

RESOLUTION NO. 540

RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE PUGET SOUND AIR POLLUTION  
CONTROL AGENCY ADOPTING MODIFIED  
PARTICULATE SOURCE TEST PROCEDURES

WHEREAS, Regulation I Section 9.09(f) requires procedures for source sampling performed in connection with standards of Regulation I and II for particulate and gases to be done using current Environmental Protection Agency requirements or procedures and definitions adopted by the Board; and

WHEREAS, to conform to current safe and less toxic chemical storage, the particulate measurement procedures currently used by the Agency have been proposed for modification; and

WHEREAS, the Expanded Advisory Council reviewed and approved said source test laboratory procedure modifications; and

WHEREAS, a public hearing was held by the Puget Sound Air Pollution Control Agency Board of Directors on August 11, 1983, to allow public input and critique on the proposal; and

WHEREAS, the Board deems it necessary to adopt said modification to source test procedures; now therefore,

BE IT RESOLVED BY THE BOARD OF PUGET SOUND AIR POLLUTION CONTROL AGENCY:

The Board of Directors does hereby adopt the modifications to the source test procedures, a copy of which is attached hereto and made a part hereof.

PASSED AND APPROVED by the Board of Directors of the Puget Sound Air Pollution Control Agency held this 11<sup>th</sup> day of August, 1983.

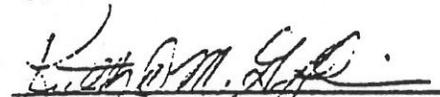
PUGET SOUND AIR POLLUTION CONTROL AGENCY

By   
Chairman

Attest:

  
Air Pollution Control Officer

Approved as to form:

  
Agency Attorney

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**Proposed Revised PSAPCA  
Particulate Source Test Procedures**

**Engineering Division  
Puget Sound Air Pollution Control Agency  
200 West Mercer Street, Room 205  
P.O. Box 9863  
Seattle, Washington 98109**

**June 9, 1983**

## I. Procedures for Particulate Source Sampling

Unless otherwise authorized by the Control Officer, all particulate source sampling performed to demonstrate compliance with the emission standards of Regulation I shall be done using current Environmental Protection Agency Methods 1-5 contained in 40 CFR Part 60, Appendix A, as modified in Section II of this document.

## II. Procedure for Determining Particulate Matter in the Impinger Catch (Back Half)

The analysis and calculations for Method 5 shall conform to that described by EPA in the current 40 CFR Part 60, Appendix A, except that the back half catch shall be included as particulate matter. The back half weight is the sum of the impinger catch (organic and inorganic) and the back half acetone rinse weights.

### A. Sample Recovery of the Back Half

#### 1. Purging

Whenever SO<sub>2</sub> interference is suspected, purge the impingers immediately after the test run is complete with N<sub>2</sub> or clean air for a minimum of one-half the sample volume.

#### 2. Impinger Liquid

Measure the volume of water collected in all impingers and place the water from the first three impingers in a container. Thoroughly rinse all sample-exposed surfaces between the filter and fourth impinger with water and place in above container.

#### 3. Acetone Rinse

Thoroughly rinse all sample-exposed surfaces between the filter and the fourth impinger with acetone and place the washings in a tared beaker to dry.

### B. Analysis of the Back Half

#### 1. Impinger Liquid Extraction

- a. Add 50-100 ml of dichloromethane to the impinger liquid.
- b. Spin for at least ten minutes.

- c. Pour the liquid into a separatory funnel and drain the organic phase into a tared beaker (organic fraction).
- d. Drain the remaining liquid into a beaker and repeat Steps a, b, and c. Perform the extraction several times with fresh dichloromethane until the organic fraction is clear. Keep each organic extraction in a separate beaker.
- e. Following the last extraction, drain the remaining liquid from the separatory funnel into a tared beaker (inorganic fraction).
- f. Allow the organic fraction beakers to dry under a hood at room temperature.
- g. Evaporate the inorganic fraction in such a manner that the beaker contents do not become exposed to temperatures greater than 212°F.
- h. Dry weighed beakers containing a sample of the acetone, dichloromethane and a sample of distilled deionized water to check for blank weight.
- i. Desiccate organic, inorganic and blank beakers for at least 24 hours at room temperature in a desiccator containing silica gel. Weigh to a constant weight and report the results to the nearest 0.1 mg. Constant weight is defined in Section 4.3 of Method 5.

2. Back Half Acetone Rinse

- a. Dry the acetone rinse in a hood at room temperature.
- b. Desiccate and weigh the beaker to constant weight and record.

C. Reagents

1. Water

Use distilled deionized water in the impingers and to rinse all glassware.

2. Acetone

Use reagent grade,  $\leq$  0.001 percent residue in glass bottles.

3. Dichloromethane

Use reagent grade,  $\leq$  0.001 percent residue in glass bottles.

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

SOURCE TEST METHOD 9A

VISUAL DETERMINATION OF OPACITY FOR A THREE MINUTE STANDARD

1. Principle

The opacity of emissions from stationary sources is determined visually by a qualified observer.

2. Procedure

The observer must be certified in accordance with the provisions of Section 3 of 40 CFR Part 60, Appendix A, Method 9, as in effect on July 1, 1990, which are hereby adopted by reference.

The qualified observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented in the 140° sector to his back. Consistent with maintaining the above requirement, the observer shall, as much as possible, make his observations from a position such that his line of vision is approximately perpendicular to the plume direction, and when observing opacity of emissions from rectangular outlets (e.g., roof monitors, open baghouses, noncircular stacks), approximately perpendicular to the longer axis of the outlet. The observer's line of sight should not include more than one plume at a time when multiple stacks are involved, and in any case, the observer should make his observations with his line of sight perpendicular to the longer axis of such a set of multiple stacks (e.g., stub stacks on baghouses).

The observer shall record the name of the plant, emission location, type of facility, observer's name and affiliation, and the data on a field data sheet. The time, estimated distance to the emission location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), and plume background are recorded on a field data sheet at the time opacity readings are initiated and completed.

The observer should make note of the ambient relative humidity, ambient temperature, the point in the plume that the observations were made, the estimated depth of the plume at the point of observation, and the color and condition of the plume. It is also helpful if pictures of the plume are taken.

Opacity observations shall be made at the point of greatest opacity in the portion of the plume where condensed water vapor is not present. The observer shall not look continuously at the plume, but instead shall observe the plume momentarily at 15-second intervals.

When condensed water vapor is present within the plume as it emerges from the emission outlet, opacity observations shall be made beyond the point in the plume at which condensed water vapor is no longer visible.

When water vapor in the plume condenses and becomes visible at a distinct distance from the emission outlet, the opacity of emissions should be evaluated at the emission outlet prior to the condensation of water vapor and the formation of the steam plume.

Opacity observations shall be recorded to the nearest 5 percent at 15-second intervals on an observational record sheet. Each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period.

### 3. Analysis

The opacity of the plume is determined by individual visual observations. Opacity shall be reported as the range of values observed during a specified time period, not to exceed 60 consecutive minutes. The opacity standard is exceeded if there are more than 12 observations, during any consecutive 60-minute period, for which an opacity greater than the standard is recorded.

### 4. References

Federal Register, Vol. 36, No. 247, page 24895, Dec. 23, 1971.

"Criteria for Smoke and Opacity Training School 1970-1971" Oregon-Washington Air Quality Committee.

"Guidelines for Evaluation of Visible Emissions" EPA 340/1-75-007.



PUGET SOUND AIR POLLUTION CONTROL AGENCY  
KING COUNTY KITSAP COUNTY PIERCE COUNTY SNOHOMISH COUNTY

David W. Moore  
Environmental Regulatory Affairs  
The Boeing Company  
P.O. Box 3707, MS 7A-XC  
Seattle, WA 98124-2207

January 15, 1998

Dear Dave:

Thank you for your December 10, 1997 E-mail concerning compliance with solvent composition limits. Jim has asked me to respond directly to you.

We believe that you are correct in stating that the Aerospace NESHAP accepts the manufacturer's supplied data in order to demonstrate compliance with many of the solvent and HAP requirements. In the case of hand-wipe cleaning solvents it is the only method cited in the rule for determining approved composition (see section 63.750 (a)).

In other areas, such as with the VOC content of primers and topcoats, the rule also cites EPA Method 24 as the reference method (see section 63.750 (c)(1)).

For the purpose of periodic monitoring and certification under Title V, Boeing may use manufacturer's supplied data as we have proposed in the draft permits that you have seen. We do not intend to change those parts of the permits. Where the Aerospace NESHAP also cites other methods, such as EPA Method 24, PSAPCA reserves the right to use those methods or to require that Boeing use the reference method.

As in the past, PSAPCA does not envision requiring reference method testing on a routine basis. For the Aerospace NESHAP we only envision requiring reference method testing if there is evidence that the manufacturers' data may be erroneous.

If you have any additional questions on this issue, please call Jay Willenberg of our staff (206) 689-4052.

Sincerely,

Neal J. Shulman  
Manager-Inspection

cc: PSAPCA Aerospace Inspection/Engineering Team

Dennis J. McLerran, Air Pollution Control Officer  
B O A R D O F D I R E C T O R S

Commissioner, Kitsap County  
Member at Large  
Mayor, Everett

Mayor, Bremerton  
Snohomish County Council  
King County Executive

Mayor, Tacoma  
City of Seattle  
Pierce County Executive

110 Union Street, Suite 500, Seattle, Washington 98101-2038

(206) 343-8800

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FAX: (206) 343-7522

*Boeing* *Airbus*

**PUGET SOUND  
Clean Air Agency**

Working Together For Clean Air

110 Union Street, Suite 800  
Seattle, Washington 98101

Ph 206.343.8800  
1.800.552.3565  
Fax 206.343.7522

September 21, 1999

Mr. Edward Cierebiej  
Boeing Fabrication Division  
PO BOX 3707, M/C 5R-14  
Seattle, WA 98124-2207

Dear Mr. Cierebiej:

EXECUTIVE DIRECTOR  
Dennis J. McLerran

Puget Sound Clean Air Agency Review and Comment on Boeing's Draft  
Semiannual Compliance Report

- BOARD OF DIRECTORS
- CITY OF SEATTLE, BOARD CHAIR  
Margaret Pageler
- KING COUNTY EXECUTIVE  
Ron Sims
- KITSAP COUNTY  
Charlotte Garrido, Commissioner
- PIERCE COUNTY EXECUTIVE  
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Brian Ebersole, Mayor
- MEMBER AT LARGE  
Janet Chalupnik

Thank you, for providing the Puget Sound Clean Air Agency with the opportunity to review and comment on Boeing's draft Semiannual Compliance Report. This notification is required per 40 CFR 63.753(b)-(e) under reporting requirements for the National Emission Standards (NESHAP) for Aerospace Manufacturing and Rework Facilities. The Boeing draft Semiannual Compliance Status Notification Report incorporates all of the required elements of the notification as required per 40 CFR 63.753(b)-(e) of the Aerospace NESHAP reporting requirements. It is also consistent with the draft Boeing Plant 2 Air Operating Permit reporting requirements, as specified under Section V.M. Compliance Certifications (2)(b) Semiannual Compliance Certification Reports.

As you may know, EPA is developing an on-line electronic reporting form. This is a form that can be used by facilities at their discretion to meet compliance with 40 CFR 63.753(b)-(e). We encourage you to review this form since EPA has determined that this meets the reporting requirements in the NESHAP.

Note that under "Optional" headings, EPA asks for a description of corrective action. We are pleased to see that you included this information in your draft report. Although reporting of corrective action and the cause of a violation is not required by 40 CFR 63.753, such reporting is required under WAC 173-400-107 and our draft operating permits for any excess emissions that Boeing wants us to consider unavoidable and excusable under WAC 173-400-107. It is very important for the Puget Sound Clean Air Agency to understand the cause of problems, when corrective action was taken, what was done to correct the problem, and what was done to prevent a recurrence of the problem in the future. It is also important to identify the specific time periods and the ANESHAP operations in use during each noncompliant period. This

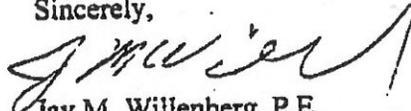
Edward J. Hebiej  
Boeing Fabrication Division  
September 21, 1999  
Page 2

information will be used to determine the appropriate enforcement action, if any, that should be taken.

One of our goals with the operating permit program is to pull together all the reporting requirements from the applicable NESHAPS and the operating permit in order to reduce the number of reports required. We look forward to working with you to achieve this goal.

The reporting deadline for the Semiannual Compliance Report is November 1, 1999 and should contain compliance information from March 1, 1999 through August 31, 1999. If you have additional questions or comments, feel free to contact Abby Lee at (206) 689-4059.

Sincerely,



Jay M. Willenberg, P.E.  
Senior Air Pollution Engineer

JMW:ACL:mj

cc: Robin Bennett, Boeing  
Aerospace Team

PSAPCA <sup>Spray Coating</sup> OCT 16 1998

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 REGION 10  
 1200 Sixth Avenue  
 Seattle, Washington 98101

Reply To  
 Attn Of: OAQ-107

OCT 14 1998

Mr. Jay M. Willenberg  
 Puget Sound Air Pollution Control Agency  
 110 Union Street, Suite 500  
 Seattle, Washington 98101-2038

Re: Preval Spray Units Applicability to the Aerospace NESHAP

Dear Mr. Willenberg:

This letter is in response to your correspondence to Gregg Wagner, B.F. Goodrich Aerospace, dated August 18, 1998, regarding the applicability of Preval® spray units to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Aerospace Manufacturing and Rework Facilities, 40 CFR Part 63, Subpart GG. Specifically, you determined that the Preval® spray units are exempt from the Aerospace NESHAP and requested concurrence from the Environmental Protection Agency (EPA). EPA concurs with your determination for the reasons explained below.

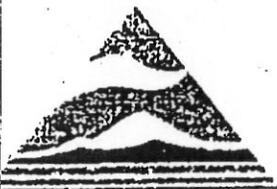
You have stated that the Preval® system used at B.F. Goodrich Aerospace is a hand-held aerosol can that has a non-refillable pressurized portion. In Appendix A - Specialty Coating Definitions of the Aerospace NESHAP, EPA defines "aerosol coating" as *a hand-held, pressurized, non-refillable container that expels an adhesive or a coating in a finely divided spray when a valve on the container is depressed*. Based on your description, we agree that the Preval® system meets the criteria for being classified as an aerosol coating. Since aerosol coatings are considered specialty coatings, and specialty coatings are exempt from the Aerospace NESHAP [63.741(f)], we have concluded that the Preval® system is exempt from the Aerospace NESHAP.

If, at any time, EPA amends this NESHAP such that specialty coatings are no longer exempt, this applicability determination will need to be revisited. If you have any questions regarding this determination, please contact Andrea Wullenweber at (206) 553-8760.

Sincerely,

Douglas E. Hardesty, Manager  
 Federal & Delegated Air Programs Unit

cc: Robin Bennett, Boeing Company  
 Lisa Rutan, Hexcel Corporation  
 Jim Szykman, EPA OAQPS  
 Gregg Wagner, B.F. Goodrich Aerospace



PUGET SOUND AIR POLLUTION CONTROL AGENCY  
KING COUNTY    KITSAP COUNTY    PIERCE COUNTY    SNOHOMISH COUNTY

February 19, 1999

The Boeing Company  
c/o Robin Bennett, Manager - Environmental Regulatory Affairs  
PO Box 3707 MS 7A-XC  
Seattle WA 98124-2207

Boeing Commercial Airplane Group  
Aerospace NESHAP Paint Booth Requirements

Dear Ms. Bennett:

Thank you for your December 21 letter, G-1242-AGW-022, to James Nolan concerning the applicability of the Aerospace NESHAP for certain coatings.

After reviewing the information that you provided; our regulations and EPA's aerospace rules and guidance, we concur that the requirements for coating with inorganic hazardous air pollutants (HAP) do not apply to coatings with HAP concentrations less than 0.1 percent for carcinogens and 1.0 percent for non-carcinogens, the required reporting concentrations for the Material Safety Data Sheet (MSDS) under 29 CFR 1910.1200(g). Specifically, if a coating contains less than 0.1% inorganic HAP, it is not subject to the spray booth requirements for inorganic HAP (40CFR 63.745(g)) even though it may have a concentration of about 0.0002% inorganic HAP. However the requirements for organic HAP and VOC may apply.

PSAPCA concludes that reducing the HAP content to below the reportable thresholds is a desirable pollution prevention approach that should be encouraged. Consider that primers, such as BMS 10-11 and BMS 10-79, often have inorganic HAP concentrations in the 5% to 20% range and the required control efficiency for inorganic HAP is about 90%. Using such a system would result in the same emissions as using a coating that has HAP concentrations in the 0.5% to 2.0% range. Clearly using a coating without add-on control that has less than 0.1% inorganic HAP results in lower emissions than using a coating with 5% HAP and 90% control efficiency.

40CFR63.471(f) states that the requirements of subpart GG do not apply to primers and topcoats containing HAP and VOC concentrations less than 0.1 percent for carcinogens or 1.0 percent for non-carcinogens, as determined from manufacture's representations. When EPA says, "manufacture's representations", they clearly mean the MSDS as they indicated in applicability section of their *Summary of Requirements for Implementing the NESHAP*<sup>1</sup>. Elsewhere in that document EPA says that the inspector should observe coating labels and other records for organic HAP and VOC content<sup>2</sup>. Clearly EPA wants to use widely available information to determine if the Aerospace NESHAP applies to a particular activity.

<sup>1</sup> EPA -156/R-97-006, "National Emission Standards for Aerospace Manufacturing and Rework Facilities: Summary of Requirements for Implementing the NESHAP" December 1998, p6

<sup>2</sup> EPA -156/R-97-006, "National Emission Standards for Aerospace Manufacturing and Rework Facilities: Summary of Requirements for Implementing the NESHAP" December 1998, p52

Dennis J. McLerran, Air Pollution Control Officer

B O A R D O F D I R E C T O R S

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Edward D. Hansen, Mayor, Everett

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Dave Somers, Snohomish County Council  
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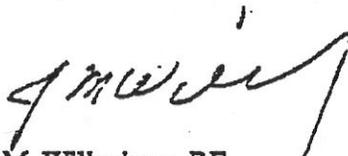
Brian Ebersole, Mayor, Tacoma  
Charlotte Carrido, Commissioner, Kitsap County  
Doug Sutherland, Pierce County Executive

40CFR 63.745(g) lists coating operation requirements in which any of the primers or topcoats that are "spray applied contain inorganic HAP". The section does not list a lower threshold for determining if a coating contains inorganic HAP. However it seems clear that EPA intended to use the MSDS thresholds of 0.1% and 1.0% for carcinogens and non-carcinogens, because the applicability section of the subpart says that the subpart does not apply to primers and topcoats containing HAP and VOC concentrations less than 0.1 percent for carcinogens or 1.0 percent for non-carcinogens, as determined from manufacture's representations. Although EPA does not say that the section 63.745(g) does not apply to coatings containing less than 0.1% inorganic HAP, we must rely on the applicability section of the subpart and our understanding of EPA's intent. We understand EPA's intent is not to regulate coatings with low concentrations of HAP. We also understand EPA's intent is to have the threshold for regulating a coating the same threshold as required for reporting for the MSDS. Thus an inspector could determine if a coating is regulated under the subpart based on looking at the federally required parts of the MSDS sheet.<sup>3</sup>

By copy of this letter, we are also requesting EPA's concurrence on this interpretation of the Aerospace NESHAPS.

If you have any questions, please contact Abby Lee at (206) 689-4059 or me at (206) 689-4052.

Sincerely,



Jay M. Willenberg, P.E.  
Senior Air Pollution Engineer

JMW:ml

cc: Doug Hardesty, EPA Region 10  
Lisa Jacobsen, EPA Region 10  
Gregg Wagner, BF Goodrich Aerospace  
Katherine Garrison, Hexcel Corporation  
Aerospace Team, PSAPCA

<sup>3</sup> 29 CFR 1910.1200(g) says that the MSDS can require reporting of concentrations of less than the 1.0% and 0.1% thresholds if there is evidence that the ingredient(s) could be released from the mixture in concentrations which would exceed an established OSHA permissible exposure limit or ACGIH Threshold Limit Value, or could present a health risk to employees. If EPA had intended to use this lower threshold we assume that EPA would have quoted all of the MSDS reporting thresholds and not just one section. Also some MSDS list other ingredients, like inorganic HAP at lower concentration levels for other reasons, such as Calif. Prop. 65. Again if EPA wanted to regulate at these lower thresholds that would have stated so.

Attachment 6



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 8th Avenue  
Seattle, WA 98101

APR 2 1999

APR 05 1999

Reply To  
Area Of QAQ-107

Ms. Robin Bennett, Manager  
Environmental Regulatory Affairs  
The Boeing Company  
MS 7A-XC  
P.O. Box 3707  
Seattle, WA. 98124-2207

Re: Aerospace NESHAP Rule Interpretation

Dear Ms. Bennett:

This letter is in response to a February 15, 1999, letter from Puget Sound Air Pollution Control Agency (PSAPCA) to Boeing regarding the National Emission Standards for Aerospace Manufacturing and Rework Facilities. We concur with PSAPCA's regulatory interpretation that the inorganic hazardous air pollutant (HAP) coating requirements of §63.745(g) for primers and topcoats do not apply to coatings containing inorganic HAP at a concentration less than 0.1 percent for carcinogens and 1.0 percent for non-carcinogens. The aforementioned threshold concentrations parallel those utilized by Material Safety Data Sheet (MSDS) to require reporting. EPA intended to utilize readily available information to determine applicability, and MSDS provide the most readily available information.

If you have any questions regarding this regulatory interpretation, please contact Dan Meyer of this office at (206) 553-4150.

Sincerely,

Bonnie Thie, Manager  
State & Tribal Air Programs Unit

DM:BT:cb

cc: Ms. Abby Lee, PSAPCA ✓  
Ms. Christi Lee, USEPA Region 10 - Washington Operations Office  
Mr. Jay M. Willenberg, P.E., PSAPCA



Attachment 7

PUGET SOUND AIR POLLUTION CONTROL AGENCY  
KING COUNTY    KITSAP COUNTY    PIERCE COUNTY    SNOHOMISH COUNTY

January 9, 1998

David Moore  
The Boeing Company  
PO Box 3707, M/S 7A-XC  
Seattle, WA 98124

Dear Mr. Moore:

Notice of Construction (NOC) Requirements for Paint Spray Booths

This letter is intended to clarify when PSAPCA would require a Notice of Construction for upgrading or changing paint spray booths.

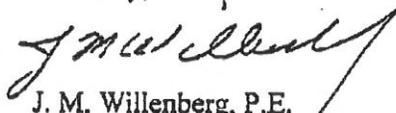
We require a NOC for major changes in control technology or changes that increase emissions. We do not require a NOC for minor changes that do not result in increased emissions from the facility.

Major changes include changing control technology from waterwash to dry filters and increasing the airflow by more than 10 or 15% over originally permitted levels. In general, changing the fan or motor will not increase the flow by more than 15%.

Minor changes include adding an additional stage to a dry filter to meet the Aerospace NESHAP, and moving an existing booth to a new location within the same facility and conducting the same activity. Boeing must notify PSAPCA if the location or use of a booth changes. It is essential that PSAPCA know the location of each booth and that it have some identifier such as the MSS/ID No. so we can properly conduct inspections. The use is important to identify the applicable requirements. An example of a significant change in the activity of a booth is conducting abrasive blasting in a booth that we have not approved to house such an activity.

If you have any additional questions, please call me at 206 689-4052.

Sincerely,

  
J. M. Willenberg, P.E.  
Senior Air Pollution Engineer

JMW:MJ

- cc: D. S. Kircher
- A. C. Lee
- H. A. Bryant
- D. J. Gribbon
- M. McAfee
- R. J. Pogers
- M. D. Scarberry

Dennis J. McLerran, Air Pollution Control Officer

BOARD OF DIRECTORS

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PUGET SOUND AIR POLLUTION CONTROL AGENCY  
KING COUNTY      KITSAP COUNTY      PIERCE COUNTY      SNOHOMISH COUNTY

May 8, 1995

Hannah Kimball  
The Boeing Company  
PO Box 3707 M/S 7E EH  
Seattle, WA 98124-2207

Dear Ms. Kimball:

Rule Applicability for Cold Solvent Cleaners

In response to your letter of April 13, 1995, the Puget Sound Air Pollution Control Agency (PSAPCA) has determined that Regulation III, Section 3.05, clearly applies to all cold solvent cleaners using a solvent with a true vapor pressure greater than 0.6 psia to degrease metal parts. This rule does not apply to cleaning equipment used exclusively to clean spray guns or nonmetal parts. In addition, the requirements in 40 CFR Part 63 Subpart T apply to batch cold solvent cleaning machines that use more than 5 percent liquid halogenated hazardous air pollutants (HAP).

However, PSAPCA has determined that neither a Notice of Construction nor equipment registration will be required for cold solvent cleaners with a working liquid capacity less than 10 gallons, unless the equipment uses more than 5 percent liquid halogenated HAP solvent. These cleaners will be exempt from registration as allowed by part 17 of Exhibit A, Section 5.03 of Article 5, Regulation I, which exempts only equipment with negligible emissions that are not a threat to health or the environment.

PSAPCA is presently reevaluating Regulation I, Article 5, and Regulation III, Section 3.05, to assure that our requirements are at least as stringent as the EPA NESHAP. We will likely make several changes to our regulations based on this evaluation. We will be happy to involve the Boeing Company in the regulation review process.

Sincerely,

David S. Kircher  
Manager - Engineering

mj

cc: A. C. Lee  
M. L. Corbin  
J. K. Anderson  
J. M. Willenberg

Dennis J. McLerran, Air Pollution Control Officer

B O A R D O F D I R E C T O R S

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Lynn S. Horton, Mayor, Bremerton  
R.C. Johnson, Councilman, Snohomish County  
Gary Locke, King County Executive

Harold G. Moss, Mayor, Tacoma  
Norman B. Rice, Mayor, Seattle  
Doug Sutherland, Pierce County Executive

**PUGET SOUND  
Clean Air Agency**  
18 Union Street, Suite 500  
Seattle, Washington 98101

Working Together For Clean Air

Attachment 9

January 30, 2001

Edward Cierebiej  
The Boeing Company  
PO Box 3707, MC 5R-14  
Seattle, WA 98124-2207

Dear Mr. Cierebiej:

Boeing (Auburn), Registration No. 13117  
Boeing (Frederickson), Registration No. 17771  
Mobile Equipment

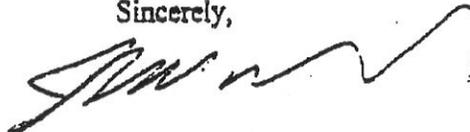
Thank you for your September 19, 2000 letter (A-1320-RGS-101) concerning the definition of "Mobile Equipment."

The Puget Sound Clean Air Agency concurs with your interpretation of Regulation II, Section 3.04. Specifically, we concur that *mobile equipment* as it relates to Boeing facilities is intended to mean equipment that is licensed or likely to be licensed to operate on a public roadway. For example, the definition does not apply to jigs and carts used to move parts and equipment in and around buildings at Boeing facilities. However, the definition does apply to the trucks and trailers that move parts between Boeing facilities, such as the large trucks and trailers that move wing parts from Frederickson to Everett.

We will include this clarification in your air operating permit, if we have not changed the rule by then.

If you have any questions on this matter, please contact me at (206) 689-4052 or [jayw@psccleanair.org](mailto:jayw@psccleanair.org).

Sincerely,



Jay M. Willenberg  
Senior Engineer

JMW:mj

cc: Robin Bennett, Boeing  
J. L. Nolan  
Aerospace Team

Ph 206.343.8800

1.800.552.3565

Fax 206.343.7522

[www.pscleanair.org](http://www.pscleanair.org)

EXECUTIVE DIRECTOR

Dennis J. McLarran

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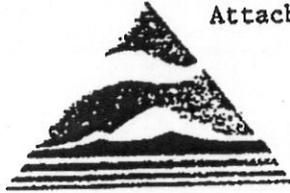
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**PUGET SOUND AIR POLLUTION CONTROL AGENCY**  
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February 27, 1996

J. E. Ramos  
Environmental Manager  
Boeing Commercial Airplane Group  
PO Box 3707, M/S 5H-09  
Seattle, WA 98124-2207

Dear Ms. Ramos:

Registration No. 17771, Boeing (Frederickson)  
Adhesive Coating Operation in the 24-50 Building  
Approval of Exemption Request

Puget Sound Air Pollution Control Agency (PSAPCA) grants your request of February 23, 1996 (Boeing Letter No. A-1320-EVN-OS-120) for an exemption to PSAPCA's Regulation I, Section 9.16, for an adhesive coating operation conducted in the 24-50 Building.

This is an approval by the Control Officer of PSAPCA to allow the coating of items that cannot be reasonably handled in an enclosed spray area, as required by Regulation I, Section 9.16(b)(6).

This exemption to the requirements for a filtration system to capture overspray and a vertical stack exhaust to control odors will be valid provided that this exemption may be revoked for cause.

Sincerely,

Jay M. Willenberg, P.E.  
Senior Air Pollution Engineer

mj

cc: Odette Schindler, M/S 5H-09  
Dave Moore  
Abigail Lee  
M. D. Scarberry

Dennis J. McLerran, Air Pollution Control Officer

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Working Together For Clean Air

January 18, 2002

Robin Bennett  
Manager, Environmental Regulatory Affairs  
The Boeing Company  
P.O. Box 3707, MC 7A-XC  
Seattle, WA 98124-2207

Dear Ms. Bennett:

"New Source" Requirements for Spray Gun Cleaning Operations

Thank you for your April 26, 2001 letter, G-1242-AGW-005, concerning "New Source" Requirements for Spray Gun Cleaning Operations. We have reviewed the letter and the references, and we agree with the approach outlined in your letter. Specifically we concur with the following:

1. The Puget Sound Clean Air Agency does not require a Notice of Construction of spray gun cleaning operations unless those operations are subject to a NESHAP or NSPS.
2. Construction of a new spray gun cleaning operation occurs when Boeing starts cleaning spray guns in an area, such as a paint shop or hanger, where spray gun cleaning subject to the Aerospace NESHAP, 40 CFR 63 subpart GG, has never previously existed. Therefore, under Puget Sound Clean Air Agency Regulation I, Section 6.03(a)(3) a Notice of Construction Application is only required when Boeing intends to clean spray guns in an area where such activity has not previously occurred.
3. Different methods of gun cleaning or types of gun cleaners in the same area at a facility do not constitute separate affected sources. Hence, at an existing area, Boeing can change to any Aerospace NESHAP compliant gun cleaning method or equipment without a Notice of Construction.
4. Reconstruction of an existing gun cleaning operation does not include replacing parts or equipment that does not involve capital expenditures of less than \$5,000. However, construction of a new gun cleaning operation may involve expenditures of less than \$5,000. It need only involve gun cleaning in a new area.

If you have any question on the matter, please contact me at (206) 689-4057 or [jayw@pscleanair.org](mailto:jayw@pscleanair.org).

Sincerely,

Jay M. Willenberg  
Senior Air Pollution Engineer

Ph 206.343.9800

1.800.552.3565

Fax 206.343.7522

[www.pscleanair.org](http://www.pscleanair.org)

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CLATSOP COUNTY COMMISSIONER  
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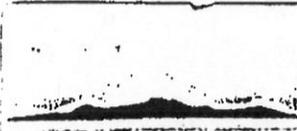
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**Clean Air Agency**

110 Union Street, Suite 500  
Seattle, Washington 98101

Attachment 12

Working Together For Clean Air

October 10, 2001

Jade Hudson  
Boeing Commercial Airplane Group  
PO Box 3707 M/C 5R-410  
Seattle, WA 98124-2207

Dear Ms. Hudson:

Notice of Construction (NOC) Requirements for Scrubbers and Baghouses

This letter seeks to clarify when Puget Sound Clean Air Agency requires a Notice of Construction (NOC) for upgrading or altering existing scrubbers and baghouses. Per Agency Regulation I Section 6.03(a), a new NOC is required if a "substantial alteration" of control equipment on an existing source is made. The type of alteration that would be considered substantial varies depending on the control equipment.

On January 9, 1998, Jay Willenberg of this Agency wrote a letter to David Moore of Boeing discussing NOC applicability for spray booths. This letter stated that a NOC is required if airflow is increased by more than 10 to 15 percent over the original permitted airflow levels (this type of change is therefore substantial). In general, changing the fan or motor will not increase the airflow by more than 15 percent over the original permitted airflow.

Per the January 9, 1998 letter, an NOC is not needed if moving an existing booth to a new location within the same facility, so long as the same activities continue to be conducted in the booth. The letter emphasizes that while a new NOC is not needed for relocation, it is essential that Boeing notify the Agency of any relocations so that the Agency can properly conduct inspections.

The Agency will extend the guidance discussed above for spray booths to scrubbers and baghouses. This guidance is valid providing the alteration does not expand or increase the emission generation activity which the control equipment is supporting. An example of an expanded emission generation condition would be the inclusion of additional tanks

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Ph 206.343.8800

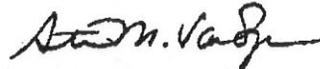
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www.pscleanair.org

or shops to the exhaust system which were previously not exhausted. If questions of applicability arise for specific scrubbers or baghouses that do not clearly fit this guidance, the Agency requires that Boeing contact the Agency directly to discuss the issue.

Sincerely,



Steven M. Van Slyke, P.E.  
Supervisory Engineer

SMV:AZM:ns

Enclosure: January 9, 1998 Letter from Jay Willenberg

cc: Robin Bennett, MC 7A-XC  
Edward Cierebiej, MC 5R-410  
Barbara Thompson, MC 20-13  
Kirk Thomson, MC 7A-XE  
J. L. Nolan  
J. M. Willenberg  
Aerospace Team



Working Together For Clean Air

January 16, 2002

Neva Welch  
Auburn Environmental Affairs  
PO Box 3707 MS 5R-14  
Seattle, WA 98124-2207

Dear Ms. Welch:

Operating Permit No. 13117  
Solvent Metal Cleaners

This letter is in answer to your question regarding the applicability of Puget Sound Clean Air Agency (Agency) Regulation III Section 3.05 for solvent metal cleaners. In a September 30, 2001 email to Agata McIntyre (Agency) you asked, "Is a tank that is used to clean wet paint from metal tools and equipment considered a degreasing tank?" This question was with reference to whether certain paint cleaning activities at the Boeing Auburn facility would be regulated under Agency Regulation III Section 3.05.

On October 5, 2001, Agency representatives John Schantz and Agata McIntyre visited the Boeing Auburn facility to discuss this question with you in person and to view the paint cleaning activities to which you were referring. The activity seen during the visit was the cleaning of metal spatulas that had been coated with paint. During the visit you indicated that these spatulas are soaked in canisters of solvent to remove the paint. The Agency believes this activity is a paint removal activity, and paint removal activities are not subject to regulation under Agency Regulation III Section 3.05.

The Agency strongly encourages Boeing to continue its good housekeeping activities to reduce solvent evaporation. Please feel free to contact Agata McIntyre at (206) 689-4061, or me, at (206) 589-4052 with any further questions.

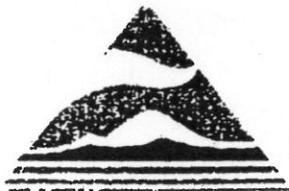
Sincerely,

Steven M. Van Slyke, P.E.  
Supervisory Engineer

SMV:AZM:ns

cc: John S. Schantz  
Aerospace Team

Ph 206.343.8800  
1.800.552.3565  
Fax 206.343.7522



PUGET SOUND AIR POLLUTION CONTROL AGENCY  
KING COUNTY      KITSAP COUNTY      PIERCE COUNTY      SNOHOMISH COUNTY

August 10, 1999

Charles Austin  
Manager, Environmental Engineering  
The Boeing Company  
Fabrication Division, A-1320  
PO Box 3707, MC 5R-14  
Seattle, WA 98040-2207

Dear Mr. Austin:

Registration No. 13117 - Boeing (Auburn)  
Small Container Used for Immersion Cleaning with Acetone

Thank you for your January 14, 1999 letter A-1320-ENV-015 to Abigail Lee concerning our clarification of small containers used for immersion cleaning with acetone.

After a recent inspection of your facility, we have determined that small buckets, pails and beakers with capacities of 2 gallons or less used for cleaning with acetone are exempt from Puget Sound Clean Air Agency's Regulation III, Section 3.05, Solvent Metal Cleaners and WAC 173-460-060(5), Solvent Metal Cleaners. However, we encourage you to follow good industrial practice and keep such containers closed at all times, except when adding or removing parts. We also strongly suggest that you hold the part over the container as the part is removed until the dripping stops.

As we review our regulations, we will incorporate this change into the rules.

If you have any additional question on this matter, please contact Abby Lee (206) 689-4059.

Sincerely,

David S. Kircher  
Manager - Engineering

DSK:ACL:mj

cc: Robin Bennett  
Aerospace Team

AIR-Aub      8/10/99  
Sitewide: Acetone Exemption

<< 3626 >>

Dennis J. McLerran, Air Pollution Control Officer

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*Boeing Comm Air*



PUGET SOUND AIR POLLUTION CONTROL AGENCY  
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August 1, 1996

Ms. Chris Morris  
Manager, Environmental Affairs  
Boeing Everett Division  
PO Box 3707 MS OH 00  
Seattle, WA 98124-2207

RE: Boeing Letter No.: E-1320-JTF-133

PSAPCA Registration No.: 13120  
Everett Facility, 3003 W Casino Rd., Everett WA 98201

Dear Ms. Morris:

Airplane Cleaning Operations  
Boeing Everett Facility

Puget Sound Air Pollution Control Agency has determined that the "typical airplane cleaning operation" described in your letter of June 13, 1996, is best defined under the Aerospace NESHAP (40 CFR Part 63 Subpart GG) as a "hand-wipe cleaning" operation. Hand-wipe cleaning operations where wiping, scrubbing, mopping, or other hand actions are used are specifically not included as "flush cleaning."

In your description of your typical airplane cleaning operations, you noted that it is the scrubbing and wiping action that is responsible for removing contaminants from the surface, which meets the above described NESHAP definition of "hand -wipe cleaning operation."

Thank you for offering me the opportunity to watch the operation in person (on third shift). I regretfully excuse myself due to scheduling difficulties. Your description of this cleaning operation is similar to what I have seen at several Boeing facilities and I am confident that this is a reasonable, accurate interpretation of the Aerospace MACT. I am looking forward to more in-depth conversations with you regarding the new MACT standard.

Sincerely,

Abigail C. Lee  
Air Pollution Engineer

ACL:ls

cc: H. Kimball, J. Fosberg, Boeing  
W. Voegtlin, PSAPCA

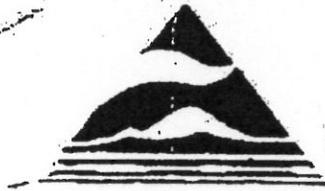
Dennis J. McLerran, Air Pollution Control Officer

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PUGET SOUND AIR POLLUTION CONTROL AGENCY  
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February 26, 1993

J. T. Johnston, P.E.  
Boeing Defense & Space Group  
The Boeing Company  
PO Box 3999, M/S 89-18  
Seattle, WA 98124-2499

Dear Mr. Johnstone,

Confirmation of Exemption from PSAPCA O&M Plan Requirements for Fume Hoods and Ovens

Puget Sound Air Pollution Control Agency will not require record keeping regarding the operations and maintenance of fume hoods or ovens, unless a special condition or other regulatory requirement is imposed upon the specific fume hood or oven operation by this Agency. As you pointed out, the maintenance of the fume hood or oven has no net effect on limiting emissions to the atmosphere.

PSAPCA encourages your comments in these areas as we are truly interested in focusing and maximizing our efforts to minimize air pollution. We appreciate your comments and input, and we want to work with you to support your manufacturing productivity and our environmental goals.

Please call me at 589-4059 with any questions or comments you may have.

Sincerely,

Abigail C. Lee  
Air Pollution Engineer

mj

- cc: Robert Sloan, Environmental Engineer
- Cathryn Carrothers, BD&SG Focal Contact
- Pat Bachtel, Corp. SHEA
- PSAPCA Inspectors

Anita J. Frankel, Air Pollution Control Officer

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Attachment 17

-----Original Message-----

From: Agata McIntyre  
Sent: Thursday, January 02, 2003 9:47 AM  
To: 'Fosberg, John T'  
Cc: Steve Van Slyke; Aerospace Team; Central Files Archive  
Subject: FW: Meaning of "month" and "week"

John,

Per your December 18 email, you proposed a way that Boeing will interpret the terms "monthly" and "weekly" in Section II.A.2(d) of the NBF/Plant 2 and Frederickson AOPs when these terms are not accompanied by the word "calendar". Based on the information you provided, it appears that Boeing has reviewed the issue carefully and feels comfortable with this interpretation. I don't have any concerns with your interpretation. However, I would ask that Boeing be clear about when the interpretation is taken so that there is no confusion at a later date. In case of future questions regarding AOP interpretations, I suggest that Boeing use its best judgment in forming and following interpretations while ensuring that the requirements of the AOP are being met.

Regards,

Agata McIntyre  
Air Pollution Engineer  
Puget Sound Clean Air Agency  
110 Union Street Suite 500  
Seattle WA 98101-2038  
(206) 689-4061  
AgataM@psc CleanAir.org

-----Original Message-----

From: Fosberg, John T [<mailto:john.t.fosberg@boeing.com>]  
Sent: Monday, December 23, 2002 3:32 PM  
To: 'agatam@psc CleanAir.org'  
Subject: RE: Meaning of "month" and "week"

Agata,

Thanks for your phone message on this subject. Would you mind summarizing your conclusion in an email back to me?

Thanks,

John T. Fosberg  
Everett Environmental Affairs  
M/C OK-FP  
Phone: (425) 717-0988  
Pager: (425) 631-2731

> -----Original Message-----  
> From: Fosberg, John T  
> Sent: Wednesday, December 18, 2002 9:39 AM  
> To: 'agatam@psc Cleanair.org'  
> Subject: Meaning of "month" and "week"  
>  
> Agata,  
>  
> We'd like to discuss the meaning of the terms "month" or "monthly"  
> and  
> "week" or "weekly" as they appear in Section II.A.2(d) of the  
> NBF/Plant 2,  
> Everett, and Frederickson air operating permits.  
>  
> We believe that when the word "month" or "monthly" is used to specify  
> the  
> frequency of an inspection required under II.A.2(d), without use of  
> the  
> term "calendar," either of the following two procedures (among other  
> possibilities) are proper:  
>  
> (1) the inspection may be performed at least once each calendar  
> month, on  
> any day of that calendar month; or  
>  
> (2) the inspection may be performed at least once each consecutive  
> 28-day  
> period, on any day of that 28-day period (a 28-day period chosen  
> since 28  
> days is the minimum number of days in any calendar month)  
>  
> The U.S. EPA's flexibility on this issue is illustrated, for example,  
> by  
> its definition of "month" in the recently promulgated NESHAP for the  
> Surface Coating of Large Appliances which is "a calendar month or a  
> pre-specified period of 28 to 35 days to allow for flexibility in  
> recordkeeping when data are based on a business accounting period."  
> See  
> 40 CFR § 63.4181.  
>  
> It should be noted that on a 28-day schedule, it is possible that an  
> inspection may not be performed during a calendar month. This would  
> occur, for example, if an inspection was performed on the first day  
> of a  
> 28-day inspection period that was coincidentally the last day of a  
> calendar month and then not performed again until at least five days  
> into  
> the next 28-day period.  
>  
> 28-day period      Date inspection performed  
> November 2 - November 29      November 5  
> November 30 - December 27      November 30  
> December 28 - January 24      January 2  
>  
> However, it should also be noted that on a 28-day schedule an  
> inspection  
> will occur on average 13 times in a calendar year (and occur, on  
> average,

> every 28 days) whereas on a calendar month schedule the inspection  
will  
> only occur 12 times in a calendar year (and occur, on average, every  
30.4  
> days).  
>  
> Similar to the words "month" or "monthly," we believe that when the  
word  
> "week" or "weekly" is used to specify the frequency at which an  
inspection  
> is required to be performed under II.A.2(d), the inspection may  
either be  
> performed at least once each conventional (i.e. Sunday through  
Saturday)  
> week, on any day of that conventional week, or the action may be  
performed  
> at least once every consecutive 7-day period (e.g. Friday through  
Thursday  
> - Boeing's business and accounting systems' week), on any day of that  
> consecutive 7-day period.  
>  
> So that there is no confusion as to what schedule is being followed  
at a  
> particular facility, Boeing air operating permit sites will specify  
in  
> their O&M Plans or other documentation whether they are following a  
> calendar schedule or a 28-day/7-day schedule to satisfy a  
monthly/weekly  
> inspection frequency from Section II.A.2(d) of the air operating  
permit.  
>  
> Once you've had a chance to review this issue, please give me a call  
and  
> we can discuss it further.  
>  
> Thanks,  
>  
> John T. Fosberg  
> Everett Environmental Affairs  
> M/C OK-FP  
> Phone: (425) 717-0988  
> Pager: (425) 631-2731  
>