

PERMIT Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 9-1430-00081/00007

Effective Date: 04/28/2000 Expiration Date: No expiration date

Permit Issued To: NIAGARA TRANSFORMER CORP

1747 DALE RD

CHEEKTOWAGA, NY 14225-4915

Contact: ROBERT A FISHLOCK

PLANT MANAGER, NIAGARA TRANSFORMER CORP

1747 DALE RD BUFFALO, NY 14225 (716) 896-6500

Facility: NIAGARA TRANSFORMER CORP

1747 DALE RD

CHEEKTOWAGA, NY 14225

Contact: ROBERT A FISHLOCK

PLANT MANAGER, NIAGARA TRANSFORMER CORP

1747 DALE RD BUFFALO, NY 14225 (716) 896-6500

Description:

The Niagara Transformer Corporation facility custom manufactures high voltage electrical transformers. Activities such as welding and fabrication of metal housing, winding of copper core, varnish coating of core, assembly and flow coating of cooling radiators, airless painting of housings, and complete assembly and testing occur at this facility. There specialty is large custom made transformers, 15 to 20 MVa, approximately 200 units per year. Mineral oil is used as the dielectric oil and coolant in the transformers, some are constructed to operate as "dry" transformers. Polychlorinated Biphenyl (PCB's) was used as a dielectric oil and coolant in the past. Our records indicate this practice ceased in the early 1980's.

The emissions of concern are moderate toxicity Volatile Organic Compound (VOC) emissions from coating of cooling radiators and transformer housings, and VOCs from the varnishing and baking of coil cores. The facility actual annual emissions of VOC's are around 10 tpy. The applicable regulation for the control of VOC's is 6 NYCRR part 228, "Surface Coating Processes". Part 228 was rewritten in 1993 to achieve the requirements of the 1990 Clean Air Act, Title 1, for the control of lower atmospheric ozone/smog. Part 228 is based on Reasonable Available Control Technology (RACT) for VOC emissions. Compliance options are specific maximum VOC content of coatings for certain description of products, control by add on equipment or if none of the previous two prove to be feasible a lesser degree of control



determined by RACT analysis. Table 1 in part 228 applies to facilities with a potential to emit of 10 tpy and specifies a maximum pound of VOC per gallon (minus water and excluded VOC) of coating at application. For the transformer varnish dip and baking of copper core windings the Part 228 specification is 3.0 pounds/gallon (Miscellaneous metal parts, oven > 90 C) and 3.5 lbs/gallon for the flow coater and airless sprayer ,(miscellaneous metal parts, extreme performance). The varnishing of the copper cores should not be confused with the magnetic wire insulation coating in part 228 table 1. This is for individual wire coating and not bulk dip/bake. The facility cannot meet these emission limit specifications and has applied for a variance. The RACT demonstration proved that add on controls was not an option and that suitable compliant coatings were not available for flow coating of epoxy primers, top coats and the varnish. Alternate limits , in lbs of VOC /gallon, are specified in the permit. The facility has reduced usage by purchasing the cooling radiators pre finished and by using a compliant primer on transformer housings. They are also required to continue researching compliance coating and possible control options . The variance is good for 5 years , and requires approval by EPA for a source specific State Implementation Plan revision. The revision to be handled by New York States Department of Environmental Conservation bureau of Technical Support.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator:	DAVID S DENK
	DIVISION OF ENVIRONMENTAL PERMITS
	270 MICHIGAN AVE
	BUFFALO, NY 14203-2999
Authorized Signature:	Date: /



Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.



LIST OF CONDITIONS

DEC GENERAL CONDITIONS

HEADQUARTERS

General Provisions

Facility Inspection by the Department
Relationship of this Permit to Other Department Orders and Determinations
Applications for Permit Renewals and Modifications
Permit Modifications, Suspensions, and Revocations by the Department
Facility Level
Submission of Applications for Permit Modification or Renewal -REGION 9

DEC Permit Conditions Page 1 of 3



DEC GENERAL CONDITIONS **** General Provisions **** GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department

Applicable State Requirement: ECL 19-0305

Item 1.1:

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

Item 1.2:

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

Item 1 3

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Condition 2: Relationship of this Permit to Other Department Orders and Determinations
Applicable State Requirement: ECL 3-0301.2(m)

Item 2.1:

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Condition 3: Applications for Permit Renewals and Modifications
Applicable State Requirement: 6NYCRR 621.13(a)

Item 3.1:

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item 3.2:

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

Condition 4: Permit Modifications, Suspensions, and Revocations by the Department Applicable State Requirement: 6NYCRR 621.14



Item 4.1:

The Department reserves the right to modify, suspend, or revoke this permit. The grounds for modification, suspension or revocation include:

- a) the scope of the permitted activity is exceeded or a violation of any condition of the permit or provisions of the ECL and pertinent regulations is found;
 - b) the permit was obtained by misrepresentation or failure to disclose relevant facts;
 - c) new material information is discovered; or
- d) environmental conditions, relevant technology, or applicable law or regulation have materially changed since the permit was issued.

**** Facility Level ****

Condition 5: Submission of Applications for Permit Modification or Renewal -REGION 9

HEADOUARTERS

Applicable State Requirement: 6NYCRR 621.5(a)

Item 5.1:

Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator Region 9 Headquarters Division of Environmental Permits 270 Michigan Avenue Buffalo, NY 14203-2999 (716) 851-7165



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: NIAGARA TRANSFORMER CORP

1747 DALE RD

CHEEKTOWAGA, NY 14225-4915

Facility: NIAGARA TRANSFORMER CORP

1747 DALE RD

CHEEKTOWAGA, NY 14225

Authorized Activity By Standard Industrial Classification Code:

3612 - TRANSFORMERS

Permit Effective Date: 04/28/2000 Permit Expiration Date: No expiration date.



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6NYCRR 200.1: Definitions Applicable To This Permit
- 2 6NYCRR 200.3: False statement
- 3 6NYCRR 200.5: Sealing
- 4 6NYCRR 200.6: Acceptable ambient air quality
- 5 6NYCRR 200.7: Maintenance of equipment
- 6 6NYCRR 201-1.2: Unpermitted Emission Sources
- 7 6NYCRR 201-1.4: Unavoidable Noncompliance and Violations
- 8 6NYCRR 201-1.5: Emergency Defense
- 9 6NYCRR 201-1.7: Recycling and Salvage
- 10 6NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the Air
- 11 6NYCRR 201-1.10(a): Public Access to Recordkeeping
- 12 6NYCRR 201-3.2(a): Proof of Eligibility
- 13 6NYCRR 201-3.3(a): Proof of Eligibility
- 14 6NYCRR 202-1.1: Required emissions tests
- 15 6NYCRR 211.3: Visible emissions limited.
- 16 6NYCRR 215: Open Fires Prohibited at Industrial and Commercial Sites
- 18 6NYCRR 228.1(g): Once in, always in
- 17 6NYCRR 228.3(e)(1): Compliance Demonstration
- 19 6NYCRR 228.5(a): Compliance Demonstration
- 20 6NYCRR 228.10: Handling, storage, and disposal of volatile organic compounds
- 21 40CFR 82, Subpart F: Recycling and Emissions Reduction

Emission Unit Level

EU=0-UVARN

22 6NYCRR 228.5(b): method 24 40 CFR 60

EU=U-PAINT,Proc=PNT

23 6NYCRR 228.5(b): method 24 40 CFR 60

EU=U-PAINT,EP=00003,Proc=PNT,ES=00003

24 6NYCRR 212.4(c): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 25 6NYCRR 201-5: General Provisions
- 26 6NYCRR 201-5: Emission Unit Definition
- 27 6NYCRR 201-5.3(b): Contaminant List
- 28 6NYCRR 211.2: Air pollution prohibited
- 29 6NYCRR 217-3.2(a): Diesel truck opacity limitation

Air Pollution Control Permit Conditions

Page 2 of 20 FINAL



30 6NYCRR 217-3.2(b): Idling of diesel trucks limited **Emission Unit Level**

31 6NYCRR 201-5: Emission Point Definition By Emission Unit

32 6NYCRR 201-5: Process Definition By Emission Unit



FEDERALLY ENFORCEABLE CONDITIONS **** Facility Level ****

Condition 1: Definitions Applicable To This Permit

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 200.1

Item 1.1:

The definitions found in Parts 200 and 201 apply throughout this permit. Specific definitions used in this permit and their meanings include:

- 1. "Act" refers to the Federal Clean Air Act, 42 U.S.C. Section 7401, et seq., as amended by Public Law 101-549, November 15, 1990.
- 2. "Administrator" refers to the Administrator of the United States Environmental Protection Agency or designee.
- 3. "Department" refers to the New York State Department of Environmental Conservation.

Condition 2: False statement

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 200.3

Item 2.1:

No person shall make a false statement in connection with applications, plans, specifications and/or reports submitted pursuant to this Subchapter.

Condition 3: Sealing

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 200.5

Item 3.1:

- (a) The commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the commissioner issued in the case of the violation. Sealing means labelling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.
- (b) No person shall operate any air contamination source sealed by the commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.



(c) Unless authorized by the commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section

Condition 4: Acceptable ambient air quality

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 200.6

Item 4.1:

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the commissioner shall specify the degree and/or method of emission control required.

Condition 5: Maintenance of equipment

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 200.7

Item 5.1:

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such device effectively.

Condition 6: Unpermitted Emission Sources

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-1.2

Item 6.1:

If an existing emission source was subject to the permitting requirements of 6NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

- (a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.
- (b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

Condition 7: Unavoidable Noncompliance and Violations
Effective between the dates of 04/28/2000 and Permit Expiration Date



Applicable Federal Requirement: 6NYCRR 201-1.4

Item 7.1:

At the discretion of the commissioner a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The following actions and recordkeeping and reporting requirements must be adhered to in such circumstances.

- (a) The facility owner and/or operator shall compile and maintain records of all equipment maintenance or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the commissioner's representative when requested to do so in writing or when so required by a condition of a permit or certificate issued for the corresponding air contamination source. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.
- (b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates.
- (c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation of the malfunction and the air contaminants emitted.
- (d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

Condition 8: Emergency Defense

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-1.5

Item 8.1:

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.



- (a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;
- (2) The equipment at the permitted facility causing the emergency was at the time being properly operated;
- (3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.
- (c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

Condition 9: Recycling and Salvage

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-1.7

Item 9.1:

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Condition 10: Prohibition of Reintroduction of Collected Contaminants to

the Air

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-1.8

Item 10.1:

No person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

Condition 11: Public Access to Recordkeeping

Effective between the dates of 04/28/2000 and Permit Expiration Date



Applicable Federal Requirement: 6NYCRR 201-1.10(a)

Item 11.1:

Where emission source owners and/or operators keep records pursuant to compliance with the operational flexibility requirements of 6 NYCRR Subpart 201-5.4(b)(1), and/or the emission capping requirements of 6 NYCRR Subparts 201-7.2(d), 201-7.3(f), 201-7.3(g), 201-7.3(h)(5), 201-7.3(i) and 201-7.3(j), the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Emission source owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department of receipt of the request.

Condition 12: Proof of Eligibility

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-3.2(a)

Item 12.1:

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Condition 13: Proof of Eligibility

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-3.3(a)

Item 13.1:

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Condition 14: Required emissions tests

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 202-1.1

Item 14.1:

An acceptable report of measured emissions shall be submitted, as may be required by the commissioner,



to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the commissioner within the time stated shall be sufficient reason for the commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6NYCRR Part 202-1.

Condition 15: Visible emissions limited.

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 211.3

Item 15.1:

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous sixminute period per hour of not more than 57 percent opacity.

Condition 16: Open Fires Prohibited at Industrial and Commercial Sites

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 215

Item 16.1:

No person shall burn, cause, suffer, allow or permit the burning in an open fire of garbage, rubbish for salvage, or rubbish generated by industrial or commercial activities.

Condition 18: Once in, always in

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 228.1(g)

Item 18.1:

Any coating line subject to the provisions of this Part, will remain subject to these provisions even if the facility annual potential to emit VOC later falls below applicability criteria.

Condition 17: Compliance Demonstration

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 228.3(e)(1)

Item 17.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 17.2:

Compliance Demonstration shall include the following monitoring:

Air Pollution Control Permit Conditions Page 9 of 20 FINAL



Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

The Niagara Transformer facility custom manufactures high voltage electrical transformers. Processes used in the manufacturing of the transformers that result in VOC emissions are: Varnishing of copper coil components in an immersion process, baking of varnish coils (Uvarnish); Flow coating of cooling radiators and airless spray application of coatings to transformer exterior surfaces for corrosion protection, (Upaint). The facility actual emissions of VOC have reached a high of 15 tons/year in 1995 and were below 10 tpy prior to 1995. Emissions have steadily decreased since 1995 to a current emission rate of 10 tpy. The decrease in emissions is attributed to the efforts made by the plant to decrease VOC content and usage of paints and varnish. A couple of changes to this effect are the purchase of cooling radiators finish painted in their standard colors and a change in the primer to a compliant coating. Current varnish VOC content is approximately 4.0 lbs/gal and coatings range from 3.5 to 4.5 lbs/gal. The specifications for a compliance VOC coating in 228.7 are 3.0 lbs/gal for the varnish operation and 3.5 lbs/gal for the radiator and housing paints.

Since 1995 the facility has evaluated various products in an attempt to find a compliant top coat and varnish without success. The performance requirements of the varnish and top coats as well the variety and small quantities of top coats make it difficult to address with a coating change. An economic evaluation prepared in accordance with NYSDEC Air Guide 20 is attached to the application as well an analysis using EPA's Cost Control Manual (USEPA 450/3-90-006). This evaluation demonstrates that application of RACT for emissions of VOC's from non-compliant coating processes is well in excess of the viable economic threshold of \$ 3000/ ton removed.

In order to allow for maximum flexibility in operations the facility is granted a variance from the applicable requirements of 6 NYCRR part 228.7 and must adhere to the following conditions:

1.a) Cooling Radiator and transformer housing primers are limited to 3.5 pounds of VOC per gallon (minus water and excluded VOC) of coating at application. Epoxy primers are limited to 4.81 lbs of VOC/gallon.

1.b)Top coat coatings are limited to 4.0 pounds of VOC per



gallon(minus water and excluded VOC) of coating at application.

1.c)Transformer Coil Varnishes are limited to 4.5 pounds of VOC per gallon (minus water and excluded VOC) of coating at application.

- 2. The source owner must maintain records which verify the VOC content of coatings as applied and annual 12 month rolling total VOC emissions in tpy. These records must be submitted to the department annually on the anniversary date of this permit.
- 3. The source owner must continue to investigate compliance strategies and submit quarterly reports documenting the evaluation of either reformulation, abatement technology or process modifications. The written report must include the results and specific dates of the testing and evaluation and are due annually on the anniversary date of this permit.
- 4.The Department reserves the right to require the source owner to evaluate and implement innovative technology within a time frame established by the Commissioner's representative as per 621.14(a)(4).

Monitoring Frequency: MONTHLY

Reporting Requirements: ANNUALLY (ANNIVERSARY)

Initial Report Due: 05/27/2001 for the period 04/28/2000 through 04/27/2001

Condition 19: Compliance Demonstration

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 228.5(a)

Item 19.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 19.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Certification from the coating supplier/manufacturer which verifies the parameters used to determine the actual VOC content of the as applied coating, for each coating used at the facility, must be maintained and, upon request, be provided to the departments representative.

Air Pollution Control Permit Conditions Page 11 of 20 FINAL



In addition, purchase, usage and/or production records of the coating material, including solvents, must be maintained and, upon request, be submitted to the department. Records must be maintained at the facility for a period of five years.

Monitoring Frequency: MONTHLY

Averaging Method: CALENDAR YEAR AVERAGE

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 20: Handling, storage, and disposal of volatile organic

compounds

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 228.10

Item 20.1:

No owner or operator of a facility subject to 6NYCRR Part 228 shall:

- (a) use open containers to store or dispose of cloth or paper impregnated with VOC and/or solvents that are used for surface preparation, cleanup, or coating removal;
- (b) store in open containers spent or fresh VOC and/or solvents to be used for surface preparation, cleanup, or coating removal;
- (c) use VOC and/or solvents to cleanup spray equipment unless equipment is used to collect the cleaning compounds and to minimize their evaporation to the atmosphere;
- (d) use open containers to store or dispense surface coatings and/or inks unless production, sampling, maintenance, or inspection procedures require operational access. This provision does not apply to the actual device or equipment designed for the purpose of applying a coating material to a substrate; or
- (e) use open containers to store or dispose of spent surface coatings, spent VOCs and/or solvents.

Condition 21: Recycling and Emissions Reduction

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 82, Subpart F

Item 21.1:

The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVAC's in Subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR Part 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR Part 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR Part 82.161.



- d. Persons disposing of small appliances, MVAC's, and MVAC-like appliances must comply with recordkeeping requirements pursuant to 40 CFR Part 82.166. ("MVAC-like appliance as defined at 40 CFR Part 82.152)
- e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR Part 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR Part 82.166.

**** Emission Unit Level ****

Condition 22: method 24 40 CFR 60

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 228.5(b)

Item 22.1:

This Condition applies to Emission Unit: 0-UVARN

Item 22.2:

Acceptable analytical methods for determining the volatile content, water content, density, volume of solids and weight of solids of surface coatings are presented in appendix A, method 24, of 40 CFR 60.

Condition 23: method 24 40 CFR 60

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 228.5(b)

Item 23.1:

This Condition applies to Emission Unit: U-PAINT

Process: PNT

Item 23.2:

Acceptable analytical methods for determining the volatile content, water content, density, volume of solids and weight of solids of surface coatings are presented in appendix A, method 24, of 40 CFR 60.

Condition 24: Compliance Demonstration

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.4(c)

Item 24.1:

The Compliance Demonstration activity will be performed for:



Emission Unit: U-PAINT Emission Point: 00003 Process: PNT Emission Source: 00003

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 24.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING Monitoring Description:

Emissions of solid particulates are limited to less than 0.050 grains of particulates per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis. Compliance testing will be conducted at the discretion of the Department.

Parameter Monitored: PARTICULATES Upper Permit Limit: 0.05 grains per dscf Reference Test Method: EPA Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST

METHOD INDICATED

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY



STATE ONLY ENFORCEABLE CONDITIONS **** Facility Level ****

Condition 25: General Provisions

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 25.1:

This section contains terms and conditions that are not federally enforceable and are not required under the Act or under any of its applicable requirements. Terms and conditions so designated are not subject to the requirements of Section 201-6.4 of Part 201.

Item 25.2:

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

Item 25.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Condition 26: Emission Unit Definition

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 26.1:

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: 0-UVARN Emission Unit Description:

THIS EMISSION UNIT CONSISTS OF VARNISHING AND BAKING PROCESSES ASSOCIATED WITH THE COATING AND DRYING OF THE TRANSFORMER COIL COMPONENTS. THE EMISSION POINTS ASSOCIATED WITH THIS UNIT ARE EXHAUST SYSTEMS MOUNTED ON THREE BAKING OVENS AND FUGITIVE EMISSIONS FROM TWO VARNISH DIP TANKS. THE OVENS ARE ELECTRICALLY HEATED AND



TEMPERATURE IS MONITORED. OVENS WITH LIQUID FILLED TRANSFORMERS OPERATE AT 220 F AND MAY BE IN THE OVEN UP TO 5 DAYS, DRY TRANSFORMERS OPERATE AT 300 F, 8 TO 12 HOURS.

LARGE DRY OUT OVEN- 131"L X 72" W $\,$ X 119" H

EXHAUST - DAYTON 2C864

MEDIUM DRY OUT OVEN- 109" L X 91" W X 96" H EXHAUST- BUFFALO FORGE

SMALL DRY OUT OVEN- 78"L X 84" W X 84" H EXHAUST- DAYTON 4C217

VARNISH TANK #1- 96" L X 54" W X 95"

VARNISH TANK #2 - 60"L X 40"W X 81" H

A NON-COMPLIANT VARNISH IS PRESENTLY USED IN THIS PROCESS DUE TO MEET CRITICAL PERFORMANCE SPECIFICATION REQUIREMENTS. RACT DEMONSTRATION DOCUMENTATION TO OBTAIN A VARIANCE FOR THE USE OF NON-COMPLIANT COATINGS IS PROVIDED AS PART OF THIS PERMIT APPLICATION.

Building(s): 1

Item 26.2:

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-PAINT Emission Unit Description:

THIS EMISSION UNIT CONSISTS OF VARIOUS SURFACE COATING PROCESSES ASSOCIATED WITH THE AIRLESS SPRAY PAINTING OF THE TRANSFORMER VESSEL COMPONENTS AND THE FLOW COATING OF RADIATOR COMPONENTS FOR CORROSION PROTECTION OF EXTERIOR SURFACES. THE EMISSION POINT ASSOCIATED WITH THIS UNIT IS A WALL MOUNTED EXHAUST FANS LOCATED IN THE PAINTING BAY. FILTERS FOR PARTICULATE CONTROL WILL BE MAINTAINED ON EXHAUST AT ALL TIMES. COMPLIANT AND

Air Pollution Control Permit Conditions Page 16 of 20 FINAL



NON-COMPLIANT COATINGS ARE APPLIED DEPENDING ON PERFORMANCE SPECIFICATIONS REQUIREMENTS. RACT DEMONSTRATION DOCUMENTATION TO OBTAIN A VARIANCE FOR THE USE OF NON-COMPLIANT COATINGS IS PROVIDED AS PART OF THIS PERMIT APPLICATION.

Building(s): 1

Condition 27: Contaminant List

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5.3(b)

Item 27.1:

Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 0NY075-00-0 Name: PARTICULATES

CAS No: 0NY998-00-0

Name: VOC

Condition 28: Air pollution prohibited

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 211.2

Item 28.1:

No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

Condition 29: Diesel truck opacity limitation

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 217-3.2(a)

Item 29.1:

No person who owns, operates or leases a vehicle propelled by a diesel engine or who owns, leases or occupies land and has actual or apparent dominion or control over the operation of a vehicle propelled by a diesel engine which is present on said land, shall operate said vehicle or allow or permit it to be operated, in such a manner that exhaust emissions of a shade of blue, black, or gray equal to or greater than No. 1 on the Ringelmann chart



(20 percent opacity) or equivalent standard acceptable to the commissioner are produced for a continuous period of more than five seconds when the vehicle is in motion.

Condition 30: Idling of diesel trucks limited

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 217-3.2(b)

Item 30.1:

No person who owns, operates or leases a bus or truck, the motive power for which is provided by a diesel engine or who owns, leases or occupies land and has the actual or apparent dominion or control over the operation of a bus or truck present on such land, the motive power for which said bus or truck is provided by a diesel engine, shall allow or permit the diesel engine of such bus or truck to idle for more than five consecutive minutes when the bus or truck is not in motion, except as otherwise permitted by 6 NYCRR Subpart 217-3.3.

**** Emission Unit Level ****

Condition 31: Emission Point Definition By Emission Unit

Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 31.1:

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 0-UVARN

Emission Point: 00001

Height (ft.): 30 Diameter (in.): 10

NYTMN (km.): 4757.12 NYTME (km.): 192.229 Building: 1

Emission Point: 00002

Height (ft.): 30 Diameter (in.): 8

NYTMN (km.): 4757.12 NYTME (km.): 192.229 Building: 1

Item 31.2:

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-PAINT

Emission Point: 00003

Height (ft.): 27 Diameter (in.): 44

NYTMN (km.): 4757.12 NYTME (km.): 192.329 Building: 1

Condition 32: Process Definition By Emission Unit

Air Pollution Control Permit Conditions Page 18 of 20 FINAL



Effective between the dates of 04/28/2000 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 32.1:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-UVARN

Process: VAR Source Classification Code: 4-02-003-01

Process Description:

THIS PROCESS INVOLVES THE APPLICATION AND BAKING OF PROTECTIVE VARNISH COATING ON COPPER COILS USED IN THE TRANSFORMERS. THE COILS ARE DIPPED IN AN IMMERSION TANK FILLED WITH THE VARNISH AND XYLENE THINNER. SUBSEQUENT TO DIPPING, THE COILS ARE BAKED IN AN OVEN TO FIX THE COATING. THE PROCESS RESULTS IN THE EMISSION OF VOCS AND HAPS THAT ARE PRESENT IN THE SOLVENT CARRIERS OF THE VARNISH. EMISSIONS OCCUR DURING THE DIPPING AND BAKING PHASES OF THE COATING PROCESS. THIS PROCESS EMPLOYS ONE VARNISH (A NON-COMPLIANT COATING PER PART 228) THAT MEETS THE PERFORMANCE REQUIREMENTS OF NIAGARA TRANSFORMER. AN EXTENSIVE **EVALUATION OF ALTERNATIVE VARNISHES AND** THINNING PROCESSES HAS BEEN CONDUCTED BY NIAGARA TRANSFORMER TO ASSESS THE POTENTIAL FOR USING COMPLIANT SUBSTITUTES. TO DATE A SUITABLE SUBSTITUTE THAT PROVIDES THE REQUIRED PERFORMANCE CHARACTERISTICS HAS NOT BEEN IDENTIFIED. THE DOCUMENTATION OF THESE ALTERNATIVE VARNISH EVALUATIONS HAS BEEN PROVIDED AS SUPPLEMENTAL INFORMATION TO THIS APPLICATION.

Emission Source/Control: 00001 - Process

Emission Source/Control: 00002 - Process

Item 32.2:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-PAINT

Process: PNT Source Classification Code: 3-09-016-99

Process Description:

THIS PROCESS ENTAILS THE APPLICATION OF

Air Pollution Control Permit Conditions Page 19 of 20 FINAL



VOC-BASED SURFACE COATINGS ON FABRICATED STEEL TRANSFORMER COMPONENTS. APPLICATION OF THE COATING IS MADE WITH AIRLESS SPRAY GUNS OR USING A PUMPED FLOW COATING TECHNIQUE. THE COATED COMPONENTS ARE SUBSEQUENTLY ALLOWED TO AIR DRY TO SET THE COATINGS. THE PROCESS RESULTS IN THE EMISSION OF VOCS AND HAPS THAT ARE PRESENT IN THE SOLVENT CARRIERS. EMISSIONS OCCUR DURING THE APPLICATION AND THE AIR DRYING PHASES OF THE COATING PROCESS. THIS PROCESS EMPLOYS SEVERAL COATINGS, DEPENDING ON THE COMPONENTS BEING COATED AND CUSTOM SPECIFICATIONS.

Emission Source/Control: 00003 - Process