Comments of the Plumbers and Steamfitters Union, Local 166 Concerning a Proposed Source Modification Permit for Construction and Operation of a Two Sided-Two Coat Coating Line at Steel Dynamics, Inc., Butler, IN
&
Request for Public Hearing

Presented to

Indiana Department of Environmental Management,
Office of Air Quality, Permits Branch
&
U.S. Environmental Protection Agency, Region V,
Air & Radiation Division, Permits & Grants Section
& Air Enforcement Section

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1 Introduction

The Plumbers and Steamfitters Union, Local 166, are submitting these comments for filing with the Indiana Department of Environmental Management, Office of Air Quality and the U.S. Environmental Protection Agency, Region 5.

The Plumbers and Steamfitters Union, Local 166 represent construction workers and their families who are employed in the construction trades in the geographical area of Butler, Indiana. These individuals perform plumbing, pipefitting and steamfitting work in conjunction with industrial construction work including the types of work necessary to construct and install the two sided-two coat coal coating line at Steel Dynamics, Inc.'s facility in Butler, Indiana.

The members of this Union are interested in maintaining a sustainable economy and sustainable economic development that can only be done when sound environmental policies and practices are followed. The proposed permit will provide for environmental degradation in the Butler, Indiana area that may very well jeopardize future jobs by making the environment less desirable for anyone to live and derive an income in this area and more importantly will create a less favorable environmental condition to allow for future economic development. Continued degradation of air quality can and has caused construction moratoriums and other restrictions on growth, which have reduced future employment opportunities for citizens in this state.

The individuals and their families that are represented by Plumbers and Steamfitters Union, Local 166 work in this community and will suffer the impact of detrimental projects towards the environment. All citizens, including the members of our client, breathe the same polluted air that is created and suffer the same health and safety impacts as all other citizens. The Plumbers and Steamfitters Union, Local 166 and its members have a significant interest in ensuring environmental laws protect its members as well as all other workers who are employed in the area.

The Plumbers and Steamfitters Union, Local 166 assert that the proposed Steel Dynamics project should receive close scrutiny. It is simply unacceptable and highly objectionable to both our union and our community for the Steel Dynamics project to illegally cause significant air quality degradation by failing to use state of the art emission control techniques and, at the same time, to fail to provide the counter-veiling economic benefits of decent wages and benefits during project construction.

The comments below describe how the proposed project will cause greater actual pollution impacts than are indicated in the company’s emission analysis and how these facts show that the permit should not be granted in its current form. The Applicant is unlawfully attempting to evade federally required disclosure of all expected emissions and full prevention of significant deterioration review required under IDEM and EPA

rules. Because of Steel Dynamics evasion of disclosure and failure to comply with applicable requirements, we trust that IDEM will deny the permit application after full review of these comments and issue a cease and desist order against continuance of any site construction and operation of the facility.

2 Request to IDEM to Hold a Public Hearing Concerning the Steel Dynamics Modification Permit

The public notice for the draft permit contains the following provision:

> "If adverse comments concerning the air pollution impact of this draft source are received, together with a request for a public hearing, such a hearing may be held to give further consideration to this application."

Commentors raise serious issues of technical errors and non-compliance with federally-significant preconstruction review and air quality impact requirements. In addition, Commentors raise significant issues concerning emission limitations and compliance monitoring for the proposed modification.

As a result of these significant technical and legal issues, by this document Commentors request a public hearing to be held concerning the proposed draft source modification permit, including an extension of the comment period until the time of the public hearing and the holding of a public hearing during evening hours in the Butler, IN area so that concerned working people and local union members can attend.

3 The Proposed Steel Dynamics Modification Cannot be Permitted as a Minor Modification of a Major Source

3.1 The Emission Characterization of the Proposed Modification is in Error as a Result of Failure to Consider Nitrogen Oxides Generated from Combustion of Waste VOC Gases in the Thermal Oxidizer; the Potential to Emit for NOX from the Proposed Modification Exceeds 40 Tons Per Year

The Applicant has considered and admitted the maximum potential to emit for nitrogen oxides from 88 MMBTU/hr of natural gas combustion in the thermal oxidizer and the two paint curing ovens with the resulting 37.42 tons per year of NOX emissions.

However, the Applicant and IDEM deliberately failed to consider generation of NOX inherent in the combustion of waste VOC gases in the inlet to the thermal oxidizer. The calculation of these emissions is presented below. Commentors searched available literature and industrial sources for the heats of combustion for nearly all of the solvents

used in the paints as listed in Applicants table of HAP and non-HAP VOC paint constituents. The results of that review are shown in the table below:

VOC Constituent	Mol Wt	CAS No	Emp Form	kJ/mol[1]	BTU/lb	Info Source
1,2,4-trimethylbenzene	120.19	95-63-6	C9-H12	5191	18597	NIST[2]
o-xylene	106.17	95-47-6	C8-H10	4552	18462	NIST
ethylene Glycol Butyl Ether	118.17	111-76-2	C6-H14-O2		12915	DOW[3]
butanol	74.12	71-36-3	C4-H10-O	2670	15511	NIST
proylene glycol mono methyl ether	132.16	108-65-6	C6-H12-O3		10248	DOW
butoxyethoxyethyl acetate	204.26	124-17-4	C10-H20-O4		12300	DOW*[4]
naphthalene	128.17	91-20-3	C10-H8	5160	17335	NIST
Solvent Naphtha		64742-95-6			19389	EXXON[5]
Solvent Naphtha, Heavy		64742-94-5			18493	EXXON
Aromatic Solvent		na			18493	EST[6]
ethylbenzene	106.17	100-41-4	C8-H10	4567	18523	NIST
2-ethylhexanol	130.23	104-76-7	C8-H18-O	5288	17484	NIST
isobutanol	74.12	78-83-1	C4-H10-O	2669	15505	NIST
Pantanedioc Acid, dimethyl ester	160.17	1119-40-0	C7-H12-O4	3612	9710	NIST
Cyclohexanone	98.14	108-94-1	C6-H10-O	3518	15435	NIST
Isophorone	138.21	78-59-1	C9-H14-O	5265	16403	NIST
Butyrolactone	86.09	96-48-0	C4-H6-O2	2000	10003	NIST
2-Propoxy-ethanol	104.2	2807-30-9	C5-H12-O2	2928	12100	DOW
n-butyl acetate	116.16	123-86-4	C6-H12-O2	3467	12852	NIST

[1] Information from NIST [see next footnote] is generally provided in kilo-Joules per mole. This information was converted by Commentors to BTU/lb by using the published molecular weight and other appropriate conversion factors.

[2] NIST is the National Institute of Science and Technology, Chemistry Web-book, available online at http://webbook.nist.gov/chemistry/

[3] DOW is the Dow Chemical Company website at www.dow.com Various pages at gl;ycol ether web section.

[4] The heat of combustion of butoxyethoxyethyl acetate is estimated by using the heat of combustion for Butyl Carbitol or butoxyethoxyethyl provided by Dow Chemical Company.

[5] EXXON is the ExxonMobil Chemicals, Inc., September 23, 2002 personal conversation with the Product and Technical Information Support Department, (800)526-0749 on heat value of Aromatic 100 Fluid and Aromatic 150 Fluid, each consisting nominally of 100% of the light aromatic petroleum solvent and heavy aromatic petroleum solvent, respectively.

[6] The heat of combustion of "aromatic solvents" is estimated by using the heat of combustion of heavy aromatic petroleum solvent, obtained from ExxonMobil Chemicals.

Using the BTU per pound information from the above table and the percent by weight, maximum usage and coating density information admitted by Applicant, the following table was assembled to derive annual BTU value of the waste VOC gases containing the 19 solvents noted in the prior table:

Primer 45Y54 Constituents	**BTU/lb**	**% by Wt**	**Annual Max Usage (gal)**	**Coating Density (lb/gal)**	**Annual BTU from Constituent**
1,2,4-trimethylbenzene	18597	3.4	637523	11.44	4.61e+09
Xylene	18462	4.2	637523	11.44	5.66e+09
ethylene Glycol Butyl Ether	12915	5.7	637523	11.44	5.37e+09
naphthalene	17335	1.2	637523	11.44	1.52e+09
Solvent Naphtha	19389	5.8	637523	11.44	8.20e+09
Solvent Naphtha, Heavy	18493	10.9	637523	11.44	1.47e+10
ethylbenzene	18523	1	637523	11.44	1.35e+09
Subtotal, Annual BTU to Thermal Oxidizer					**4.14e+10**
Finishing Poly White Constituents	**BTU/lb**	**% by Wt**	**Annual Max Usage (gal)**	**Coating Density (lb/gal)**	**Annual BTU from Constituent**
1,2,4-trimethylbenzene	18597	6.29	739922	11.51	9.96e+09
ethylene Glycol Butyl Ether	12915	5.44	739922	11.51	5.98e+09
butanol	15511	1.44	739922	11.51	1.90e+09
proylene glycol mono methyl ether	10248	3.32	739922	11.51	2.90e+09
Aromatic Solvent	18493	13.08	739922	11.51	2.06e+10
Subtotal, Annual BTU to Thermal Oxidizer					**4.13e+10**
Finishing Poly Color Constituents	**BTU/lb**	**% by Wt**	**Annual Max Usage (gal)**	**Coating Density (lb/gal)**	**Annual BTU from Constituent**
butanol	15511	4.7	369961	9.35	2.52e+09
naphthalene	17335	2.2	369961	9.35	1.32e+09
Solvent Naphtha, Heavy	18493	19.7	369961	9.35	1.26e+10
ethylbenzene	18523	0.3	369961	9.35	1.92e+08
2-ethylhexanol	17484	2	369961	9.35	1.21e+09
isobutanol	15505	1.1	369961	9.35	5.90e+08
Pantanedioc Acid, dimethyl ester	9710	2.3	369961	9.35	7.73e+08

Subtotal, Annual BTU to Thermal Oxidizer					**1.92e+10**
SMP-White Finishing Constituents	**BTU/lb**	**% by Wt**	**Annual Max Usage (gal)**	**Coating Density (lb/gal)**	**Annual BTU from Constituent**
1,2,4-trimethylbenzene	18597	4.74	221977	10.42	2.04e+09
Xylene	18462	1.03	221977	10.42	4.40e+08
ethylene Glycol Butyl Ether	12915	4.86	221977	10.42	1.45e+09
butoxyethoxyethyl acetate	12300	8.65	221977	10.42	2.46e+09
Aromatic Solvent	18493	10.31	221977	10.42	4.41e+09
ethylbenzene	18523	0.14	221977	10.42	6.00e+07
Subtotal, Annual BTU to Thermal Oxidizer					**1.09e+10**
SMP Color Finishing Constituents	**BTU/lb**	**% by Wt**	**Annual Max Usage (gal)**	**Coating Density (lb/gal)**	**Annual BTU from Constituent**
1,2,4-trimethylbenzene	18597	2.6	73992	9.48	3.39e+08
Xylene	18462	1.1	73992	9.48	1.42e+08
butanol	15511	4.5	73992	9.48	4.90e+08
butoxyethoxyethyl acetate	12300	1.9	73992	9.48	1.64e+08
naphthalene	17335	2	73992	9.48	2.43e+08
Solvent Naphtha	19389	4.2	73992	9.48	5.71e+08
Solvent Naphtha, Heavy	18493	16.8	73992	9.48	2.18e+09
ethylbenzene	18523	0.3	73992	9.48	3.90e+07
isobutanol	15505	1.7	73992	9.48	1.85e+08
Cyclohexanone	15435	1.7	73992	9.48	1.84e+08
Subtotal, Annual BTU to Thermal Oxidizer					**4.54e+09**
Kynar-White Finishing Constituents	**BTU/lb**	**% by Wt**	**Annual Max Usage (gal)**	**Coating Density (lb/gal)**	**Annual BTU from Constituent**
Xylene	18462	6.44	44395	11.51	6.08e+08
proylene glycol mono methyl ether	10248	3.23	44395	11.51	1.69e+08
butoxyethoxyethyl acetate	12300	4.5	44395	11.51	2.83e+08
ethylbenzene	18523	1.51	44395	11.51	1.43e+08
Isophorone	16403	19	44395	11.51	1.59e+09
Butyrolactone	10003	1.18	44395	11.51	6.03e+07
Subtotal, Annual BTU to Thermal Oxidizer					**2.86e+09**

Kynar-Color Finishing Constituents	BTU/lb	% by Wt	Annual Max Usage (gal)	Coating Density (lb/gal)	Annual BTU from Constituent
Xylene	18462	1.6	29597	9.35	8.17e+07
ethylene Glycol Butyl Ether	12915	11.6	29597	9.35	4.15e+08
butanol	15511	3	29597	9.35	1.29e+08
butoxyethoxyethyl acetate	12300	2.5	29597	9.35	8.51e+07
naphthalene	17335	2.2	29597	9.35	1.06e+08
Solvent Naphtha	19389	1.4	29597	9.35	7.51e+07
Solvent Naphtha, Heavy	18493	19.7	29597	9.35	1.01e+09
2-ethylhexanol	17484	1.5	29597	9.35	7.26e+07
2-Propoxy-ethanol	12100	1.8	29597	9.35	6.03e+07
n-butyl acetate	12852	1.1	29597	9.35	3.91e+07
Subtotal, Annual BTU to Thermal Oxidizer					**2.07e+09**

The following table summarizes the annual BTU value of waste VOC gases for each painting system for the 19 solvents analyzed:

Paint System	Annual BTU to Thermal Oxidizer
45Y54 Primer	4.14E+10
Poly-White Finish	4.13E+10
Poly-Color Finish	1.92E+10
SMP-White Finish	1.09E+10
SMP-Color Finish	4.54E+09
Kynar White Finish	2.86E+09
Kynar Color Finish	2.07E+09
Total Annual BTU from all Coatings in Waste VOC Gases for 19 Solvents	**1.22E+11**

This forgoing analysis of the total BTU value of uncontrolled emissions of 19 waste solvents accounts for a total of 3621 tons per year of uncontrolled VOC emissions from paint solvents as compared to the Applicants total calculated uncontrolled VOC emission rate of 3894 tons per year solely from painting solvents.

The 1.22E+11 BTU/year calculated heating value of the 19 waste solvents compares to the 7.709 E+11 BTU/year natural gas heat input at 88 MMBTU/hr maximum potential rate. As a result, the calculated annual heating value from waste solvents cannot be disregarded in NOX potential to emit calculations.

Using the emission factor of 100 lbs NOX per million cubic feet of gas, Commentors convert this factor into a BTU equivalent. Commentors calculate this equivalent factor to be 9.709E-8 lbs of NOX per BTU heat input. At the rate of 1.22E+11 BTU per year from waste VOC constituents for the 19 solvents and at the afformentioned NOX BTU rate, the NOX emissions attributable to the combustion of such waste VOCs is 5.92 tons per year.

As a result, the potential to emit emission calculation for the proposed modification is 37.42 tons/year plus 5.92 tons/year or 43.34 tons per year. This amount exceeds the NOX major modification threshold contained in Indiana and U.S. EPA Prevention of Significant Deterioration regulations.

3.2 The Proposed Permit Impermissibly Fails to Provide Federally Enforceable Physical Conditions to Limit the NOX Potential to Emit to Less than the 40 Ton Per Year Major Modification Threshold Given Inherent NOX Emissions from Combustion of Waste VOC Gases as well as Natural Gas Consumption

Form CE-02 in the Application for the thermal oxidizer indicates that both the supplementary fuel heat input rate and the total heat input capacity are both 44 MMBTU/hr. However, Applicant's indication of the total heat input capacity of the thermal oxidizer as 44 MMBTU/hr isn't credible in view of the significant BTU inputs from waste VOC combustion identified later in this section.

Applicant admits in their NOX potential to emit calculation [labeled for natural gas combustion only] to 37.42 tons of NOX per year based on a total heat input of 88 MMBTU/hr and 8760 hours per year.

Applicant must be deemed to have admitted by the potential to emit calculation in the application that combustion of worst case waste VOC gases on a potential to emit basis can occur during maximum calculated natural gas consumption in the NOX potential to emit calculation.[7] As demonstrated in the prior section, such a scenario would lead to NOX emissions of 43.34 tons per year.

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[7] In their application, the Applicant is claiming that the maximum rate of 88 MMBTU/hr will only occur during startup and that heat recovery will allow the ovens to operate at less than their maximum combined 44 MMBTU/hr natural gas firing rate. Commentors deny that such a practice can constitute a basis for arriving at a lower potential to emit calculation based on less than 88 MMBTU/hour natural gas consumption. Counterbalancing the allegation of a reduced firing rate by the Applicant is the presence of a waste heat boiler shown in drawing 452-02-U in the application. The presence of the waste heat boiler means that the facility will have additional ability to use BTUs generated and recovered and that heat recovery at the thermal oxidizer outlet may not necessarily be directed to the curing ovens. No details are provided in the application concerning the BTU/hr capacity of the waste heat boiler.

Nothing about the maximum 3790 VOC usage limitation of condition D.1.1(a) limits the potential NOX emissions from the oxidizer exhaust below the 40 ton per year NOX threshold given the contribution of NOX inherent from waste gas VOC combustion.

The proposed permit modification contains no physical limitations on the potential to emit that would have the effect of limiting NOX emissions to less than 40 tons per year in view of the emission calculation of the prior section. There are no NOX hourly or annual emission limitations and not NOX continuous emissions or stack testing performance requirements.

3.3 The Applicant Has Commenced Construction of a Major Modification to a Major Stationary Source in Violation of the Federal Clean Air Act, Federal Air Pollution Regulations and IDEM Regulatory Requirements

The Applicant has apparently commenced construction in August, 2002 on this major modification for NOX emissions without the required federal and/or state Prevention of Significant Deterioration permit. Given that nothing in the draft permit simultaneously limits NOX emissions to less than 40 tons per year and places federally enforceable physical conditions that limit the potential to emit for NOX, final issuance of the draft permit cannot be held as a defense against violations of required pre-construction best available control technology and air quality impact reviews contained in the approved, federally-enforceable Indiana State Implementation Plan. Applicant is thus immediately vulnerable to a federal enforcement order from EPA under 42 U.S.C. Sec. 7477 and to citizen suits after a 60 day notice pursuant to 42 U.S.C. Sec. 7604(a)(3). Commentors are bringing this matter to the attention of the Region 5 air enforcement offices of the U.S. Environmental Protection Agency with the filing of these comments.

4 Regulatory Issues on Volatile Organic Compound Emissions Raised by Use of Paints Containing Significant Amounts of Oxygenated Solvents

Of the 19 paint solvents analyzed in Section 3.1, 12 of the solvents are oxygenates. Of the 3621 tons of VOC addressed by the Section 3.1 analysis, a total of 1108 tons (30.5%) are oxygenates whose molecules contain one or more oxygen atoms. This information was developed on the basis of the Applicant's spreadsheets showing percent by weight composition in the exposition of the package of worst-case coatings developed for purposes of determining the highest potential HAP and non-HAP VOC emissions.

The fundamental issue of concern is how total VOC emissions arising from oxygenates are disclosed, measured and regulated in analytical work and disclosure on paint formulations, in emission calculations and in stack testing and compliance determination methods. Commentors object to all methodologies proposed for use or contained in the draft permit which attempt to characterize paint formulations, to limit

annual VOC use in paints, to calculate VOC emissions, to verify thermal oxidizer control efficiency and to verify stack emission compliance relying on an "as carbon" basis to allegedly ensure compliance with requirements to hold VOC emissions from the modified facility to be less than 40 tons per year for NSR compliance purposes. Commentors objection to "as carbon" emission characterization methodologies in these matters as gross underestimations and erroneous characterization of planned and actual emissions from the facility, even where NSPS Subpart TT allows and/or requires use of Method 25 "as carbon" methods when such a large proportion of paint solvents are oxygenates.

Even if "as carbon" emission testing methodologies are used to comply with NSPS Subpart TT, the draft permit should nevertheless be amended to require additional stack testing, paint formulation, compliance recordkeeping and thermal oxidizer performance efficiency testing that identifies each VOC species emitted of the solvents listed in the paint formations and with expected products of incomplete combustion (i.e. formaldehyde) for NSR purposes.

Emission characterizations for PSD applicability and non-applicability determinations must reflect volatile organic compound emission calculation analysis that takes the full mass of oxygenated VOCs into account. EPA directives on this matter are clear that use of "as carbon" measurements for purposes of new source review and Title V applicability and compliance are not permissible:

> "For the other regulated pollutants that you listed, with the exception of VOC, calculation of the actual or potential emissions for purposes of NSR and title V applicability should follow the EPA principles for developing emission factors, inventories and test methods for the subject pollutant. For VOC emissions, however, it is recognized that the EPA's test methods do not measure the pollutant mass exactly or only measure a subset of the pollutant mass.2 Nevertheless, for the purposes of both NSR and title V applicability, our policy has been that VOC emissions should be calculated as the total mass of VOCs. That is, a value for each volatile organic compound known to be emitted should be calculated separately and the sum of the individual values should be reported as total VOCs (e.g., 20 tpy of toluene and 26 tpy of methyl ethyl ketone should be calculated separately and then reported as 46 tpy of VOC). This follows our guidance in the document titled "Procedures for Preparing Emission Factor Documents," where we indicate that emission factors for VOCs should be reported "in terms of actual weight of the emitted substance." Those organic substances which are specifically excluded from EPA's definition of VOC at 40 CFR § 51.100(s), because they have "negligible photochemical reactivity," should not be included in the total VOC emission calculation for NSR and title V applicability. The document also provides an exception in the case of unknown species by stating that such emissions should be calculated using an "educated guess" or a molecular weight of 44 (for reporting as propane). Where necessary, this procedure should be used to

calculate emissions of those volatile organic compounds that cannot otherwise be quantified."

"It is the EPA's intent that a consistent approach be taken, wherever possible, to quantify and report pollutant emissions for its various air programs. Thus, the methods described above for quantifying pollutant emissions would also apply to our procedures for such things as NSR netting, emission trading and offsets, as well as for other SIP-related programs for criteria pollutants."[8]

Commentors assert that other test methods are more appropriate for stack emission determinations of a complex mixture which includes substantial amounts of oxygenates, include methods the same as or similar to Methods 18 and 320.

4.1 Commentors are Unable to Verify and Clarify the Analytical Basis of the Paint Formation and Its Effect on the VOC Emissions Analysis from File Materials Disclosed by IDEM on the Steel Dynamics

IDEM's disclosure to Commentors contained only two Material Safety Data Sheets for two of the Akzo Nobel paints under consideration for use at the proposed facility. These MSDS sheets identified paint formation for solvents in "% by weight," but the MSDS sheets do not identify the analytical methodology by which this was derived. Similarly, there is no information in the application to identify the methodology for determining the percent by weight figures used in the HAP/non-NAP VOC calculation spreadsheet submitted by the Applicant.

Commentors insist that the application must be considered incomplete and unapprovable until IDEM can verify that the figures offered for percent by weight are not adjusted or otherwise modified on a "VOC as carbon" basis and represent actual physical product proportions of the solvents in question. Any attempt to use product formulations for solvent information reported on a "VOC as carbon" basis will render gross underestimation errors in the VOC emission calculations and a resulting erroneous consideration of the proposed project as a minor VOC source (given how close existing VOC emission predictions are to the major modification threshold).

[8] June 5, 2001 letter from John Seitz, Director, EPA Office of Air Quality Planning and Standards, to D. Edward Settle, Manager, Air Quality, ThermoRetec Corporation, Golden, CO available on EPA's Region 7 NSR website or from Commentors.

4.2 Compliance Verification and Stack Testing Procedures for Volatile Organic Compounds Contemplated by the Draft Permit are Vague and Some VOC Testing Procedures that are Mentioned Undermine Proper VOC Compliance Testing with "As Carbon" Testing Methodologies

The VOC performance stack test provisions of the draft permit are written so broadly that IDEM and the Applicant could use an "as carbon" method which opens the way for Steel Dynamics to evade full testing and disclosure of the total mass of VOC emissions from the facility in light of the large component of oxygenates used. Under Section C.7(a) and C.10, the Applicant and IDEM could easily agree to "as carbon" stack test methods for emissions and verification of thermal oxidizer efficiency which significantly understate the total mass of VOC emissions arising from the significant oxygenate use contemplated for this facility. In fact, the only specificity found in the permit on stack testing methods is found at Section D.1.8(c)(A) & (B) which "as carbon" methods are explicitly specified as part of a NSPS Subpart TT compliance procedure.

Vague stack testing, thermal oxidizer performance verification methods and paint constituent analytical methods which allow this source to under characterize its emissions so that it can operate a major modification VOC source, understate its emissions and then get away with being treated as a minor modification VOC source must be rejected in favor of methods which ascertain the true emission impact of the source in total mass of VOC constituents emitted.

5 The Applicant has Evaded Characterizing VOC Emissions Associated with Paint Polymer/Resin Thermal Degradation and Use of Cleanup Solvents

All potential VOC emissions in the operation must be characterized and shown in the emission calculations. The Applicant has failed to show likely emissions from two specific sources.

The Applicant has failed to characterize VOC emissions resulting from thermal degradation of polymers and resins contained in the paints as they are heated in the curing ovens. No information is provided on the minimum and maximum curing oven temperatures, but some thermal degradation of such polymers and resins is to be expected in a elevated temperature curing operation.

The Applicant has failed to characterize VOC emissions resulting from the use of solvents for cleaning of paint spraying systems, including expected solvent cleaning of nozzles, nozzle supply injection lines between paint changes, solvents used to remove buildup of paint overspray on process equipment surfaces, solvents used to cleanout paint totes/tanks and solvents used in removing spills and in maintenance. Finally, there is no mention of any solvent cleanup to remove oils and grease in any pre-coating processing

of steel coil materials, to the extent that such operations will occur. All such solvent uses associated with the modified facility must be accounted for in emission calculations and review as to whether the 40 ton per year VOC major modification threshold is exceeded.

Respectfully submited,

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