported deviations include removal of equipment since issuance of the original ROP which results in obsolete conditions; stack/vent restrictions in the original ROP that now contradict conditions in PTI revisions; and lack of mechanically assisted covers on heated aqueous parts washers as required by Rule 707. The facility switched to non-heated solvent in April 2015 which negates the need to install mechanically assisted covers for their aqueous parts washers. -RIL</p>

Activity Date	Activity Type	Compliance Status	Comments
01/12/2016	ROP Other	Compliance	<p>VOC Destruction Efficiency Emissions Test Summary Report for PTIs 48-15B and 190-14.</p> <p>Test report was received on 12/29/15 and did not include an ROP certification report signed and dated by the facility's responsible official. Staff requested the certification report on 1/4/16 and it was received on 1/8/16. -RIL</p>
01/12/2016	Stack Test	Compliance	<p>VOC Emission Rate and Destruction Efficiency Test: R540 (PTI 190-14) and C1150A (PTI 48-15B)</p> <p>Test plan for VOC emission rate and destruction efficiency (DE) testing of thermal oxidizers that control VOC emissions from R540 oven degreaser and C1150A oven degreaser was submitted on 10/6/15 and was approved by the AQD on 10/21/15. Per the test plan, the facility proposed to operate equipment at a core count equal to or greater than 75% of maximum process equipment rating. Testing was conducted on 11/12/15 (R540) and 11/13/15 (C1150A) and was observed by Dale Turton, AQD on one of the two days. According to the test report, R540 operated at about 78% of its maximum processing rate and C1150A at 100% of its maximum processing rate during testing. Permit conditions are identical for both thermal oxidizers and require that the control equipment meet a minimum DE of 95% or a maximum VOC emission rate of 0.54 pounds/hour. Per the test report, R540 had a 88.9% DE and a VOC emission rate of 0.28 pounds/hour which complies with the VOC emission limit in PTI # 190-14. C1150A had a 98.8% DE and a VOC emission rate of 0.03 pounds/hour which complies with both the minimum DE and maximum VOC emission rate limit in PTI # 48-15B. Signed ROP certification report was requested and received on 1/8/16. -RIL</p>

Activity Date	Activity Type	Compliance Status	Comments
01/04/2016	ROP Other	Compliance	<p>Annual Evaporative Oil Mass Balance Test (2015)</p> <p>Denso performs annual evaporative oil loss testing on three different part size categories in all four manufacturing areas. A summary of the testing results for 2006 through 2015 are attached to this report. It appears that the most recent test was conducted in a similar fashion and time frame as previous tests. A random check review of test results revealed no calculation errors. There continues to be a degree of variability in evaporative oil loss results across the four manufacturing areas with heater cores having the least degree of deviation and radiator cores having the highest standard deviation across the ten years of test results. A signed certification page was submitted along with the test report. -RIL</p>
11/13/2015	Stack Test Observation	Unknown	Stack test on the C1150A oven degreaser and thermal oxidizer
10/12/2015	Stack Test	Compliance	<p>DE and VOC emission test for H751 Thermal Oxidizer - PTI No. 19-04B</p> <p>Destruction efficiency (DE) and VOC emission test was performed on H751 Thermal Oxidizer in the Heater Core area on 8/11/15. Test was performed by BTEC Inc. and test report received on 9/3/15. Test results indicate a DE of 99.9% (PTI No. 19-04B requires minimum DE of 95%) and a VOC emission rate of 0.00 pounds/hour (PTI limits VOC to 0.29 pounds/hour).</p> <p>Staff contacted Ms. Jody Smith, Denso on 10/5/15 because the test report did not include an ROP certification report. Ms. Smith thought that because PTI No. 19-04B had not been incorporated into their ROP that the certification report was not required. On 10/9/15, an ROP certification report was received for the test report that contains an original dated signature by the facility's responsible official. -RIL</p>

Activity Date	Activity Type	Compliance Status	Comments
10/08/2015	ROP Semi 1 Cert	Compliance	<p>ROP semi-annual certification report review: 1/1/15- 6/30/15</p> <p>Report is signed and dated by the facility's responsible official. The facility is reporting a total of three deviations. Two reported deviations are related to numerous obsolete conditions for equipment that has been removed from the 2003 issued ROP and ROP conditions that have been modified through numerous PTIs issued since the ROP was reissued that will be incorporated in the ROP renewal process. The third reported deviation is related to the facility's cold cleaners that were switched to a solvent that was thought to contain no VOCs. Upon further investigation it was determined to contain &lt; 5% VOC by weight but because the solution was heated the cold cleaners should have been equipped with mechanically assisted covers. The facility has since switched to a new solution that is not required to be heated which allows the cold cleaners to be operated without a mechanically assisted cover. -RIL</p>
09/01/2015	Telephone Notes	Compliance	Conference Call on Re-permitting Project Status
08/11/2015	Stack Test Observation	Compliance	EU-HTR2 (PTI No. 19-04B): DE and VOC emission rate testing

Name: RIL

Date: 6/7/16

Supervisor: MIA 6/7/2016

