TITLE V APPLICATION REVIEW

Surface Coating of Metal Parts and Products

Facility #:	N-1002	**Proc. Engineer:**	Brian J. Johnson
Project #:	960566	**Date of Review:**	07/22/97
Date Deemed Complete:	11/29/96		

Facility Name: Lodi Metal Tech, Inc.
Mailing Address: P.O. Box 967
Lodi, CA 95241-0967

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I. PROPOSAL

Lodi Metal Tech Incorporated is proposing that an initial Operating Permit be issued for its existing metal coating plant in Lodi, CA. The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and to provide the legal and factual basis for proposed permit conditions.

II. FACILITY LOCATION

Lodi Metal Tech, Inc. is located at 213 S. Kelly St., Lodi, California 95241-0967.

III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is shown in Attachment A.

A summary of the exempt equipment categories which describe the insignificant activities or equipment at the facility not requiring a permit is shown in Attachment B. This equipment is not exempt from facility-wide requirements.

IV. MODEL GENERAL PERMIT TEMPLATE USAGE

The applicant has requested to utilize template SJV-UM-0-0 (Facility Wide Umbrella) for this facility. Based on the information submitted in the Template Qualification Form, the applicant qualifies for the use of this template.

V. SCOPE OF EPA AND PUBLIC REVIEW

Segments of the proposed Operating Permit are based on a model general permit template that has been previously subject to EPA and public review. The terms and conditions from the model general permit template are included in the proposed permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The following permit conditions, including their underlying applicable requirements, originate from model general permit templates and are not subject to further EPA and Public review:

Conditions 1-39 on N-1002-0-0.

VI. APPLICABLE REQUIREMENTS ADDRESSED BY MODEL GENERAL PERMIT TEMPLATES

District Rule 1100 - Equipment Breakdown (Last Amended 12/17/92)

District Rule 1160 - Emission Statements (Adopted 11/18/92)/

District Rule 2010 - Permits Required (Last Amended 12/17/92)

District Rule 2020 - Exemptions (Last Amended 12/21/94)

District Rule 2031 - Transfer of Permits (Last Amended 12/17/92)

District Rule 2040 - Applications (Last Amended 12/17/92)

District Rule 2070 - Standards for Granting Applications (Last Amended 12/17/92)

District Rule 2080 - Conditional Approval (Last Amended 12/17/92)

District Rule 2520 - Federally Mandated Operating Permits, Sections 5.2, 9.5.1, 9.5.2, 9.6.1, 9.6.2, 9.8, 9.9.1, 9.9.2, 9.9.3, 9.9.4, 9.9.5, 9.10, 9.13.1, 9.14.1, 9.14.2, 9.17, and 10.0 (Adopted 06/15/95)

District Rule 4101 - Visible Emissions (Last Amended 12/17/92)

District Rule 4601 - Architectural Coatings (Last Amended 12/17/92)

District Rule 8020, 8030, and 8060 - Fugitive Dust (PM_{10}) Emissions (Last Amended 4/25/96)

40 CFR Part 82 - Subpart F, Stratospheric Ozone

40 CFR Part 61 - Subpart M, National Emission Standard for Asbestos

VII. APPLICABLE REQUIREMENTS NOT ADDRESSED BY MODEL GENERAL PERMIT TEMPLATES

District New and Modified Stationary Source Review Rule

District Rule 2520 - Federally Mandated Operating Permits, Sections 9.4.2,

District Rule 4201 - Particulate Matter Concentration (Last Amended 12/17/92)

District Rule 4603 - Surface Coating of Metal Parts (Last Amended 5/20/93)

District Rule 4661 - Organic Solvents (Last Amended 12/17/92) - {Non SIP replacement for San Joaquin Co. Rule 409}

40 CFR 60 Subpart EE, Surface Coating of Metal Furniture

VIII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Operating Permit are designated as Federally Enforceable Through Title V Permit.

For this facility, conditions 1, 3 and 4 of the requirements for permit unit N-1002-1-1, conditions 2, 3, and 4 of the requirements for permit unit C-1002-2-2, and condition 1 of the requirements for permit unit N-1002-3-1 are not Federally Enforceable through Title V.

IX. COMPLIANCE

This section describes how compliance is ensured with each applicable requirement identified in Section V.

A. Requirements Addressed by Model General Permit Templates

The applicant is proposing to use model general permit templates to address federally applicable requirements for the entire facility. Section IV of template SJV-UM-0-0 includes a demonstration of compliance for all applicable requirements. Template conditions have been added to the facility wide requirements (N-1002-0-0) as condition numbers 1 through 39 to ensure compliance with these requirements.

B. Requirements not Addressed by Model General Permit Templates

1. District New and Modified Stationary Source Review Rule (NSR)

a. Binks Paint Spray Booth (N-1002-1-0)

Permit unit N-1002-1-0 was not subject to the District NSR Rule at the time the applicant applied for a Permit to Operate for this existing unit in 1979. The unit was previously exempt and has not undergone any NSR modifications.

b. Binks Water Wash Spray Booth (N-1002-2-1)

Permit unit N-1002-2-0 was subject to the District NSR Rule at the time the applicant applied for an Authority to Construct for the unit. Additionally, an NSR permit modification was performed and an ATC was issued on 5/1/89 to replace the existing equipment with the current permit unit (N-1002-2-1).

- Condition 1 from the ATC contains two separate requirements, 0.1 gr/dscf and visible emissions. The grain loading requirement was included as condition 1 of the requirements for permit unit N-1002-2-2. The opacity limitation is included as condition 22 of the facility wide requirements (N-1002-0-0).

- Condition 2 from the ATC was included as condition 2 of the requirements for permit unit N-1002-2-2 without any change. Condition 2 is not federally enforceable because it is based on the nuisance provisions of the State Health and Safety Code, not a Federally applicable requirement.
- Condition 3 from the ATC was not included as a condition of the requirements for permit unit N-1002-2-2. This condition requires compliance with District Rule 4603 by reference. Condition 3 from the ATC is considered extraneous and redundant because the requirements of District Rule 4603 are specified in more detail by conditions 5-14 of the requirements for permit unit N-1002-2-2.
- Condition 4 from the ATC was included as condition 3 of the requirements for permit unit N-1002-2-2 without any change. This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
- Condition 5 from the ATC was included as condition 4 of the requirements for permit unit N-1002-2-2 without change.
- Condition 6 from the ATC was included in condition 12 of the requirements for permit unit N-1002-2-2.
- Condition 7 from the ATC was included in condition 13 of the requirements for permit unit N-1002-2-2.
- Condition 8 from the ATC was made more stringent to require maintaining records for five years in order to conform with Section 9.5.2 of Rule 2520 and shall be enforced by the facility wide requirements (N-1002-0-0) conditions 9 and 19.
- Condition 9 from the ATC was included as condition 10 of the requirements for permit unit N-1002-2-2 without change.
- Condition 10 from the ATC was included as condition 8 of the requirements for permit unit N-1002-2-2 without change.
- Condition 11 from the ATC was included as condition 9 of the requirements for permit unit N-1002-2-2 without change.
- Condition 12 from the ATC was rewritten and included as condition 11 of the requirements for permit unit N-1002-2-2. The original ATC condition allowed the use of any application method specified in District Rule 4603, 5.5. The revised condition requires HVLP spray application which is allowed by Rule 4603 and is the current practice.
- Condition 13 from the ATC was included as condition 15 of the requirements for permit unit N-1002-2-2 without change.
- Condition 14 from the ATC was included as condition 16 of the requirements for permit unit N-1002-2-2 without change.

c. Outdoor Surface Coating of Metal Parts and Products (N-1002-3-0)

Permit unit N-1002-3-0 was subject to the District NSR Rule at the time the applicant applied for an Authority to Construct for the unit. ATC 89-62 was issued on 5/1/89.

- Condition 1 from the ATC was administratively removed as obsolete. This ATC condition was originally included to provide flexibility for expected ARB modifications to San Joaquin County APCD Rule 209.1. Such wording is no longer appropriate for District permits and has previously been removed from the current PTO.
- Condition 2 from the ATC has been incorporated into condition 2 of the requirements for permit unit N-1002-3-1.
- Conditions 3 and 4 from the ATC were not included as requirements for permit unit N-1002-3-1. These conditions require that only approved coating by used. This condition is redundant to conditions 2 and 3 of the requirements for permit unit N-1002-3-1 which specify the acceptable VOC limits for coatings.
- Condition 5 from the ATC has been revised to incorporate the wording of the PTO, and shall now be enforced by the requirements for permit unit N-1002-3-1 condition 12. Condition 5 from the ATC limits the entire stationary source to 32 gallons per day of oil based paint. The revised condition limits the daily VOC emission from this unit to 43.9 lb/day.
- Condition 6 from the ATC was included as condition 10 of the requirements for permit unit N-1002-3-1. The wording of the included condition was administratively rewritten to more clearly state the record keeping requirement of District Rule 4603.
- Condition 7 from the ATC has been removed. The condition was erroneously placed onto the original ATC. The facility's file documents the mistake and the removal of the condition from the current District PTO. The ATC condition limited the entire facility's VOC emissions to 307 lb/day. The revised condition limits this permit unit to 43.9 lb VOC/day.
- Condition 8 from the ATC had been administratively corrected on the current PTO by the District as a mistake on the original ATC. A corrected condition is in place on the current PTO and shall now be enforced by condition 12 of the requirements for permit unit N-1002-3-1. The ATC condition limited this permit unit to 91 lb VOC/day. The revised condition limits this permit unit to 43.9 lb VOC/day.

- Condition 9 from the ATC was not included in the requirements for this permit unit. This condition requires the use of obsolete coating application equipment (i.e. airless spray guns) which is no longer allowed by District Rule 4603.
- Condition 10 from the ATC was not included in the requirements for this permit unit. This condition specifies that the District may take coating samples upon request. This condition is redundant to condition 21 of the facility wide requirements (N-1002-0-0).

2. District Rule 4201 - Particulate Matter Concentration

Section 3.1 requires that a source not discharge dust, fumes, or total suspended particulate matter emission in excess of 0.1 gr/dscf.

a. Binks Paint Spray Booth (N-1002-1-0)

Emissions from this unit are estimated by a maximum coating use of 35 gallons per 10 hour day with a solids content of 3.0 lb/gal, and an air flow rate given by the manufacturer as 34,800 cfm. Therefore the emission rate is calculated as follows:

35 gal/day * 3.0 lb PM/gal = 105 lb PM/day = 1225 gr/min

The transfer efficiency of HVLP is 75%[1], therefore

total emissions = 1225 gr/min * (1-0.75) = 306 gr/min

emission rate = 306 gr/min / 34,800 ft^3/min = 0.009 gr/scf

Therefore, compliance is expected and no additional monitoring is required.

b. Binks Water Wash Spray Booth (N-1002-2-1)

Emissions from this unit are estimated by a maximum coating use of 321 gallons per 10 hour day with a solids content of 1.3 lb/gal, and an air flow rate given by the manufacturer as 37,500 cfm. Therefore the emission rate is calculated as follows:

321 gal/day * 1.3 lb PM/gal = 417.3 lb PM/day = 4868 gr/min

The transfer efficiency of electrostatic deposition is greater than 75%[2], therefore,

[1] From STAPPA/ALAPCO “Air Quality Permits”, Volume 2, Table 14.2

total emissions = 4868 gr/min * (1-0.75) = 1217 gr/min

emission rate = 1217 gr/min / 37,500 ft^3/min = 0.032 gr/scf

Therefore, compliance is expected and no additional monitoring is required.

Permit conditions have been be added to ensure compliance with the emission limits of this rule. See permit condition 2 of the requirements for permit unit N-1002-1-1 and condition 1 of the requirements for permit unit N-1002-2-2.

3. District Rule 4603 - Surface Coating of Metal Parts

Section 5.1 prohibits the application of coating with a VOC content in excess of specified limits. Condition 5 of the requirements for permit unit N-1002-1-1, condition 5 of the requirements for permit unit N-1002-2-2, and condition 2 of the requirements for permit unit N-1002-3-1 ensure compliance with this prohibition.

Section 5.2 prohibits the application of specialty coating with a VOC content in excess of specified limits. Condition 6 of the requirements for permit unit N-1002-1-1, condition 6 of the requirements for permit unit N-1002-2-2, and condition 3 of the requirements for permit unit N-1002-3-1 ensure compliance with this prohibition.

Section 5.4.1 requires that solvents containing no more than 200 grams of VOC per liter of material be used. Condition 7 of the requirements for permit unit N-1002-1-1, condition 7 of the requirements for permit unit N-1002-2-2, and condition 4 of the requirements for permit unit N-1002-3-1 ensure compliance with this prohibition.

Section 5.4.2 requires that all solvent laden cloth or paper be stored in closed, non absorbent containers. Condition 8 of the requirements for permit unit N-1002-1-1, condition 8 of the requirements for permit unit N-1002-2-2, and condition 5 of the requirements for permit unit N-1002-3-1 ensure compliance with this prohibition.

Section 5.4.3 requires that all coatings and solvents be stored in closed containers. Condition 9 of the requirements for permit unit N-1002-1-1, condition 9 of the requirements for permit unit N-1002-2-2,

[2] From STAPPA/ALAPCO “Air Quality Permits”, Volume 2, Table 14.2

and condition 6 of the requirements for permit unit N-1002-3-1 ensure compliance with this prohibition.

Section 5.4.4 requires the use of an enclosed system for spray equipment cleanup, or equipment proven to be equally effective. Condition 10 of the requirements for permit unit N-1002-1-1, condition 10 of the requirements for permit unit N-1002-2-2, and condition 7 of the requirements for permit unit N-1002-3-1 ensure compliance with this prohibition.

Section 5.5 limits the use of coating application equipment to one of the listed methods. Condition 11 of the requirements for permit unit N-1002-1-1, condition 11 of the requirements for permit unit N-1002-2-2, and condition 8 of the requirements for permit unit N-1002-3-1 ensure compliance with this prohibition.

Section 5.6 presents the requirement that no person shall solicit or require for use or specify the application of a coating subject to this rule if such use or application results in a violation of the provisions of this rule. The requirement applies to all written or oral contracts under the terms of which any coating is to be applied to any metal part or product at any physical location within the District.

Section 6.1 requires the display of maximum VOC content of the coating and statement of the manufacturer's recommendation regarding thinning of the coating. Condition 12 of the requirements for permit unit N-1002-1-1, condition 12 of the requirements for permit unit N-1002-2-2, and condition 9 of the requirements for permit unit N-1002-3-1 ensure compliance with this prohibition.

Section 6.2 requires the permittee to maintain records of volume of coating and solvent used. Condition 13 of the requirements for permit unit N-1002-1-1, condition 13 of the requirements for permit unit N-1002-2-2, and condition 10 of the requirements for permit unit N-1002-3-1 ensure compliance with this prohibition.

Section 6.2.3 requires all records be maintained and made available for inspection for the previous 24 month period. This requirement has been superseded by the requirement of Section 9.5.2 of District Rule 2520 which requires retention of records for five years. See condition 9 of the requirements for permit unit N-1002-0-0.

Section 6.3 specifies the test methods to be used in quantifying the VOC content of coatings, VOC emission rates, and VOC capture efficiency. In addition this section presents methods to be used in the

quantification of coating as a metallic/iridescent topcoat, for the determination of the acid content of primers, and for the determination of emissions of VOCs from spray gun cleaning systems. Condition 14 of the requirements for permit unit N-1002-1-1, condition 14 of the requirements for permit unit N-1002-2-2, and condition 11 of the requirements for permit unit N-1002-3-1 ensure compliance with this prohibition.

4. District Rule 4661 and San Joaquin Rule 409 - Organic Solvents

This facility is exempt from the requirements of these rules. The facility is subject to District Rule 4603 which is the current SIP approved replacement for San Joaquin County Rule 409.4. Section 6(A)(iv) of Rule 409.4 states that any source which is in full compliance with the provisions of the rule shall be exempt from otherwise applicable provisions of Rule 409. Furthermore, Rule 4661 Section 4.2 grants an exemption from the provisions of the rule when other Regulation IV rules are applicable. Therefore, Lodi Metal Tech by being in compliance with current District Rule 4603 is exempt from District Rule 4661 and San Joaquin County Rule 409.

5. 40 CFR 60 Subpart EE - Surface Coating of Metal Furniture

This requirement is designed to regulate the VOC content of coatings applied to metal furniture at facilities which use more than 3,842 liters per year and have been constructed, modified, or reconstructed since November 28, 1980.

This facility is subject to the provisions of this requirement. District Rule 4603 as described in section 3 above is also applicable to this facility and is more stringent than 40 CFR 60 Subpart EE as shown in Table 1 below.

Table 1 - Comparison of District Rule 4603 and 40 CFR 60 Subpart EE

Requirement	District Rule	Subpart EE
Limits VOC emissions to less than 0.9 kg of VOC per liter of coatings solids applied	X	X
Limits VOC emissions in all cases to less than 0.42 kg of VOC per liter of coatings solids applied	X	
Contains requirements for evaporative loss minimization	X	
Limits the equipment and method of coating application	X	

Requirement	District Rule	Subpart EE
Requires each container or accompanying data sheet to display the maximum VOC content	X	
Requires recordkeeping to maintain a current list of VOC content of coatings and solvents as applied, and amount of each used	X (daily)	X (monthly)
Test Method 24 or coating manufacturer's formulation data used to determine compliance	X	X
Test Method 25 used for the VOC concentration and emissions	X	X

Therefore, compliance with permit conditions used to enforce District Rule 4603 (Section 3 above) shall also show compliance with 40 CFR 60 Subpart EE.

X. PERMIT SHIELD

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Operating Permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

A. Requirements Addressed by Model General Permit Templates

By submitting model general permit template SJV-UM-0-0 the applicant has requested that a permit shield be granted for all the applicable requirements identified by the template. Therefore, the permit shield as granted in the model general permit template is included as conditions 38 and 39 of the facility wide requirements (N-1002-0-0).

B. Requirements not Addressed by Model General Permit Templates

The applicant has requested a permit shield for each of the requirements listed below:

1. District Rule 2010, 4.0

Compliance with these requirements was addressed in Section IX of this document, and is ensured by the facility wide requirements (N-1002-0-0) condition 4. Therefore, a permit shield is being granted for these requirements in the facility wide requirements (N-1002-0-0) condition 39.

2. District Rule 4101

Compliance with these requirements was addressed in Section IX of this document, and is ensured by the facility wide requirements (N-1002-0-0) condition 22. Therefore, a permit shield is being granted for these requirements in the facility wide requirements (N-1002-0-0) condition 39.

3. District Rule 4201

Compliance with this requirement was addressed in Section IX of this document, and is ensured by condition 2 of the requirements for permit unit N-1002-1-1 and condition 1 of the requirements for permit unit N-1002-2-2. Therefore, a permit shield is being granted for this rule in condition 15 of the requirements for permit unit N-1002-1-1 and condition 17 of the requirements for permit unit N-1002-2-2.

4. District Rule 4603

Compliance with this requirement was addressed in Section IX of this document. Compliance is ensured by conditions 5-14 of the requirements for permit units N-1002-1-1 and 2-2, and conditions 2-11 of the requirements for permit unit N-1002-3-1. Therefore, a permit shield is being granted for this rule in condition 15 of the requirements for permit unit N-1002-1-1, condition 17 of the requirements for permit unit N-1002-2-2, and condition 13 of the requirements for permit unit N-1002-3-1.

XI. PERMIT CONDITIONS

See draft permits beginning on the next page.

EPA COMMENTS / DISTRICT RESPONSE

The EPA's comment regarding the proposed Title V Operating Permit for Lodi Metal Tech (District facility N-1002) is encapsulated below followed by the District's response. A copy of the EPA's 9/19/97 letter is available at the District.

1. EPA COMMENT

Lodi Metal Tech's proposed permits do not contain conditions which fully address the labeling requirements of District Rule 4603. Therefore, the District must either add permit condition(s) to address these requirements or remove them from the shields scope of applicability.

DISTRICT RESPONSE

The District will add the following additional wording to the proposed permit to address the labeling requirements of District Rule 4603, Sections 6.1.1 and 6.1.2.

> The VOC content of all coatings shall be displayed as grams of VOC per liter of coating (less water and exempt compounds).
>
> Each container or accompanying data sheet of any subject coating shall display a statement of the manufacturer's recommendation regarding thinning of the coating.

2. EPA COMMENT

EPA would prefer the language in Condition 14 (N-1002-1-1 and N-1002-2-2) and Condition 11 (N-1002-3-1) to be modified to require the determination of the VOC content of any coating, as applied, be determined either: 1) by analysis using EPA Method 24 on an annual basis; or 2) by product data sheets provided by the coating manufacturer and certification that EPA Method 24 was used to determine the VOC content. Manufacturer's data may not be sufficient to determine compliance. For example, MSDS often specify VOC content as a range. In order to insure that compliance demonstrations based on manufacturer's data are accurate, such a requirement is necessary.

DISTRICT RESPONSE

District Rule 4603, Section 6.1.1 specifically allows for the VOC content to be calculated using product formulation data, or may be determined using the test methods in Section 6.3. Therefore, the Rule does not require certification that the manufacturer used EPA Method 24 to determine the VOC content. If the

manufacturer has specified the product information as a range, the most conservative or highest VOC content will be used for compliance determinations.

3. EPA COMMENT

The final Title V permit must ensure compliance with Rule 409 unless the District's revise permit analysis demonstrates that this requirement does not apply.

DISTRICT RESPONSE

As stated in the proposed engineering evaluation, this facility is subject to District Rule 4603 which is the current SIP approved replacement for San Joaquin County Rule 409.4. Section 6(A)(iv) of Rule 409.4 states that any source which is in full compliance with the provisions of the rule shall be exempt from otherwise applicable provisions of Rule 409. Therefore, Lodi Metal Tech by being in compliance with current District Rule 4603 is exempt from San Joaquin County Rule 409. Clarification has been made in the proposed engineering evaluation to identify the above exemption.