

Air Permit Review

Permit Issue Date:
CDS ID No. 374900159

Region: Washington Regional Office
County: Craven
NC Facility ID: 2500159
Inspector's Name: Robert Bright
Date of Last Inspection: 04/29/2005
Compliance Code: C/In Compliance With Procedural Reqr

Facility Data			Permit Applicability (this application only)
Applicant (Facility's Name): Naval Air Depot Facility Address: Naval Air Depot PSC Box 8021 Cherry Point, NC 28533 SIC: 9711 / National Security NAICS: 92811 / National Security Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V			SIP: NSPS: NESHAP: PSD: PSD Avoidance: NC Toxics: 112(r): Other:
Contact Data			Application Data
Facility Contact	Authorized Contact	Technical Contact	Application Number: 2500159.05A Date Received: 09/15/2005 Application Type: Modification Application Schedule: TV-Significant Existing Permit Data Existing Permit Number: 05506/T33 Existing Permit Issue Date: 08/03/2004 Existing Permit Expiration Date: 06/30/2009
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Review Engineer: Michael Brandon, P.E. Review Engineer's Signature: _____ Date: 9/28/05		Comments / Recommendations: Issue 05506/T34 Permit Issue Date: Permit Expiration Date:	

1. Purpose of Application:

The Navel Air Depot at Cherry Point is to construct a new paint spray booth (ID No. A0179) in building 4032 and make some administrative changes as follows.

- a. Update the Chromium Electroplating NESHAP to allow for a greater variance in composite mesh pad control system pressure drop from ± 1 to ± 2 inches of water. The change was promulgated in the July 19, 2004 Federal Register.
- b. Remove Aerospace NESHAP applicability from the metal coating (HVOF) booths because these sources utilize vapor deposition technology not covered by the NESHAP.

Changes to the Title V permit are as follows:

PAGE	SECTION	CHANGE
na	insignificant activities	Room Vents (ID Nos. D013 and D117) and unknown (ID No. T041) were removed because vents are not emission sources. A SermeTel (ID No. IA0178) paint booth in Building 133 was added. The following four emission sources, which were included in both the insignificant activity list and the PART 1 significant emission source list, were removed because they have been modeled for toxic air pollutant (TAPs)

PAGE	SECTION	CHANGE
		and the modeled emission rates are significant; T0127, T0181, T0184, T0192.
5-6	1 Emission Source Table	<p>Added spray booth (ID No. A0179) with dry filter system (CD-A0179) in building 4032.</p> <p>Five emission sources in building 4035 (ID Nos. T001, T0003, T0009, T0031, T0124) were listed in both the significant emission source table and the insignificant activities list. They were removed from the significant emission source table. None was modeled for TAP impact.</p> <p>nine emission Sources (ID Nos. A0018 in building 129; C0087 in building 1798; D0059, D0161, and D0165 in building 3766; and E0027, E0026, E0029, and E0039 in building 133) were removed from the significant emission source table because they are out of service and/or dismantled. Associated control devices (ID Nos. CD-E026A, CD-E026B, DC1, DC2, DC3, CD-D0165, and CD-D0164) were also removed.</p>
	All of Section 2.1	Miscellaneous Particulate standards (15A NCAC 2D .0515) were removed from every source with a NESHAP inorganic HAP control requirement (i.e., paint spray booths, and non chemical depainting operations).
9	2.1.84 B.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT topcoat and primer operations and TAP applicability.
10	2.1.84 B.1.	No monitoring, recordkeeping or reporting (MRR) is required for visible emissions (VE).
10	2.1.129 A.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT topcoat and primer operations and TAP applicability.
10	2.1.129 A.1.	No monitoring, recordkeeping or reporting (MRR) is required for visible emissions (VE).
11	2.1.133 A.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT topcoat and primer operations and TAP applicability.
11	2.1.133 A.1.	No monitoring, recordkeeping or reporting (MRR) is required for visible emissions (VE).
11	2.1.133 B.	Control device descriptions for Source ID Nos. A0009 and A0010 were revised.
13	2.1.133 B.3.	No monitoring, recordkeeping or reporting (MRR) is required for visible emissions (VE).
13	2.1.133 C.	Emission sources (ID No. E0026) and control devices (ID Nos. CD-E0026A and CD-E0026B) that are removed from service were removed from the condition.
14	2.1.133 C.2.	Added filter pressure drop values to opacity monitoring requirements and removed VE emission evaluation option.
15/16	2.1.133 D./2.1.133 H.	Put strip tank B0009 under 2.1.133 H. as it is not a MACT affected facility.
15 16	2.1.133 D. 2.1.133 G.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT for Cleaning Operations.
n/a	previous permit 2.1 I. for Building 133	Conditions were removed for blast booths (ID Nos. E0027, E0029, E0039) and controls (ID No. CDE0028) because they have been removed from service.
17	2.1.137A.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT for Cleaning Operations.

PAGE	SECTION	CHANGE
17	2.1.137 B.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT topcoat and primer operations and TAP applicability.
18	2.1.137 B.1.	No monitoring, recordkeeping or reporting (MRR) is required for visible emissions (VE).
18	2.1.137 C.	TAP applicability added.
18-21	2.1.137 C.1.	Moved from Section 2.2 the MACT Chrome Plating HAP emissions standards.
21	2.1.137 E.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT Chemical Depainting Operations and TAP applicability.
22	2.1.137 G.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT Non-Chemical Depainting Operations.
23	2.1.137 G.1.	Added filter pressure drop values to opacity monitoring requirements and removed VE emission evaluation option.
23	2.1.137 H.	Regulatory table includes reference to 2.2 for VOC work practice standards
24	2.1.188 A.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT topcoat and primer operations and TAP applicability.
24	2.1.188 A.1.	No monitoring, recordkeeping or reporting (MRR) is required for visible emissions (VE).
25	2.1.245 A.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT topcoat and primer operations and TAP applicability.
25	2.1.245 A.1.	No monitoring, recordkeeping or reporting (MRR) is required for visible emissions (VE).
26	2.1.245 B.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT Cleaning Operations
26	2.1.1798 A.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT Cleaning Operations
26	2.1.1798 B.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT topcoat and primer operations and TAP applicability.
27	2.1.1798 B.1.	No monitoring, recordkeeping or reporting (MRR) is required for visible emissions (VE).
27	2.1.1798 C.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT Cleaning Operations
28	2.1.1798 D.2.	Added filter pressure drop values to opacity monitoring requirements and removed VE emission evaluation option.
30	2.1.3766 A.	Removed Aerospace Manufacturing/Rework MACT requirements for depainting operations from glass bead blast booth and reclaim (ID Nos. D0184 and D0185). Modified descriptions to reflect actual emissions sources and control devices. Removed production limits as part of old source removal. Regulatory table includes reference to 2.2 TAP applicability.
31	2.1.3766 A.2.c.	Added notification requirement for start up and ΔP submittal for inclusion to permit requirements.

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33	2.1.3767 A.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT topcoat and primer operations and TAP applicability.
33	2.1.3767 A.1.	No monitoring, recordkeeping or reporting (MRR) is required for visible emissions (VE).
34	2.1.4032 A.	Added new spray booth (ID No. A0179) and dry filter (CD-A0179). Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT topcoat and primer operations and TAP applicability.
34	2.1.4032 A.1.	No monitoring, recordkeeping or reporting (MRR) is required for visible emissions (VE).
34	2.1.4032 B.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT Cleaning Operations
35	2.1.4032 C.	Regulatory table includes reference to 2.2 for VOC work practice standards
35	2.1.4034 A.	<p>Revised the equipment list to include PMB separator (ID No. D0205 with filter bank (cartridge A/HEPA B, CD0205) and correct filter control arrangement for other sources....D0182 is now PMB Blast with three dry filter banks (A/B, C/D, E/F) D0183 has one dry filter bank (A/B, CD0183).</p> <p>Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT Non-Chemical Depainting Operations and TAP applicability.</p> <p>Removed temporary operating conditions and placed permanent operation conditions in TAP review avoidance section of 2.2.</p>
36	2.1.4304 A.1.	Added filter pressure drop values to opacity monitoring requirements and removed VE emission evaluation option.
37	2.1.4035 A.	<p>The following four emission sources, which were included in both the insignificant activity list and the PART 1 significant emission source list, were removed from the significant emission source list because they have not been modeled for toxic air pollutant (TAPs) and are apparently not significant; T0001, T0003, T0009, T0031, T0032, T0049, T0051, T0079, T0085, T0086, T0090, and T0124). These sources and control device (4035-OH-1) were not removed from IBEAM.</p> <p>TAP applicability added.</p>
38 39-40	2.1.4035 B.1.	<p>TAP applicability added.</p> <p>Moved from Section 2.2 the MACT Chrome Plating HAP emissions standards.</p>
40	2.1.4035 C.	Regulatory table includes reference to 2.2 for VOC work practice standards
41	2.1.4037 A.	Regulatory table includes reference to 2.2 for VOC work practice standards
44	2.1.4224 B.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT topcoat and primer operations and TAP applicability.
44	2.1.4224 B.2.	No monitoring, recordkeeping or reporting (MRR) is required for visible emissions (VE).
44	2.1.4224 C.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT Cleaning Operations.
45	2.1.4225 A.	TAP applicability added.
45	2.1.4225 B.	TAP applicability added.

PAGE	SECTION	CHANGE
45	2.1.4225 C.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT topcoat and primer operations and TAP applicability.
46	2.1.4225 C.1.	No monitoring, recordkeeping or reporting (MRR) is required for visible emissions (VE).
46	2.1.4225 D.	Regulatory table includes reference to 2.2 for Aerospace Manufacturing/Rework MACT Cleaning Operations
46	2.1.4225 E.	Regulatory table includes reference to 2.2 for VOC work practice standards.
46	2.1.4225 F.	TAP applicability added.
48	2.1.4225 F.3.	No monitoring, recordkeeping or reporting (MRR) is required for visible emissions (VE).
n/a	2.2	Removed table for MACT Subpart GG.
49-52	2.2 A.1.	Added provisions for Aerospace Manufacturing/Rework MACT Cleaning Operations.
52-56	2.2 A.2.	Added provisions for Aerospace Manufacturing/Rework MACT Primer and Topcoat Application Operations.
56-60	2.2 A.3.	Added provisions for Aerospace Manufacturing/Rework MACT Non-Chemical Depainting Operations.
60-61	2.2 A.4.	Added provisions for Aerospace Manufacturing/Rework MACT Chemical Depainting Operations.
61-62	2.2 A.5.	Added provisions for Aerospace Manufacturing/Rework MACT Chemical Milling Maskant Application Operations.
62	2.2 A.6.	Added provisions for Aerospace Manufacturing/Rework MACT Handling and Storage of Waste.
63-72	2.2 B.1.	Added provisions for Modeled TAP including: old Condition 2.2 E. facility wide emission limits for modeled emissions; removed MRR for 4035-OH-1, 4035A-OH-1, and 4035-CR-1 because there are no applicable requirements and emission sources were not modeled for TAPs; added HVOF (ID Nos. A0009, A0010, A0011, and E0165) ΔP monitoring requirements, as these are TAP emission sources; and removed TAPs addressed in 2.2 C.1 (conditions no longer apply).
72	2.2 B.2.	Added Facility Wide Toxic Pollutant Exemption rates for no required ambient impact analysis (chloroform no longer emitted with source removal).
n/a	old 2.2 B.	VOC PSD avoidance condition for D0069 in Building 84 and D0129 in Building 245 was removed because the emissions limit of 36.9 tons per year was the potential emission. Actual emissions from the past 10 years have been about 15 tons.
73-74	2.2 B.	This is the old 2.2 C. for no net increase in TAP emissions for exemption from modeling with requirements added for sources previously in the 2D. 0515 portions of the permit.
n/a	old 2.2 D.	HF TAP condition was removed as it does not represent present conditions at facility.
75	2.2 C.1.	Added VOC work practice standards.
n/a	old 2.2 F.	Renamed 2.1.137 C.1. and 2.1.4035 B.1.
76-83	3	Updated General Conditions.
85-86	PART II	Added construction approval for spray booth (ID No. A0179) with dry filter (ID No. CD-A0179).

2. **Application Chronology:**

The application chronology is detailed on the attached IBEAM Report.

3. **New Equipment/Change in Emission and Regulatory Review**

The new paint spray booth (ID No. A0179) with dry filter system (ID No. CD-A0179) will coat parts presently coated in the existing paint spray booth (ID No. A0051) except larger. Both booths will operate for an interim period, but not simultaneously. Eventually, the existing booth (ID No. A0051) will be decommissioned. In the mean time, a condition was placed in the permit under toxic air pollutant requirements that both booths shall not operate simultaneously. Potential VOC emissions from the new booth are estimated to be about 27 tons per year, or 18 tons per year accounting for the reductions from the existing booth. Emissions of fluorides, lead, and particulate matter will decrease due to the higher inorganic HAP requirements of the NESHAP for Aerospace Manufacturing and Rework facilities, and none are greater than the PSD significant levels without consideration of decreases from the existing booth.

Twelve toxic air pollutants from the new booth include benzene, di(2-ethylhexyl)phthalate, ethyl acetate, ethylene diamine, maleic anhydride, methyl ethyl ketone, methyl isobutyl ketone, methylene chloride, phenol, toluene, toluene diisocyanate, and xylene. Emissions are expected to increase daily and annually but not hourly as the new booth will have the same number and type of spray guns as the existing booth, only larger parts will be coated.

The applicable regulations are:

2D .0521 - Control of Visible Emissions

2D .1100 - Control of Toxic Air Pollutants

2D .1111 - NESAP for Aerospace Manufacture and Rework Facilities

2D .0521

Visible emissions from this source are limited to 20 percent opacity. However, it is unlikely that there will be any visible emissions for this source even if it was not controlled. No monitoring, recordkeeping, or reporting is required.

2D.1100

Annual and daily periods of the twelve TAP emissions were modeled and determined to be in compliance with the acceptable ambient levels (AALs). The facility had not assessed the hourly impact because the hourly rate would not change. However, the location of emissions had changed and would affect ambient concentrations. The AQAB reviewed the analyses and concurred with the submittal, but did question the lack of the hourly assessment. After thorough examination of source contribution and total impact, it was determined that the hourly impact was not likely to exceed the AAL. The AQAB memo of October 26, 2005 details the review.

2D .1111

The facility must meet the NESHAP Aerospace Manufacturing and Rework Facility requirements for primer and topcoat applications at the new paint spray booth (ID No. A0179). The affected source will comply using compliant coatings for organic HAPS and a dry filter system for inorganic HAPS. The specific requirements may be viewed in the permit text. The only requirement that is not verbatim of the NESHAP text is the allowance for three missing days of pressure drop per monitor per semi annual period, at DAQ's discretion.

4. **Facility Compliance Status:**

The facility was inspected in April of 2005 and determined to be deficient in recordkeeping in three areas (see Regional review). Other than these violations the facility appears to be in compliance with all applicable regulations and permit conditions.

5. **Facility Emissions Review:**

Potential emission increases due to the proposed modification is 18 tons per year of VOC.

6. **Conclusions, Comments, and Recommendations:**

A public Notice will be provided for the draft permit and review and concurrently sent for EPA approval.

Zoning Consistency was determined by the military command for this facility.

The permit was entirely reformatted for better utilization. All source ID Nos. were modified to have one alphabetical character and four numeric characters. Control device ID Nos. were provided for spray booths, as the controls employed are

not integral as in the usual spray booth configuration, some sources were removed from the permit as they are no longer in service, and some sources were moved to the insignificant activities list. It is noted that IBEAM has duplicate listings for sources and, inappropriately, lists some sources as a group. IBEAM was not updated except for the addition of the sources requested by this application because of the extensive changes that need to be made to conform to the correct permitting of these sources. The facility has stated that additional permit revisions will be forth coming to further correct the insignificant activity list and the source listings for the plating lines in Building 4035. Further IBEAM changes were deferred to Jenny Sheppard to implement as deemed proper.

The WARO and RCO recommend issuance of permit revision 5506T34.