

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

TRW Automotive U.S. LLC
Attn: Mr. Joseph L. Meszaros
902 South Second Street
Marshall, Illinois 62441

Application No.: 90040104 I.D. No.: 023010AAM
Applicant's Designation: EXSELECT Date Received: February 23, 2004
Subject: Automotive Electronics Manufacturing Plant
Date Issued: Expiration Date:
Location: 902 South Second Street, Marshall

Permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of six coating lines controlled by catalytic afterburner, nine soldering process lines controlled by an activated charcoal filter and one air stripper and a conformal coating dip tank as described in the application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for volatile organic material (VOM), 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year for totaled HAP). As a result, the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
 - c. This permit supersedes all operating permits for this location.
2. Emissions and operation of the equipment shall not exceed the following limits:

a. Six Coating Lines (Total):

<u>Raw Material</u>	<u>Raw Material Usage</u> (Gal/Mo) (Gal/Yr)		<u>VOM Content</u> (Lb/Gal)	<u>Control Efficiency</u> (Wt.%)	<u>VOM Emissions</u> (Lb/Mo) (T/Yr)	
Coating	2,000	24,000	5.00	95	500	3.0
Toluene	2,000	24,000	7.22	95	722	4.4

b. Nine Soldering Process Lines:

<u>Raw Material</u>	<u>VOM Usage</u> (Lb/Mo) (Lb/Yr)		<u>VOM Emissions</u> (Lb/Mo) (Ton/Yr)	
Solder Flux	200	2,000	200	1.00

These limits are based on the maximum production rate and assumption that 100% of VOM in the raw materials are evaporated and an overall control efficiency greater than 85% to demonstrate compliance with 35 Ill. Adm. Code 215.302a. Compliance with annual limits shall be determined from a running total of 12 months of data.

3. This permit is issued based on negligible emission of volatile organic materials (VOM) from the air stripper. For this purpose, emissions shall not exceed nominal emission rate of 0.1 lb/hour and 0.44 ton/year.
- 4a. The catalytic afterburner shall be equipped with a continuous monitor that will measure the temperature rise across the catalytic afterburner bed. It shall be installed, calibrated, maintained and operated according to manufacturer's specifications at all times the afterburner is in use.
- b. The afterburner combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which the afterburner was operating during the most recent stack test. This temperature shall be maintained during operation.
5. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a Clean Air Act Permit Program permit from the Illinois EPA.
- 6a. The Permittee shall perform weekly maintenance and keep such records for the Permanent Total Enclosure.
- b. The Permanent Total Enclosures (PTE) shall be maintained as they were during the most recent stack test and to meet the requirements in 35 Ill. Adm. Code 218, Appendix B, Procedure T.
- c. The Illinois EPA shall be notified within 10 working days of any modification to the PTE, and will evaluate if a retest is needed.
7. In the event of a malfunction or breakdown of the afterburner, the Permittee is authorized to continue operations in violation of the applicable requirements of 35 Ill. Adm. Code 219.301, as necessary to prevent risk of injury or severe damage to equipment. This authorization is subject to the following requirements:
 - a. The Permittee shall repair the damaged feature(s) of the afterburner or cease as soon as practicable. This shall be accomplished within two days unless the feature(s) cannot be repaired within two days, and operations cannot be stopped within

two days, and the Permittee obtains an extension, for up to two additional days, from the Illinois EPA. The request for such an extension must document that the afterburner is unavailable and specify a schedule of actions the Permittee will take that will assure the feature(s) will be repaired or operations will be terminated as soon as possible.

- 8a. The Permittee shall maintain records of excess emissions during malfunctions and breakdowns. As a minimum, these records shall include:
 - i. Date and duration of malfunction or breakdown;
 - ii. A full and detailed explanation of the cause for such emissions;
 - iii. The contaminants emitted and an estimate of the quantity of emissions;
 - iv. The measures used to reduce the quantity of emissions and the duration of the occurrence; and
 - v. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
- b. These records shall be retained for at least two years following an event, maintained at a readily accessible location at the plant, and be available to representatives of the Illinois EPA during normal working and/or operating hours.
9. The Permittee shall provide the following notification and reports to the Illinois EPA, Compliance Section and Regional Field Office, pursuant to 35 Ill. Adm. Code 201.263, concerning continued operations subject to 35 Ill. Adm. Code 219.301 during malfunction or breakdown of the control features of the afterburner.
 - a. The Permittee shall notify the Illinois EPA's regional office by telephone as soon as possible during normal working hours, but no later than three (3) days upon occurrence of noncompliance due to malfunction or breakdown.
 - b. Upon achievement of compliance, the Permittee shall give a written follow-up notice to the Illinois EPA, Compliance Section and Regional Field Office, providing a detailed explanation of the event, an explanation why continued operation of the product storage and the blend/process tanks was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when all 6 coating lines have been taken out of service.
 - c. If compliance is not achieved within 5 working days of the occurrence, the Permittee shall submit interim status reports to the Illinois EPA, Compliance Section and Regional Field Office, within 5 days of the occurrence and every 14 days thereafter, until compliance is achieved. These interim reports shall provide a brief explanation of the nature of the malfunction or

breakdown, corrective actions accomplished to date, actions anticipated to occur with schedule, and the date on which repairs will be complete or all 6 coating lines have been taken out of service.

10. The Permittee shall maintain monthly records of the following items:
 - a. The name and identification number of each coating and solvent used;
 - b. Oxidizer temperatures;
 - c. The usage (gal/month), density (lb/gal), VOM and HAP content (weight percent or lb/gal) of each coating and solvent; and
 - d. The VOM and HAP emission for current month and total running for last 12 months (ton/month, ton/yr).
11. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to the Illinois EPA or USEPA request for records during the course of a source inspection.
12. If there is an exceedance of the requirements of this permit, as determined by the record required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released, a copy of the relevant records, and a description of the exceedance or violation, and efforts to reduce emissions and future occurrences.
13. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
 - a. Coating and solvent usage (tons/year).
 - b. Their VOM and HAP content (wt. %).

If there have been no exceedances during the prior calendar year, the Annual Emission Report shall include a statement to that effect.

14. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Illinois EPA
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276

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Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Illinois EPA
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

It should be noted that this permit has been revised to correct the equipment permitted and change emissions information of soldering lines.

If you have any questions on this, please call Randy Solomon at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:RBS:jar

cc: Region 3

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission from the automotive electronics manufacturing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is a usage of 46,000 gallons of VOM containing raw materials per year. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled HAP, at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that material is handled and control measures are more effective than required in this permit.

<u>VOM (Tons/Year)</u>	<u>Single HAP (Tons/Year)</u>	<u>Total HAPs (Tons/Year)</u>
8.9	< 10	< 25

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