

**CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT**

**Thomson Consumer Electronics
3301 South Adams Street
Marion, Indiana 46952**

is hereby authorized to construct six (6) surface coating facilities, consisting of the following equipment:

- (a) Three (3) high volume, low pressure (HVLP) automatic spray stations for applying anti-corona silicone coating, capacity: 940 glass television picture tubes per hour, total.
- (b) Three (3) automatic roll-on stations for applying graphite external coating, capacity: 940 glass television picture tubes per hour, total.

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: CP 053-8592-00020	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

Construction Conditions

General Construction Conditions

1. That the data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).
2. That this permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

3. That pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.
4. That pursuant to 326 IAC 2-1-9(b)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. That notwithstanding Construction Condition No. 6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

6. That this document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:
 - (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
 - (c) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
 - (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees)
 - (e) The Permittee has submitted their Part 70 (T-053-7202-00020) application on November 18, 1996 for the existing source. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.
7. That when the facility is constructed and placed into operation the following operation conditions shall

be met:

Operation Conditions

General Operation Conditions

1. That the data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).
2. That the Permittee shall comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder.

Preventive Maintenance Plan

3. That pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:
 - (a) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.
 - (b) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.
 - (c) Identification of the replacement parts which will be maintained in inventory for quick replacement.

The preventive maintenance plan shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

Transfer of Permit

4. That pursuant to 326 IAC 2-1-6 (Transfer of Permits):
 - (a) In the event that ownership of these six (6) surface coating facilities at the existing major source is changed, the Permittee shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.
 - (b) The written notification shall be sufficient to transfer the permit from the current owner to the new owner.
 - (c) The OAM shall reserve the right to issue a new permit.

Permit Revocation

5. That pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:
 - (a) Violation of any conditions of this permit.
 - (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

Availability of Permit

6. That pursuant to 326 IAC 2-1-3(l), the Permittee shall maintain the applicable permit on the premises of this source and shall make this permit available for inspection by the IDEM, or other public official having jurisdiction.

Opacity Limitations

7. That pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:
- (a) visible emissions shall not exceed an average of 40 percent opacity in 24 consecutive readings.
 - (b) visible emissions shall not exceed 60 percent opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

Fugitive Dust Emissions

8. That pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall be in violation of 326 IAC 6-4 (Fugitive Dust Emissions) if any of the criteria specified in 326 IAC 6-4-2(1) through (4) are violated. Observations of visible emissions crossing the property line of the source at or near ground level must be made by a qualified representative of IDEM. [326 IAC 6-4-5(c)].

Particulate Matter Limitation

9. That pursuant to 326 IAC 6-3 (Process Operations):
- (a) The six (6) surface coating facilities shall comply with 326 IAC 6-3-2(c) using the following equations:

If P is equal to or less than 60,000 pounds per hour (30 tons per hour):
$$E = 4.10P^{0.67}$$
 where: E = rate of emission in pounds per hour,
P = process weight in tons per hour.

If P is greater than 60,000 pounds per hour (30 tons per hour):
$$E = 55.0P^{0.11-40}$$
 where: E = rate of emission in pounds per hour,
P = process weight in tons per hour.
 - (b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Thomson Consumer Electronics
Marion, Indiana
Permit Reviewer: MES

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Plt ID 053-00020

- Particulate Matter and Particulate Matter - 10 microns
10. Any change or modification which may increase actual emissions from the equipment covered in this permit to 25 tons per year or more of PM or 15 or more tons per year of PM₁₀ shall obtain a PSD permit pursuant to 326 IAC 2-2 before such change may occur.
- Volatile Organic Compound
11. That pursuant to 326 IAC 2-1-3(i)(8), records of surface coating quantities and organic solvent contents shall be maintained for a minimum period of 36 months and made available upon request of the Office of Air Management (OAM). Any change or modification which may increase the input of volatile organic compound (VOC) including clean up solvent, minus the VOC solvent shipped out, delivered to the applicators to 25.0 tons per year or more for the equipment covered in this permit shall cause the facilities to be subject to 326 IAC 8-1-6, and a new permit must be obtained before such change may occur. In addition any change or modification which may increase the volatile organic compounds (VOC) emissions after control from the equipment covered in this permit and the equipment covered in CP 053-8511-00020 to 40 tons per year or more shall obtain a PSD permit pursuant to 326 IAC 2-2 before such change may occur.
- Open Burning
12. That the Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for New Construction and Operation

Source Background and Description

Source Name: Thomson Consumer Electronics
 Source Location: 3301 South Adams Street, Marion, Indiana 46952
 County: Grant
 Construction Permit No.: CP 053-8592-00020
 SIC Code: 3761
 Permit Reviewer: Mark L. Kramer

The Office of Air Management (OAM) has reviewed an application from Thomson Consumer Electronics relating to the construction and operation of six (6) surface coating facilities at an existing permitted major source. In addition to the modification of the base plant that manufactures tubes of twenty-seven (27) inches and less, Thomson Consumer Electronics also submitted an application to modify the existing very large screen facilities (tubes thirty-one (31) inches and greater) at this source. The expansion at the base plant and the very large screen facilities are in no way related in terms of raw materials and products produced, will not utilize common equipment, and process throughput material separately. Traditionally, the base plant and the very large screen production line have had individual construction permits and modifications, even though they are considered one (1) source. Therefore, the two (2) modifications will be permitted separately for easy tracking and future modifications. Although the modifications will have separate permits, PSD applicability has been evaluated as if there is only one (1) modification. The very large screen modification will be permitted under CP 053-8511-00020.

The six (6) surface coating facilities modification consists of the following equipment:

- (a) Three (3) high-volume, low-pressure (HVLP) automatic spray stations for applying anti-corona silicone coating, capacity: 940 glass television picture tubes per hour, total.
- (b) Three (3) automatic roll-on stations for applying graphite external coating, capacity: 940 glass television picture tubes per hour, total.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
1	Graphite Coating	38	0.83	600	68
2	Anti-corona Coating	38	0.83	600	68

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 15, 1997, with additional information received on June 25, 1997, June 30, 1997, and July 9, 1997.

Emissions Calculations

See Pages 1 and 2 of Appendix A (Emissions Calculation Spreadsheets) for detailed calculations.

Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/yr)	Potential Emissions (tons/yr)
Particulate Matter (PM)	24.0	1.09
Particulate Matter (PM ₁₀)	14.0	1.09
Sulfur Dioxide (SO ₂)	0.00	0.00
Volatile Organic Compounds (VOC)	39.0 (24.3)	24.3
Carbon Monoxide (CO)	0.00	0.00
Nitrogen Oxides (NO _x)	0.00	0.00
Single Hazardous Air Pollutant (HAP)	19.6	19.6
Combination of HAPs	19.6	19.6

- (a) Allowable emissions of PM, and PM₁₀ are based on 326 IAC 2-2, PSD. The allowable emissions of PM and PM₁₀ are the allowable for the total emissions from this permit (CP 053-8592) and from the very large screen modification (CP 053-8511). The potential emissions are for this modification only.
- (b) The total allowable emissions of VOC of 39.0 tons per year from this permit (CP 053-8592) and from the very large screen modification (CP 053-8511) are based on 326 IAC 2-2, PSD. The allowable emissions of VOC for this modification (24.3 tons per year) are based on avoiding the requirements of 326 IAC 8-1-6, BACT. The potential emissions are for this modification only.

- (c) The potential emissions before control are less than the allowable emissions, therefore, the potential emissions before control are used for the permitting determination.
- (d) Allowable emissions (as defined in the Indiana Rule) of a single hazardous air pollutant (HAP) are greater than 10 tons per year. Therefore, pursuant to 326 IAC 2-1, a construction permit is required.

County Attainment Status

- (a) Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Grant County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Grant County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	0.00
PM ₁₀	0.00
SO ₂	312
VOC	306
CO	0.00
NO _x	207

- (a) This existing source is a major stationary source because at least one attainment regulated pollutant is emitted at a rate of 250 tons per year.

- (b) These emissions were based on the AIRS Facility Quick Look Report, dated September 18, 1996.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity:

Pollutant	PM (tons/yr)	PM ₁₀ (tons/yr)	SO ₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO _x (tons/yr)
Proposed Modification	1.09	1.09	0.00	24.3	0.00	0.00
Contemporaneous Increases	0.00	0.00	0.00	0.00	0.00	0.00
Contemporaneous Decreases	0.00	0.00	0.00	0.00	0.00	0.00
Net Emissions	1.09	1.09	0.00	24.3	0.00	0.00
PSD or Offset Significant Level	25	15	40	40	100	40

- (a) This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply. The above table applies to only this modification.
- (b) The source is also modifying the existing very large screen operations, as indicated in their construction permit application received on April 23, 1997 (CP 053-8511-00020). The two (2) modifications are being permitted separately. The total emissions increase after controls of the two (2) modifications combined are 36.6 tons per year of VOC and 9.41 tons per year of PM and PM₁₀. Therefore, the combined applications would result in emissions less than the PSD significant levels, and pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Pollutant	PM (tons/yr)	PM ₁₀ (tons/yr)	VOC (tons/yr)
CP 053-8511-00020	8.32	8.32	12.3
CP 053-8592-00020	1.09	1.09	24.3
Total for both modifications	9.41	9.41	36.6
PSD Significant Level	25	15	40

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T-053-7202-00020) application on November 18, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

There are no New Source Performance Standards (326 IAC 12) and 40 CFR Part 63 applicable to this facility.

State Rule Applicability

326 IAC 6-3-2 (Particulate Emission Limitations)

The spray operations shall comply with 326 IAC 6-3-2(c). The 326 IAC 6-3-2 equations are as follows: $E = 4.10 P^{0.67}$, where P equals process weight in tons per hour for process weights up to and including sixty thousand (60,000) pounds per hour and E equals the allowable emission rate in pounds per hour. For process weights in excess of sixty thousand (60,000) pounds per hour, $E = 55.0 P^{0.11} - 40$.

326 IAC 8-1-6 (Best Available Control Technology)

Since this glass coating source does not have the potential to emit more than 25 tons per year of VOC, 326 IAC 8-1-6 is not applicable. No other 326 IAC 8 rules apply.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 189 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This proposed modification will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the Clean Air Act. The concentrations of these air toxics were modeled and found to be (in worst case possible) as indicated in the following table. The concentrations of these air toxics were compared to the Permissible Exposure Limits (PEL) developed by the Occupational Safety and Health Administration (OSHA). The Office of Air Management (OAM) does not have at this time any specific statutory or regulatory authority over these substances.

Pollutant	Rate (lbs/hr)	Rate @ 8,760 hr/yr (tons/yr)	Rate @ 8,400 hr/yr (tons/yr)	Modeled Concentration ($\mu\text{g}/\text{m}^3$)	OSHA PEL ($\mu\text{g}/\text{m}^3$)	% OSHA PEL
Toluene	4.47	19.6	18.8	873	375,000	0.233
TOTAL		19.6	18.8			

Air Toxic Stack

Stack ID	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
2	38	0.83	600	68

- (b) The applicant has been notified in writing that the air toxic emissions exceed the major source applicability levels stated by Section 112 of the Clean Air Act Amendments, and that it would be beneficial, both to the applicant and to the public, for the applicant to take steps to reduce or eliminate these air toxic emissions.
- (c) See attached spreadsheets for detailed air toxic calculations.
- (d) 326 IAC 2-1-3.4 (New Source Toxic Control) does not apply to these facilities because the facilities being added, by themselves, cannot construct a final or intermediate product. Therefore, this rule does not apply to this proposed modification.

Conclusion

The construction of these six (6) surface coating facilities will be subject to the conditions of the attached proposed **Construction Permit No. CP 053-8592-00020**.

**Appendix A: Potential Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

**Company Name: Thomson Consumer Electronics
Address City IN Zip: 3301 South Adams Street, Marion, IN 46952
CP: 053-8592
Plt ID: 053-00020
Reviewer: Mark L. Kramer
Date: May 15, 1997**

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential tons per year	lb VOC /gal solids	Transfer Efficiency
3 Automatic Spray Booths Anti-Corona Insulating laquer (DX-1504-D)	7.257	90.10%	0.0%	90.1%	0.0%	10.00%	0.0007392	940.000	6.54	6.54	4.54	109.04	19.90	1.09	n/a	50%
3 Automatic Roll-on Application Stations Electrodag 188 (Graphite)	9.84	53.60%	50.0%	3.6%	0.0%	0.00%	0.0030096	940.000	0.35	0.35	1.00	24.05	4.39	0.00	n/a	100%

State Potential Emissions

Add worst case coating to all solvents

5.55	133	24.3	1.09
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Control Technology Emissions (Combustion)		Emission Factors								Emissions					
Type	Number	Capacity MMBtu/hr	Gas usage MMCF/yr	PM lb/MMCF	PM10 lb/MMCF	SO2 lb/MMCF	NOx lb/MMCF	VOC lb/MMCF	CO lb/MMCF	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr
Catalytic			0.0	3.0	3.0	0.6	100.0	5.3	35.0	0.0	0.0	0.0	0.0	0.0	0.0
Thermal			0.0	3.0	3.0	0.6	140.0	2.8	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Total			0.0							0.0	0.0	0.0	0.0	0.0	0.0
										Control Efficiency		Controlled	Controlled	Controlled	Controlled
										VOC PM		VOC pounds per hour	VOC pounds per day	VOC tons/yr	Particulate tons/yr
										0.00 0.00		5.55	133	24.3	1.09

Controlled Emissions due to Surface Coating Operations and Controls

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
 Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
 Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
 Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
 Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
 Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
 Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
 Total = Worst Coating + Sum of all solvents used

HAP Emission Calculations

Company Name: Thomson Consumer Electronics
Address City IN Zip: 3301 South Adams Street, Marion, IN 46952
CP: 053-8592
Plt ID: 053-00020
Reviewer: Mark L. Kramer
Date: May 15, 1997

Material	Density (lb/gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Toluene	Toluene Emissions (tons/yr)
3 Automatic Spray Booths					
Anti-Corona Insulating lacquer (DX-1504-D)	7.257	0.000739	940.00	88.60%	19.6
3 Automatic Roll-on Application Stations					
Electrodag 188 (Graphite)	9.84	0.003010	940.00	0.00%	0.00

Total State Potential Emissions

TOTALS:	(tons/yr):	19.6
	(lb/hr):	4.47
	(g/sec):	0.563

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for New Construction and Operation

Source Name: Thomson Consumer Electronics
Source Location: 3301 South Adams Street, Marion, Indiana 46952
County: Grant
Construction Permit No.: CP 053-8592-00020
SIC Code: 3761
Permit Reviewer: Mark L. Kramer

On September 3, 1997, the Office of Air Management (OAM) had a notice published in the Marion Chronicle Tribune, Marion, Indiana, stating that Thomson Consumer Electronics had applied for a construction permit to construct and operate six (6) surface coating facilities. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On September 24, 1997, Ms. June R. Furnish, resident, of 3425 S. Meridian Street, Marion, Indiana 46953, made the following comment:

COMMENT 1:

Concerning Thomson Consumer Electronics, 34th & So. Adams in Marion, Indiana, a paper was sent to Bueford Shaffer, 34th & So. Meridian Street, Marion, Indiana, on how much more pollution they want to add to this area. Indiana is already considered the worst state for allowing pollution from our factories.

None of us close to this factory can even have a decent garden anymore and trees are dying. Mr. Shaffer had English walnut and pecan trees, peach, cherry, apple and they have all died. He gave up on even trying to have a garden. He placed a pin oak in his front yard and one side of it is dying already. Jack Hensky just lost one of his silver maples and my silver maple has dead limbs after dead limbs on them and I'm on a fixed income so I can't even afford to cut them.

Mr. Shaffer and my husband built our homes on this street thinking it would be a nice area to live in. Wish we would have built somewhere else.

My husband died of cancer and in December I was operated on for cancer and August Gineen Stocker, 3500 So. Meridian had a very serious cancer operation. The stuff that Thomsons blow out isn't good for anyone to breathe.

Be nice if Thomsons would buy this row of houses on Meridian and let us go somewhere else to live. Most wind comes from the west so we get everything they blow out. Isn't fair!

Please send us the list of different things that comes out of the factory and how many tons each. What has happened to the Clean Air Act?

RESPONSE 1:

The OAM thanks Ms. Furnish for her concerns regarding the proposed modification of Thomson Consumer Electronics. The Technical Support Document details the emissions from the proposed modification and have been reiterated. Potential emissions after controls means the emissions after controls assuming that the modification operates 24 hours per day, three-hundred and sixty-five (365) days per year. The potential emissions after controls for the proposed modification are as follows:

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control):

Pollutant	PM (tons/yr)	PM₁₀ (tons/yr)	SO₂ (tons/yr)	VOC (tons/yr)	CO (tons/yr)	NO_x (tons/yr)
Proposed Modification	8.32	8.32	0.00	12.3	0.00	0.00
Net Emissions	8.32	8.32	0.00	12.3	0.00	0.00
PSD Significant Level	25	15	40	40	100	40

As shown in the above table, the potential emissions from the proposed modification are all below the Prevention of Significant Deterioration (PSD) significant levels. Therefore, according to the federal PSD rules the proposed modification is a minor modification to an existing major source. The proposed potential emissions comply with all of the existing State and Federal rules.

This proposed modification will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the Clean Air Act. The concentration of the air toxic was modeled and found to be (in worst case possible) as indicated in the following table. The concentrations of the air toxics were compared to the Permissible Exposure Limits (PEL) developed by the Occupational Safety and Health Administration (OSHA).

Pollutant	Rate (lbs/hr)	Rate @ 8,760 hr/yr (tons/yr)	Rate @ 8,400 hr/yr (tons/yr)	Modeled Concentration (µg/m ³)	OSHA PEL (µg/m ³)	% OSHA PEL
Toluene	4.47	19.6	18.8	873	375,000	0.233
TOTAL		19.6	18.8			

The modeled concentration assuming the modification operates every hour of the year and the worst case meteorological conditions calculated by an U.S. EPA-approved dispersion screening model is less than one quarter (1/4) of one (1) percent of the OSHA PEL.

The latest emissions inventory maintained by IDEM indicates that the actual emissions from the entire Thomson Consumer Electronics source for 1996 were as follows:

Pollutant	Actual Emissions (tons/year)
Particulate Matter (PM)	0.705
Particulate Matter (PM ₁₀)	0.704
Sulfur Dioxide (SO ₂)	0.410
Volatile Organic Compounds (VOC)	90.6
Carbon Monoxide (CO)	8.11
Nitrogen Oxides (NO _x)	62.8
Lead	0.0000042

As part of the 1990 Amendments to the Clean Air Act, all sources, including Thomson Consumer Electronics that have potential emissions that exceed the Part 70 major source emission thresholds for regulated pollutants, are required to obtain either a Federally Enforceable State Operating Permit (FESOP), if the source elects to limit its emissions to under the major source thresholds, or a Part 70 Operating Permit. This source has elected to obtain a Part 70 Operating Permit. The emissions from the proposed modification comply with all applicable State and Federal rules.

Particulate matter, sulfur dioxide, ozone, and nitrogen oxides are regulated by the National Ambient Air Quality Standards (NAAQS). Particulate matter is defined as Total Suspended Particulates (TSP) and Particulate Matter with size diameters less than or equal to 10 microns (PM₁₀). Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Grant County is in attainment with the TSP and PM₁₀ as well as ozone, nitrogen oxides and sulfur dioxide NAAQS, which are health-based standards. A margin of safety is incorporated into the NAAQS levels. This proposed modification will emit no sulfur dioxide or nitrogen oxides. The TSP, PM₁₀ and VOC emissions are less than the PSD significant levels and at these levels have been deemed satisfactory by the U.S. EPA.

Therefore, no changes have been made to the proposed permit.