

Statement of Basis for Dynea Overlays, Inc.

May 1, 2002

This document summarizes the legal and factual bases for the permit conditions in Dynea Overlays' air operating permit to be issued under the authority of the Washington Clean Air Act, Chapter 70.94 Revised Code of Washington, Chapter 173-401 of the Washington Administrative Code and Puget Sound Clean Air Agency Regulation I, Article 7. Unlike the permit, this document is not legally enforceable. It includes references to the applicable statutory or regulatory provisions that relate to Dynea Overlays' emissions to the atmosphere. In addition, this Statement of Basis provides a description of Dynea Overlays' activities and compliance history.

Source Description

Dynea is a Finland-based company, controlled by the Industri Kapital 1997 Fund and the Industri Kapital 2000 Fund. In 2000, Dynea had combined revenues of approximately €1.0 billion. With over 50 production units in 25 countries in Europe, the Americas and Asia Pacific, Dynea employs some 3,000 persons and is one of the world's leading providers of adhesive solutions for the woodworking and industrial markets. Dynea also produces resin impregnated paper for industrial (concrete shuttering boards for pouring concrete, shipping container linings) and decorative applications (cabinets, flooring).

Dynea Overlays employs about 70 people at its 155,000 square foot manufacturing facility located at 2144 Milwaukee Way in Tacoma. This facility has four production (paper impregnation) lines. Line 1 is used for making industrial products impregnated with phenolic, melamine or urea formaldehyde resins and can coat one or both sides of the paper with a phenolic glue. The other lines are used for making decorative products impregnated with a mixture of melamine and urea formaldehyde resins and can coat both sides of the paper with a melamine formaldehyde resin. Lines 1 and 2 are limited to paper widths up to 64 inches, but lines three and four can accept paper widths up to 100 inches.

Each process begins with a specialty paper that is immersed in a resin bath before entering the first drying section. Products to be coated will exit the first drying zone in a totally cured state (normally <1.5% volatile); other products will exit less than fully cured (>2% volatile). After passing the roll coaters, the paper is then fed into additional air floatation drying zones. Upon exiting the final drying zone, the treated paper is cooled and slit, and then either rolled or sheeted.

All drying and coating zones are maintained under negative pressure by means of an induction fan that directs the exhaust to a thermal oxidizer. The thermal oxidizers are equipped with primary heat exchangers that preheat the exhaust being fed into the oxidizer. The thermal oxidizer on line 1 is equipped with a secondary heat exchanger

that heats the line 1 dryers. A regenerative oxidizer is used for line 2, and catalytic oxidizers are used for lines three and four.

Other emission units at the facility include 1 methanol storage tank, 14 resin storage tanks, 1 diethylene glycol storage tank, 13 mixing tanks, 17 supply tanks, and 6 run tanks. Each of these tanks has a fixed roof, and the largest is rated at 10,000 gallons. Additionally, there are 8 space heaters, 3 water heaters, and 2 boilers, each is gas-fired and the largest is rated at 4 MMBtu/hr. The facility also has a small pilot treater for research and development of new products.

The 'potential to emit' of the paper impregnation lines is not well defined, since there are no emission standards for the oxidizers on lines 1 and 2. However, the actual emissions of methanol clearly exceed 10 tons per year. Therefore, Dynea Overlays is classified as a major source.

Review of Permit Application

An air operating permit application was received by Puget Sound Clean Air Agency from Dynea Overlays on June 30, 1997. On September 3, 1997, the Agency issued a written notification to Dynea Overlays that the application did not follow the certification requirements of WAC 173-401-500(7)(c) and WAC 173-401-520. This certification was received by the Agency on September 9, 1997 and was acknowledged to be complete in a letter to Dynea Overlays dated September 17, 1997.

A draft permit was published on April 20, 1999. No comments were received during the 30-day comment period on the draft permit. However, comments made by EPA on similar draft permits delayed the issuance of the proposed permit. In the interim, a new production line was added (line 4).

Compliance History

Dynea Overlays began production operations at this location in October 1993; therefore, this compliance history is limited to operations conducted after October 1993.

On October 4, 1993, Order of Approval No. 5089 was issued for the installation of equipment at this site. This equipment (most of which was purchased from Reichold Chemicals in September 1990) included a decorative product line with a thermal oxidizer, an industrial product line with a thermal oxidizer, two 10,000 gallon solvent storage tanks, and twelve 7,500 gallon resin storage tanks. On November 15, 1993, Order of Approval No. 5181 was issued for the installation of a pilot treater. (This order was amended on October 6, 1994 to limit its operation and require a thermal oxidizer if odor complaints were received.)

Order of Approval No. 5089 was based in part on source test results from a similar but not identical system that Dynea Overlays operates in Wisconsin. These test results indicated a destruction efficiency of 99.96%. Dynea Overlays assumed a capture efficiency of 100%.

In order for Dynea Overlays to avoid the air operating permit program, emissions of methanol needed to be tested and enforceable limits adopted that would limit the facility-wide potential to emit to below 10 tons per year. Accordingly, on March 29, 1996, the Agency issued a Compliance Status Report to Dynea Overlays requesting a plan to resolve the Title V applicability issue.

A test was conducted on September 18, 1996. The test report indicated the industrial line had a destruction efficiency of only 94.2% and that annual methanol emissions from the industrial line alone exceed 10 tons per year. Based on this information, the Agency issued Notice of Violation No. 35707 to Dynea Overlays on February 3, 1997 for failing to have submitted an operating permit application by the June 7, 1995 deadline pursuant to Section 7.05 of PSCAA Regulation I and WAC 173-401-500.

On April 18, 1997, the Agency issued Civil Penalty No. 8637 in the amount of \$16,700. This amount was based on the economic benefit of noncompliance associated with not having paid operating permit fees. Dynea Overlays voluntarily entered into a Consent Order and Assurance of Discontinuance on May 12, 1997, which stipulated that the penalty would be suspended if certain repairs were made to the oxidizer and subsequent test results demonstrated that the facility-wide emissions did not exceed 9.9 tons of methanol per year. Otherwise, an operating permit application would be due by January 1, 1998.

Meanwhile, Order of Approval No. 6804 (2/12/97) was issued for the installation of a second decorative production line with a catalytic oxidizer and one 7,100 gallon diethylene glycol storage tank. (This order was canceled and superceded by Order of Approval No. 7208 on February 6, 1998, which amended the permit conditions.) Order of Approval No. 6867 (3/12/97) was issued for the installation of an additional dryer on the older decorative line.

Source testing of the three production lines was conducted on July 14, 1997. These results showed that facility-wide methanol emissions exceeded 10 tons per year. Accordingly, the Dynea Overlays paid Civil Penalty No. 8637 and submitted an operating permit application.

On April 10, 2001, the Agency issued a written warning because the pre-catalyst ready temperatures for the line 3 and 4 oxidizers were improperly set, and records of the qualitative tests of their negative pressure enclosures were not available for review. Dynea Overlays, in consultation with the manufacturer of the catalytic oxidizers, made the appropriate changes to the setpoints.

Odors have been observed off-site by Agency inspectors, but no complaints have been received and no notices of violation have been issued. (The facility is located near a rendering plant and a sewage treatment plant.) The Agency has no outstanding enforcement actions pending against Dynea Overlays.

Emission Inventory

Emissions at this facility come principally from paper impregnation/coating lines. Most of the emissions come from the industrial products line. Source tests were conducted in July 1997 and March 1998. (Methanol emissions were estimated based on the March 1998 tests.) The emissions from line 1 appeared to have increased considerably since the previous test when the emission rate was only 3.4 lb/hr. In 2001, the emission rate for line 1 decreased as a result of a switch from solvent borne medium density overlays to water-based phenolic surface films.

Emissions of VOC from product storage are relatively small, based on the EPA's TANKS program. Mixing losses are assumed to equal tank working losses. Emissions of carbon monoxide and nitrogen oxides from natural gas combustion in the dryers, boiler, and thermal oxidizers are negligible, based on EPA's emission factors.

Year 2000 Emissions

Pollutant	Line 1 (lbs)	Line 2 (lbs)	Line 3 (lbs)	Line 4 (lbs)	Other (tons)	Total (tons)
Methanol	67,690	1,383	1,060	381	<0.5	35
Formaldehyde	7,547	105	81	29	<0.1	4
Phenol	8,620	0	0	0	<0.1	4
Diethylene glycol dimethyl ether	0	1,866	1,431	515		2
Total VOC	83,857	3,354	2,572	925	<0.7	45
Total HAP	83,857	1,868	1,134	410	<0.7	43

Line 1: methanol = 19.71 lb/hr; formaldehyde = 0.97 lb/hr, phenol = 0.07 lb/hr

Line 2: methanol = 0.28 lb/hr; formaldehyde = 0.05 lb/hr

Line 3: methanol = 0.34 lb/hr; formaldehyde = 0.03 lb/hr

Line 4: methanol = 0.13 lb/hr

Explanation of Applicable Requirements

Applicable requirements are listed in several sections of this operating permit as outlined below. The permit only lists the requirements that the Agency has determined to be within the scope of the definition of "applicable requirements" under the operating permit program. Dynea Overlays is legally responsible for complying with all applicable requirements of the operating permit and other requirements that do not fit the definition of "applicable requirements" found in Chapter 173-401 Washington Administrative Code (WAC).

Applicable Requirements

Dynea Overlays is subject to all the requirements listed in all the tables contained in Section I of the permit. Section I.A contains the requirements that are applicable facility-wide and Section I.B contains requirements applicable only to the coating lines. The facility-wide requirements listed in Section I.A. were not repeated in Section I.B. unless the monitoring method was specific to the listed emission unit.

The tables list the citation for the “applicable requirement” in the second column. The third column (Date) contains the adoption or effective date of the requirement. In some cases, the effective dates of the Federally Enforceable Requirement and the State Only Requirement may be different because only rules approved by EPA through Sections 110, 111, and 112 of the federal Clean Air Act are federally enforceable and either the state has not submitted the regulation to the EPA or the EPA has not approved it.

The first column is used as an identifier for the requirement, and the fourth (Requirement Paraphrase) column paraphrases the requirement. The first and fourth columns are for information only and are not enforceable conditions of this permit. The actual enforceable requirement is embodied in the requirement cited in the second and third columns.

The fifth column (Monitoring & Recordkeeping Method) identifies the methods described in Section II of the permit. Following these methods is an enforceable requirement of the permit. The sixth column (Emission Standard Period) identifies the averaging time for the emission standard and/or the minimum length of one reference method run. Section V.N.1 of the permit identifies the number of separate runs for determining compliance using the reference method. The last column (Reference Test Method) identifies the method associated with an applicable emission standard which is to be used if and when a source test is required. In some cases where the applicable requirement does not cite a test method, one has been added.

The permit identifies a specific method and the adoption date. PSCAA Regulation I, Section 3.07(a) states that testing for compliance must follow the current approved methods unless specific methods have been adopted by the Agency’s Board of Directors. WAC 173-400-105(4) allows either EPA 40 CFR 60 Appendix A or procedures in Ecology’s “*Source Test Manual – Procedures for Compliance Testing*” as of July 12, 1990. These three requirements may conflict if the current method is not listed in the permit. However, EPA seldom significantly changes the Reference Methods and the current method could be used as credible evidence of an emission violation. Finally, major changes in the Reference Test Method may necessitate reopening the permit.

In the event of conflict or omission between the information contained in the fourth and sixth columns and the actual statute or regulation cited in the second column, the requirements and language of the actual statute or regulation cited shall govern. For

more information regarding any of the requirements cited in the second and third columns, refer to the actual requirements cited.

Section I.A (Facility-Wide)

- Both WAC 173-400-040(1) and PSCAA Regulation I, Section 9.03 standards are 20% opacity. The monitoring method is based on visual inspections, with the source taking corrective action (or a WDOE Method 9A opacity reading) if any visible emissions are noted. Recording of visible emissions is not necessarily a violation of the opacity requirements. However, failure to take timely corrective action, as defined by the O&M Plan, is a deviation of the specific permit term. Taking corrective action does not relieve Dynea Overlays from the obligation to comply with the opacity requirement itself. The natural gas-fired boilers, space heaters and water heaters are insignificant emission units. Dynea Overlays is also required to develop and implement an O&M Plan for all emissions units including insignificant emission units. The Agency has never observed excess opacity from these units and it is unlikely that visible emissions will ever be observed. Therefore, the Agency has determined that weekly monitoring of the oxidizers and annual monitoring of the boilers, space heaters and water heaters is adequate.
- PSCAA Regulation I, Section 9.07 and WAC 173-400-040(6) are equivalent requirements (SO₂ emission not to exceed 1000 ppmv), except for the second paragraph of the WAC which is not in the PSCAA regulation. The second paragraph of WAC 173-400-040(6), which is not federally enforceable, allows for exceptions to this requirement if the source can demonstrate that there is no feasible method of reducing the SO₂ concentrations to 1000 ppm. However, the Agency does not allow such an exemption; therefore, the second paragraph does not apply to Dynea Overlays. Because Dynea Overlays burns pipeline grade natural gas, it is incapable of violating this standard while complying with the other requirements in the permit. Actual emissions are always below 10 ppm and are typically 1-2 ppm. Therefore, the permit does not contain additional monitoring requirements.
- PSCAA Regulation I, Section 9.09 limits particulate emissions to 0.05 gr/dscf from equipment used in a manufacturing process. WAC 173-400-060 limits particulate emissions to 0.1 gr/dscf from general process units (i.e., units using a procedure or a combination of procedures for the purpose of causing a change in material by either chemical or physical means, excluding combustion). The Puget Sound Clean Air Agency's regulation and test method are more stringent. The monitoring method is based on visual inspections with the source taking corrective action if any visible emissions are noted. Recording of visible emissions is not necessarily a violation of the particulate concentration standard because the threshold for observing visible emissions occurs at a particulate concentration less than 0.05 gr/dscf. However, failure to take timely corrective action, as defined by the O&M Plan, is a deviation of the specific permit term. Taking corrective action does not relieve Dynea Overlays from the obligation to comply with the particulate concentration standard itself.

The State Implementation Plan (SIP) identifies the effective date of WAC 173-400-060 as August 20, 1993; however, the version that was in effect on August 20, 1993 became effective on March 22, 1991.

- PSCAA Regulation I, Section 9.09 also limits particulate emissions to 0.05 gr/dscf corrected to 7% O₂ from fuel burning equipment (i.e., equipment that produces hot air, hot water, steam, or other heated fluids by external combustion of fuel) combusting natural gas. This requirement applies only to the boilers, space heaters and water heaters. WAC 173-400-050(1) limits particulate emissions to 0.1 gr/dscf corrected to 7% O₂ from all combustion units (i.e., units using combustion for waste disposal, steam production, chemical recovery or other process requirements, excluding open burning.) However, WAC 173-400-050(3) allows the Agency to determine if an alternative oxygen correction factor is appropriate. Because Dynea Overlays burns pipeline grade natural gas, it is incapable of violating this standard while complying with the other requirements in the permit. Therefore, the permit does not contain additional monitoring requirements.
- The State Implementation Plan (SIP) identifies the effective date of WAC 173-400-050 as August 20, 1993; however, the version that was in effect on August 20, 1993 became effective date on March 22, 1991.
- The remainder of the federally enforceable requirements in Section I.A does not contain an Emission Standard Reference Test Method or an Emission Standard Period. The Agency has determined they are not necessary for these requirements. The Agency will use the results of monitoring and observations, the review of operation and maintenance procedures and other information available to determine compliance with these requirements.
- PSCAA Regulation I, Sections 9.11(a) and 9.15(d) and WAC 173-400-040(5) are similar requirements that address emissions that may be environmentally detrimental or cause a nuisance. Although the permit lists these requirements together, Dynea Overlays must comply with each. The Agency has never received a nuisance complaint regarding this facility. The monitoring method is based on responding to complaints and quarterly inspections of the facility to identify any emissions that are likely to be injurious to human health, plant or animal life, or property, or that unreasonably interfere with enjoyment of life and property. Receiving complaints does not necessarily mean Dynea Overlays is in violation of this requirement, but Dynea Overlays has a responsibility to investigate complaints and take corrective action if necessary. Taking corrective action does not relieve Dynea Overlays from the obligation to comply with the standard itself.

- PSCAA Regulation I, Section 9.15(a) requires Best Available Control Technology (BACT) for all fugitive dust emissions. WAC 173-400-040(3) addresses fugitive dust emissions for some activities and WAC 173-400-040(8) requires reasonable precautions or Reasonably Available Control Technology (RACT) to control fugitive emissions. Because these requirements are less restrictive than PSCAA, Regulation I, Section 9.15(c), which outright prohibits visible fugitive particulate emissions from equipment used in a manufacturing process and fuel burning equipment, the monitoring focuses on open fugitive dust sources. The entire facility is paved. The Agency considers this to be BACT, provided that measures are employed to minimize the accumulation of dust and prevent the track-out of particulate matter onto Milwaukee Way. Dynea Overlays does not handle bulk material like sawdust or grain that would normally generate fugitive emissions, nor has the Agency ever observed fugitive dust emission violations at Dynea Overlays. The monitoring method is based on visual inspections with the source taking corrective action within 24 hours if any fugitive dust emissions are noted. Recording of fugitive dust emissions is not necessarily a violation of the requirement, since the requirement does not prohibit fugitive dust emissions, but prohibits fugitive dust unless BACT is employed.
- PSCAA Regulation I, Section 9.15(b) refers to vehicles operated on paved public roadways. Dynea Overlays has the responsibility to perform inspections of vehicles departing from its property to determine if vehicles are creating track-out or spillage of mud or dirt onto paved public roadways. Dynea Overlays' property is paved and receives little traffic. The facility has never been cited for violating Section 9.15(b). The only potential for violating this provision is associated with any construction or demolition activity that may occur. The monitoring method requires inspection of the parking lot and driveways during these activities and corrective action within 24 hours if spillage or track-out is observed.
- PSCAA Regulation I, Section 9.15(c) prohibits fugitive dust emissions from any refuse burning equipment, fuel burning equipment, equipment used in a manufacturing process, or control equipment. Fugitive dust emissions are emissions of smoke, dust or fumes that are not collected by a capture system and emitted from a stack. Dynea Overlays does not have any refuse burning equipment (i.e., equipment employed to burn any solid or liquid combustible refuse.) The oxidizers are considered to be control equipment (i.e., a device which prevents or controls the emission of any air contaminant). However, the air handled by the oxidizers does not contain particulate matter. Therefore, the O&M Plan does not contain provisions for performing inspections for fugitive emissions from any equipment.
- PSCAA Regulation I, Section 9.20(b) requires equipment not subject to Section 9.20(a) to be maintained in good working order. Section 9.20(a) is listed separately in the operating permit (under I.B) for equipment that has received a Notice of Construction permit approval.

- In accordance with PSCAA Regulation I, Section 7.09(b), Dynea Overlays is required to develop and implement an Operation and Maintenance Plan (O&M Plan) to assure continuous compliance with PSCAA Regulations I, II and III. The requirement specifies that the plan shall reflect good industrial practice, but does not define how to determine good industrial practice. To clarify the requirement, the Agency added that in most instances following the manufacturer's operations manual or equipment operational schedule, minimizing emissions until the repairs can be completed and taking measures to prevent recurrence of the problem may be considered good industrial practice. This language is consistent with a Washington Department of Ecology requirement in WAC 173-400-101(4). The Agency also added language establishing criteria for determining if good industrial practice is being used. These may include, but are not limited to, monitoring results, opacity observations, review of operations and maintenance procedures, and inspections of the emission unit or equipment. The Agency added this wording in response to a Washington State court decision, *Longview Fibre Co. v. DOE*, 89 Wn. App. 627 (1998), which held that similar wording was not vague and gave sufficient notice of the prohibited conduct.

PSCAA Regulation I, Section 7.09(b) also requires Dynea Overlays to promptly correct any defective equipment. However the underlying requirement in most instances does not define "promptly"; hence for significant emission units and applicable requirements that Dynea Overlays has a reasonable possibility of violating or when a violation would cause an air quality problem, the Agency clarified that "promptly" usually means within 24 hours. For many insignificant emission units and equipment not listed in the permit, the meaning of "promptly" will vary because the emission sources and suitable pollution control techniques vary widely, depending on the contaminant sources and the pollution control technology employed. However, the permit identifies a means by which to identify if Dynea Overlays is following good industrial practice.

As described in Section V.Q, Dynea Overlays must report to PSCAA any instances where it failed to promptly repair any defective equipment. In addition, Dynea Overlays has the right to claim certain problems were a result of an emergency (Section V.S) or unavoidable (Section V.T).

Following these requirements demonstrates that Dynea Overlays has properly implemented the O&M Plan, but it does not prohibit PSCAA or EPA from taking any necessary enforcement action to address violations of the underlying applicable requirements after proper investigation.

- PSCAA Regulation I, Section 9.10 specifies that HCl emissions shall not exceed 100 ppm (dry) corrected to 7% O₂ for combustion sources. Because Dynea Overlays burns pipeline grade natural gas and the resins used contain no chlorine, it is incapable of violating this standard while complying with the other requirements in

the permit. Therefore, the permit does not contain additional monitoring requirements.

- PSCAA Regulation I, Section 9.15(a) requires the use of reasonable precautions for fugitive dust and lists some examples of reasonable precautions. This section was amended in March 1999 and is presently enforceable only by PSCAA. The previous version of Section 9.15 is still in the State Implementation Plan, but upon approval of the proposed SIP change the revised version will be federally enforceable and the old version will no longer apply.
- WAC 173-400-040(4) requires the use of recognized good practice and procedures to reduce odors to a reasonable minimum from sources capable of unreasonably interfering with other property owners' enjoyment of their property. The most likely source of odors is the coating lines, which are controlled by the catalytic oxidizers. The Agency considers the oxidizers to be recognized good practice and procedures for odor from the coating lines, provided that the oxidizers are properly operated. The monitoring method is based on responding to complaints, quarterly inspections of the facility to identify emissions of odor-bearing contaminants, and correcting any problems identified as a result of the inspection or investigation. Receiving complaints does not necessarily mean Dynea Overlays is in violation of this requirement, since the regulation does not prohibit the emission of odors, but prohibits the emission of odors if recognized good practice and procedures are not employed to minimize the emissions.
- WAC 173-400-040(2) prohibits the emission of particulate matter from the facility to be deposited beyond the property line in sufficient quantity as to unreasonably interfere with the use and enjoyment of the property upon which the material is deposited. The monitoring method is based on responding to complaints, quarterly inspections of the facility to identify any particulate emissions or deposition of particulate that may unreasonably interfere with the use and enjoyment of the property, and correcting any problems identified as a result of the inspection or investigation. Receiving complaints does not necessarily mean Dynea Overlays is in violation of this requirement, but triggers action by the source to prevent a violation.
- RCW 70.94.040 is similar to PSCAA Regulation I, Section 9.11 and is listed separately here because it is not a federally enforceable requirement.

Section I.B.1 (Paper Impregnation Line 1 – “Industrial Line”)

- PSCAA Regulation II, Section 3.03 limits the VOC content of the resin (as applied) to 2.9 lb/gal-excluding water. WAC 173-490-040(6) contains the same requirement, but applies only in ozone nonattainment areas and is not listed in the permit. The industrial line resins used exceed this lb/gal limit by about 20%. Therefore, compliance with this standard requires control equipment. (This alternative means of

compliance was approved under Order of Approval No. 5089 as allowed under WAC 173-490-080 and PSCAA Regulation I, Section 3.23.)

- PSCAA Order of Approval No. 5089 Condition 6 requires continuous monitoring of the temperature of the regenerative oxidizer on Line 1. The O&M Plan adds auditing requirements for the monitoring system.
- PSCAA Order of Approval No. 5089 Condition 7 requires Dynea Overlays to submit a written report to PSCAA if the oxidizer is operated below 1400 degrees Fahrenheit. Operation below 1400 degrees is not prohibited, but would be grounds for ordering a source test. Depending upon the actual operating temperature, it could also be credible evidence of a violation of PSCAA Regulation I, Section 9.20(a).
- RCW 70.94.152(7) is similar to PSCAA Regulation I, Section 9.20(a) and is listed separately here because it is not a federally enforceable requirement.

Section I.B.2 (Paper Impregnation Line 2)

- PSCAA Regulation II, Section 3.03 limits the VOC content of the resin (as applied) to 2.9 lb/gal-excluding water. WAC 173-490-040(6) contains the same requirement, but applies only in ozone nonattainment areas. Line 2 is only permitted to use urea formaldehyde and melamine formaldehyde resins. Since these decorative resins only contain about 0.4 lb/gal-excluding water, the line is incapable of violating this standard as permitted. Therefore, the permit does not contain additional monitoring requirements.
- PSCAA Order of Approval No. 5089 Condition 6 requires continuous monitoring of the temperature of the thermal oxidizer on Line 2. The O&M Plan adds auditing requirements for the monitoring system.
- PSCAA Order of Approval No. 5089 Condition 7 requires Dynea Overlays to submit a written report to PSCAA if the oxidizer is operated below 1500 degrees Fahrenheit. Operation below 1500 degrees is not prohibited, but would be grounds for ordering a source test. Depending upon the actual operating temperature, it could also be credible evidence of a violation of PSCAA Regulation I, Section 9.20(a).
- RCW 70.94.152(7) is similar to PSCAA Regulation I, Section 9.20(a) and is listed separately here because it is not a federally enforceable requirement.

Section I.B.3 (Paper Impregnation Line 3)

- PSCAA Regulation II, Section 3.03 limits the VOC content of the resin (as applied) to 2.9 lb/gal-excluding water. WAC 173-490-040(6) contains the same requirement, but applies only in ozone nonattainment areas. Line 3 is only permitted to use urea formaldehyde and melamine formaldehyde resins. Since these decorative resins only contain about 0.4 lb/gal-excluding water, the line is incapable of violating this standard as permitted. Therefore, the permit does not contain additional monitoring requirements.
- PSCAA Order of Approval No. 7208 Condition 3 requires that the catalytic oxidizer have a destruction efficiency of at least 95%. (The initial performance test indicated a destruction efficiency of 99.4%.) The destruction efficiency is tested every 5 years using the reference method and continuous compliance is assured through Conditions 4, 6, and 8-11 of the Order of Approval.
- PSCAA Order of Approval No. 7208 Condition 4 requires that the coating line be maintained under negative pressure to ensure that the vapors are being directed to the catalytic oxidizer. This is verified by annual qualitative tests with smoke tubes or dry ice.
- PSCAA Order of Approval No. 7208 Condition 5 is more stringent than the generally applicable opacity requirement in I.A.1. However, the same monitoring method is used.
- PSCAA Order of Approval No. 7208 Condition 8 requires the temperature of the catalyst to be at least 550 degrees F before operating the coating line. The coating line is interlocked with the oxidizer such that it shuts down when this temperature is not achieved. Temperature records (required under Condition 9) are used as a means to verify this.
- PSCAA Order of Approval No. 7208 Condition 10 requires Dynea Overlays to have the thermocouples on the catalytic oxidizer audited annually.
- PSCAA Order of Approval No. 7208 Condition 11 requires Dynea Overlays to have samples of the catalyst analyzed for activity annually and to take corrective actions (e.g., reactivate or replace the catalyst, increase operating temperature) as necessary to assure compliance with Condition 3 of the Order of Approval.
- PSCAA Order of Approval No. 7208 Condition 12 cancels and supercedes Order of Approval No. 6804, which was issued prior to the installation of Line 3. Order of Approval No. 6804 contained typographical errors and requirements that were not applicable to Line 3 (e.g., a WAC standard for carbonyls from incinerators). Condition 12 does not appear in the permit.

Section I.B.4 (Paper Impregnation Line 4)

- PSCAA Regulation II, Section 3.03 limits the VOC content of the resin (as applied) to 2.9 lb/gal-excluding water. WAC 173-490-040(6) contains the same requirement, but applies only in ozone nonattainment areas. Line 4 is only permitted to use urea formaldehyde and melamine formaldehyde resins. Since these decorative resins only contain about 0.4 lb/gal-excluding water, the line is incapable of violating this standard as permitted. Therefore, the permit does not contain additional monitoring requirements.
- PSCAA Order of Approval No. 7784 Condition 3 requires that the catalytic oxidizer have a destruction efficiency of at least 95%. (The initial performance test indicated a destruction efficiency of 99.8%.) The destruction efficiency is tested every 5 years using the reference method and continuous compliance is assured through Conditions 4, 6, and 8-11 of the Order of Approval.
- PSCAA Order of Approval No. 7784 Condition 4 requires that the coating line be maintained under negative pressure to ensure that the vapors are being directed to the catalytic oxidizer. This is verified by annual qualitative tests with smoke tubes or dry ice.
- PSCAA Order of Approval No. 7784 Condition 5 is more stringent than the generally applicable opacity requirement in I.A.1. However, the same monitoring method is used.
- PSCAA Order of Approval No. 7784 Condition 8 requires the temperature of the catalyst to be at least 500 degrees F before operating the coating line. The coating line is interlocked with the oxidizer such that it shuts down when this temperature is not achieved. Temperature records (required under Condition 9) are used as a means to verify this.
- PSCAA Order of Approval No. 7784 Condition 10 requires Dynea Overlays to have the thermocouples on the catalytic oxidizer audited annually.
- PSCAA Order of Approval No. 7784 Condition 11 requires Dynea Overlays to have samples of the catalyst analyzed for activity annually and to take corrective actions (e.g., reactivate or replace the catalyst, increase operating temperature) as necessary to assure compliance with Condition 3 of the Order of Approval.

Section I.B.5 (Pilot Treater)

- PSCAA Order of Approval No. 5181 Condition 4 requires limiting operation hours to 750 hr/yr. The O&M Plan contains inspection and recording requirements for monitoring operating hours.
- PSCAA Order of Approval No. 5089 Condition 5 requires ducting the vapors from the pilot treater to a thermal oxidizer if neighborhood complaints are received. The O&M Plan contains procedures to monitor nuisances from the facility. This condition is not in the operating permit because Dynea Overlays ducted the exhaust to an oxidizer.

Monitoring, Maintenance and Recordkeeping

Dynea Overlays must follow the procedures contained in Section II of the permit, Monitoring, Maintenance and Recordkeeping Procedures. Failure to follow a requirement in Section II may not necessarily be a violation of the underlying applicable emission standard in Section I. However, not following a requirement of Section II is a violation of Section II and Dynea Overlays must report such violations, as well as violations or deviations from any other permit condition, as a deviation under Section V.Q.2 of the permit. In addition, all information collected as a result of implementing Section II can be used as credible evidence under Section V.N.2 of the permit. Reporting a permit deviation and taking corrective action does not relieve Dynea Overlays from its obligation to comply with the underlying applicable requirement.

The Puget Sound Clean Air Agency determined the monitoring frequency based on several factors. These include Dynea Overlays' compliance history, the likelihood of a deviation, the possible environmental impacts of a deviation, and the likelihood of detecting a deviation by some other means. The facility-wide monitoring is required pursuant to WAC 173-401-605(1) and WAC 173-401-615(1).

Prohibited Activities

Some of the requirements Dynea Overlays identified in the operating permit application are included in Section III as prohibited activities. The Agency has listed these activities in this section to highlight that they cannot occur at the facility. Since these activities are prohibited, routine monitoring of parameters is not appropriate. However, the permit does require Dynea Overlays to look for such activities during a routine facility-wide inspection.

PSCAA Regulation I, Section 9.13 and WAC 173-400-040(7) contain similar requirements addressing concealment and masking of emissions. Although both requirements apply, the permit language has been simplified by grouping these requirements together.

Activities Requiring Additional Approval

Some of the requirements Dynea Overlays identified in the operating permit application are included in Section IV as activities that require additional approval. For new source review, the permit language has been simplified. Chapter 173-460 WAC and PSCAA Regulation I, Article 6 New Source Review programs require approval to construct, install, establish, or modify an air contaminant source. All these requirements apply, but the language in these requirements has been incorporated into one section to simplify the permit language. WAC 173-400-110 does not apply within the Puget Sound Clean Air Agency's jurisdiction because the rule exempts areas that have a local program that is incorporated into the state implementation plan.

Standard Terms and Conditions

Some of the requirements Dynea Overlays identified in the operating permit application are included in Section V, Standard Terms and Conditions. This provided an easier mechanism for describing requirements that are more general in nature. This section also contains the standard terms and conditions specifically listed in WAC 173-401-620.

Section V.Q.2 of the permit requires Dynea Overlays to report deviations of the permit to PSCAA, normally within 30 days after the end of the month. Section V.Q.1 of the permit requires that a responsible official certify all required reports at least once every six months. Dynea Overlays may submit the certification with the report or certify all the reports submitted in the previous six months. For example, if Dynea Overlays detected a deviation in January, it must report the deviation to PSCAA in February. A responsible official must certify the report according to WAC 173-401-520 at the time the report is submitted or any other time within six months of submitting the report.

If Dynea Overlays does not detect any deviations to report for a six-month period, then Dynea Overlays shall report that there were no deviations during the six-month period.

Basis for Inapplicable Requirements

The requirements listed in Section VII of Dynea Overlays' Air Operating Permit do not apply to the facility, or to the specific emission units listed in the permit for the reasons listed below. The permit shield applies to all requirements so identified.

- 40 CFR Part 60, Subparts K, Ka and Kb and PSCAA Regulation II, Section 2.04 do not apply because the storage tanks are below the minimum capacity covered by the standards.
- WAC 173-490-030 does not apply because RCW 70.94.161(17) exempts operating permit sources from registration.

Basis for Insignificant Emission Units

Dynea Overlays has requested that the resin tanks be listed as insignificant emission units pursuant to WAC 173-401-530(1)(c) and WAC 173-401-533(2)(c). These tanks are rated at 10,000 gallons capacity or less, have fixed roofs or lids, and store products with a vapor pressure less than 80 mm Hg at 21 degrees Celsius.

Dynea Overlays has requested that the methanol storage tank be listed as an insignificant emission unit based on emissions, pursuant to WAC 173-401-530(1)(a). The emission threshold for this tank is 0.5 ton/yr, and the actual emission estimate from the TANKS3 program is only about 0.1 ton/yr.

Dynea Overlays has requested that the 4 MMBtu/hr boiler and the 0.3 MMBtu/hr boiler be listed as insignificant emission units pursuant to WAC 173-401-530(1)(c) and WAC 173-401-533(2)(e). These boilers are rated at less than 5 MMBtu/hr and are fired exclusively on natural gas. Therefore, they are insignificant on the basis of their size.

Dynea Overlays also has requested that the 8 space heaters and 3 water heaters be listed as insignificant emission units pursuant to WAC 173-401-530(1)(c) and WAC 173-401-533(2)(r). The space heaters and water heaters are each rated at less than 5 MMBtu/hr and are fired exclusively on natural gas. Therefore, they are insignificant on the basis of their size.

Insignificant emission units and activities that are categorically exempt under WAC 173-401-530(1)(b) and WAC 173-401-532 include the following:

Unit	Basis for IEU Designation
Lawn and Landscaping Activities	WAC 173-401-532(43)
Comfort Air Conditioning	WAC 173-401-532(46)
Vents/Bathroom Facilities	WAC 173-401-532(48)
Fire Fighting and Safety Equipment	WAC 173-401-532(52)
Fuel and Exhaust Emissions from Parking Lot	WAC 173-401-532(54)
Repair and Maintenance	WAC 173-401-532(74)

Dynea Overlays is not required to certify that these (or any other) insignificant emission units and activities are in compliance with generally applicable requirements such as the opacity and fugitive dust standards.

Public Comments and Responses

Dynea Overlays requested that the Agency add the requirements established on May 10, 1999 under Order of Approval No. 7784 for line 4.

Laurie Kral, of EPA Region 10, submitted a letter on May 5, 1999 stating that “EPA has reviewed the draft operating permit for Dyno Overlays, Inc. and we have no comments at this time.”