INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: June 29, 2005

RE: Naval Surface Warfare - Crane Division / 101-21188-00005

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-MOD.dot 1/10/05

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June 29, 2005

Mr. James Hunsicker
Naval Surface Warfare Center - Crane Division
300 Highway 361, RP-3, B3260
Crane, Indiana 47522

Re: 101-21188-00005
Fifth Minor Source Modification to:
Part 70 permit No.:T101-7341-00005

Dear Mr. Hunsicker:

Naval Surface Warfare Center - Crane Division was issued Part 70 operating permit T101-7341-00005 on May 15, 2001 for a military base where ammunition, rockets, and other military ordnance are manufactured, stored, and disposed. An application to modify the source was received on May 5, 2005. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

(a)(18) One (1) barrel blast system, located in Building 107, identified as CRN-0107-06-23-HH13, to be constructed in 2005, with a maximum throughput rate of 960 pounds of steel parts per hour and a maximum abrasive usage of 17,875 pounds of steel shots per hour, controlled by a dust collector, and exhausting through stack ABS1.

(a)(19) One (1) vertical descaling machine, located in Building 107, identified as CRN-0107-07-23-HH13, to be constructed in 2005, with a maximum throughput rate of 2,500 pounds of steel parts per hour and a maximum abrasive usage of 143,000 pounds of steel shots per hour, controlled by a dust collector, and exhausting through stack ABS2.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

The source may begin construction when the minor source modification has been issued. Operating conditions shall be incorporated into the Part 70 operating permit as a minor permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the minor permit modification has been issued.

Pursuant to Contract No. A305-5-65, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG,1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204, or call (800) 451-6027, and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original signed by
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/YC

cc: File - Martin County
Martin County Health Department
Southwest Regional Office
Air Compliance Section Inspector - Gene Kelso
Compliance Data Section
Administrative and Development
Technical Support and Modeling - Michele Boner

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PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Naval Surface Warfare Center, Crane Division
300 Highway 361
Crane, Indiana 47522

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T101-7341-00005	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: May 15, 2001 Expiration Date: May 14, 2006

First Significant Permit Modification No.: 101-14789-00005, issued January 22, 2002
Second Significant Permit Modification No.: 101-14889-00005, issued June 7, 2002
Third Significant Permit Modification No.: 101-15983-00005, issued September 11, 2002
First Minor Permit Modification No.: 101-15582-00005, issued October 4, 2002
First Administrative Amendment No.: 101-16745-00005, issued December 13, 2002
Second Minor Permit Modification No.: 101-16761-00005, issued March 19, 2003
Fourth Significant Permit Modification: 101-16689-00005, issued March 19, 2003
Fifth Significant Permit Modification No.: 101-17317-00005, issued November 10, 2003
Third Minor Permit Modification No.: 101-18186-00005, issued June 4, 2004
Second Administrative Amendment No.: 101-19237-00005, issued July 6, 2004
Fourth Minor Permit Modification No.: 101-19801-00005, issued January 27, 2005

Fifth Minor Source Modification No.: 101-21188-00005	
Issued by: Original signed by Paul Dubenetzky, Chief Permits Branch Office of Air Quality	Issuance Date: June 29, 2005

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information in Sections A.1 through A.3 and in all Facility Description boxes in the D Sections is descriptive information and does not constitute enforceable conditions; however, the Permittee should be aware that physical changes or changes in the method of operation that may render this descriptive information obsolete or inaccurate may also trigger requirements for permits or permit modifications under 326 IAC 2.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a military base where ammunition, rockets and other military ordnance are manufactured, stored and disposed.

Responsible Official:	Environmental Director
Source Address:	300 Highway 361, Crane, Indiana 47522-5009
Mailing Address:	300 Highway 361, Building 3260, Code RP-3, Crane, Indiana 47522
Phone Number:	(812) 854-3233
SIC Code:	9711, 3483
County Location:	Martin
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) Nineteen (19) Abrasive Blasting Units:

(1) CRN-0104-03-23-HH16, located in Building 104, constructed in 1983, with a maximum capacity of 1000 lbs/yr (0.5 tons per year (TPY)) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-0104-03-23-HH16-S.

(2) CRN-0106-02-23-HH13, located in Building 106, constructed in 1988, with a maximum capacity of 3000 lbs/yr (1.5 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0106-02-23-HH13-S1, S2.

(3) CRN-0107-05-23-HH13, located in Building 107, constructed in 1980, with a maximum capacity of 4433 lbs/yr (2.2 TPY)abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-05-23-HH13-S.

(4) CRN-0107-06-23-HH13, located in Building 107, constructed in 1980, with a maximum capacity of 4433 lbs/yr (2.2 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-06-23-HH13-S.

(5) CRN-0107-07-23-HH13, located in Building 107, constructed in 1980, with a maximum capacity of 4433 lbs/yr (2.2 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-07-23-HH13-S.

(6) CRN-2171-01-17-DD22, located in Building 2171, constructed in 1970, with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-2171-01-17-DD22-S.

(7) CRN-2521-07-02-J17, located in Building 2521, constructed after 1987, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2521-07-02-J17-S.

(8) CRN-2521-08-02-J17, located in Building 2521, constructed after 1987, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emission, and exhausting to stack CRN-2521-08-02-J17-S.

(9) CRN-2521-09-2-J17, located in Building 2521, constructed after 1987, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2521-09-2-J17-S.

(10) CRN-2930-06-17-V25, located in Building 2930, constructed in 1993, with a maximum capacity of 1000 lbs/yr (0.5 TPY)abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2930-06,07,08-17-V25-S.

(11) CRN-2930-07-17-V25, located in Building 2930, constructed in 1993,with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2930-06,07,08-17-V25-S.

(12) CRN-2930-08-17-V25, located in Building 2930, constructed in 1993, with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2930-06,07,08-17-V25-S.

(13) CRN-3234-14-17-U26, located in Building 3234, constructed in 1993, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-3234-14-17-U26-S.

(14) CRN-0107-08-23-HH13, located in Building 107, constructed in 1993, with a maximum capacity of 700 lbs/yr (0.4 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-08-23-HH13-S.

(15) CRN-0227-03-23-HH12, located in Building 227, constructed before 1991, with a maximum capacity of 3000 lbs/yr (1.5 TPY) abrasive used, using baghouse to control particulate matter emissions, and exhausting to stack CRN-0227-03-23-HH12-S.

(16) CRN-3168-03-17-V28, located in Building 3168, constructed in 1988, with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-3168-03-17-V28-S.

(17) CRN-0107-09-23-HH13, located in Building 107, constructed in 1993, with a maximum capacity of 700 lbs/yr (0.35 TPY) abrasive used, using a baghouse to control emissions, and exhausting to stack CRN-0107-08-23-HH13.

(18) One (1) barrel blast system, located in Building 107, identified as CRN-0107-06-23-HH13, to be constructed in 2005, with a maximum throughput rate of 960 pounds of steel parts per hour and a maximum abrasive usage of 17,875 pounds of steel shots per hour, controlled by a dust collector, and exhausting through stack ABS1.

(19) One (1) vertical descaling machine, located in Building 107, identified as CRN-0107-07-23-HH13, to be constructed in 2005, with a maximum throughput rate of 2,500 pounds of steel parts per hour and a maximum abrasive usage of 143,000 pounds of steel shots per hour, controlled by a dust collector, and exhausting through stack ABS2.

(b) Thirty-two (32) boilers:

(1) Cleaver Brooks natural gas fired boiler, identified as CRN-0115-01-23-GG12, located in Building 115, constructed in 1977, with a maximum capacity of 16.75 mmBtu/hr, and exhausting to stack CRN-0115-01-23-GG12-S.

(2) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0115-03-23-GG12, located in Building 115, constructed in 1985, with a maximum capacity of 16.75 mmBtu/hr, and exhausting to stack CRN-0115-03-23-GG12-S.

(3) Cleaver Brooks natural gas-fired boiler, identified as CRN-0128-01-17-W25, located in Building 128, constructed in 1997, with a maximum capacity of 16.75 mmBtu/hr, and exhausting to stack CRN-0128-01-17-W25-S.

(4) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0128-03-17-W25, located in Building 128, constructed in 1997, with a maximum capacity of 16.75 mmBtu/hr, and exhausting to stack CRN-0128-03-17-W25-S.

(5) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0140-01-17-Y25, located in Building 140, constructed in 1982, with a maximum capacity of 6.2 mmBtu/hr, and exhausting to stack CRN-0140-01-17-Y25-S.

(6) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0140-02-17-Y25, located in Building 140, constructed in 1982, with a maximum capacity of 6.2 mmBtu/hr, and exhausting to stack CRN-0140-02-17-Y25-S.

(7) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0150-01-17-CC23, located in Building 150, constructed in 1989, with a maximum capacity of 25.2 mmBtu/hr, and exhausting to stack CRN-0150-01-17-CC23-S.

(8) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0150-02-17-CC23, located in Building 150, constructed in 1972, with a maximum capacity of 17.5 mmBtu/hr, and exhausting to stack CRN-0150-02-17-CC23-S.

(9) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0150-03-17-CC23, located in Building 150, constructed in 1989, with a maximum capacity of 25.2 mmBtu/hr, and exhausting to stack CRN-0150-03-17-CC23-S.

(10) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0199-01-23-JJ14, located in Building 199, constructed in 1978, with a maximum capacity of 17.5 mmBtu/hr, and exhausting to stack CRN-0199-01-23-JJ14-S.

(11) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0199-02-23-JJ14, located in Building 199, constructed in 1978, with a maximum capacity of 17.5 mmBtu/hr, and exhausting to stack CRN-0199-02-23-JJ14-S.

(12) Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-1819-01-17-Y23, located in Building 1819, constructed in 1981, with a maximum capacity of 3.35 mmBtu/hr, and exhausting to stack CRN-1819-01-17-Y23-S.

(13) Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-1819-02-17-Y23, located in Building 1819, constructed in 1981, with a maximum capacity of 3.35 mmBtu/hr, and exhausting to stack CRN-1819-02-17-Y23-S.

(14) Iron Fireman natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2692-01-17-W27, located in Building 2692, constructed in 1983, with a maximum capacity of 3.01 mmBtu/hr, and exhausting to stack CRN-2692-01-17-W27-S.

(15) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2737-01-12-M41, located in Building 2737, constructed in 1987, with a maximum capacity of 12.5 mmBtu/hr, and exhausting to stack CRN-2737-01-12-M41-S.

(16) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2737-02-12-M41, located in Building 2737, constructed in 1987, with a maximum capacity of 12.5 mmBtu/hr, and exhausting to stack CRN-2737-02-12-M41-S.

(17) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2737-03-12-M41, located in Building 2737, constructed in 1987, with a maximum capacity of 12.5 mmBtu/hr, and exhausting to stack CRN-2737-03-12-M41-S.

(18) Superior natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-3234-02-17-U26, located in Building 3234, constructed in 1992, with a maximum capacity of 8.4 mmBtu/hr, and exhausting to stack CRN-3234-02-17-U26-S.

(19) Superior natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-3234-03-17-U26, located in Building 3234, constructed in 1992, with a maximum capacity of 8.4 mmBtu/hr, and exhausting to stack CRN-3234-03-17-U26-S.

(20) Superior natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0041-01-17-U26, located in Building 41, constructed in 1977, with a maximum capacity of 10.0 mmBtu/hr, and exhausting to stack CRN-0041-01-17-U26-S.

(21) Johnston natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0041-02-17-U26, located in Building 41, constructed in 1983, with a maximum capacity of 6.9 mmBtu/hr, and exhausting to stack CRN-0041-02-17-U26-S.

(22) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0064-01-10-T27, located in Building 64, constructed in 1976, with a maximum capacity of 10.0 mmBtu/hr, and exhausting to stack CRN-0064-01-10-T27-S.

(23) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0115-02-23-GG12, located in Building 115, constructed in 1977, with a maximum capacity of 6.2 mmBtu/hr, and exhausting to stack CRN-0115-02-23-GG12-S.

(24) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0128-02-17-W25, located in Building 128, constructed in 1984, with a maximum capacity of 6.2 mmBtu/hr, and exhausting to stack CRN-0128-02-17-W25-S.

(25) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0149-01-10-S30, located in Building 149, constructed in 1980, with a maximum capacity of 6.7 mmBtu/hr, and exhausting to stack CRN-0149-01-10-S30-S.

(26) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0149-02-10-S30, located in Building 149, constructed in 1980, with a maximum capacity of 6.7 mmBtu/hr, and exhausting to stack CRN-0149-02-10-S30-S.

(27) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0180-01-17-W22, located in Building 180, constructed in 1999, with a maximum capacity of 4.2 mmBtu/hr, and exhausting to stack CRN-0180-01-17-W22-S.

(28) Cleaver Brooks natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-0180-02-17-W22, located in Building 180, constructed in 1999, with a maximum capacity of 4.2 mmBtu/hr, and exhausting to stack CRN-0180-02-17-W22-S.

(29) Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2517-01-10-T21, located in Building 2517, constructed in 1981, with a maximum capacity of 4.85 mmBtu/hr, and exhausting to stack CRN-2517-01-10-T21-S.

(30) Kewanee natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2517-02-10-T21, located in Building 2517, constructed in 1981, with a maximum capacity of 4.85 mmBtu/hr, and exhausting to stack CRN-2517-02-10-T21-S.

(31) Johnston natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2523-01-9-K18, located in Building 2523, constructed in 1983, with a maximum capacity of 17.4 mmBtu/hr, and exhausting to stack CRN-2523-01-9-K18-S.

(32) Johnston natural gas and/or distillate fuel No.2-fired boiler, identified as CRN-2523-02-9-K18, located in Building 2523, constructed in 1983, with a maximum capacity of 17.4 mmBtu/hr, and exhausting to stack CRN-2523-02-9-K18-S.

(c) Three (3) Carpentry Shops, identified as:

(1) CRN-0056-04-10-T21, located in Building 56, using a wood usage of 74,880 board feet per year, with a process weight rate of 0.14 tons per hour, equipped

with a cyclone for particulate control, and exhausting to stack CRN-0056-04-10-T21-S.

(2) CRN-0224-02-23-HH12, located in Building 224, using a wood usage of 1,000,000 board feet per year, with a process weight rate of 0.69 tons per hour, equipped with a cyclone for particulate control, and exhausting to stack CRN-0224-02-23-HH12-S.

(3) CRN-2720-04-23-GG12, located in Building 2720, using a wood usage of 14,000 board feet per year, with a process weight rate of 0.25 tons per hour, equipped with a cyclone for particulate control, and exhausting to stack CRN-2720-04-23-GG12-S.

(d) Thirty (30) paint booths:

(1) CRN-0104-01-23-HH16, located in Building 104, constructed in 1983, using a water wall to control particulate matter emissions.

(2) CRN-0104-02-23-HH16, located in Building 104, constructed in 1983, using a water wall to control particulate matter emissions.

(3) CRN-0106-01-23-HH13, located in Building 106, constructed in 1960, using a water wall to control particulate matter emissions.

(4) CRN-0107-01-23-HH13, located in Building 107, constructed in 1980, using a dry filter to control particulate matter emissions.

(5) CRN-0107-02-23-HH13, located in Building 107, constructed in 1980, using a water wall to control particulate matter emissions.

(6) CRN-0107-03-23-HH13, located in Building 107, constructed in 1980, using a dry filter to control particulate matter emissions.

(7) CRN-0107-04-23-HH13, located in Building 107, constructed in 1980, using a wet wall to control particulate matter emissions.

(8) CRN-0136-01-17-Z26, located in Building 136, constructed in 1963, using a dry filter to control particulate matter emissions.

(9) CRN-0155-01-17-BB25, located in Building 155, constructed in 1986, using a dry filter to control particulate matter emissions.

(10) CRN-0155-02-17-BB25, located in Building 155, constructed in 1986, using a dry filter to control particulate matter emissions.

(11) CRN-0155-03-17-BB25, located in Building 155, constructed in 1986, using a dry filter to control particulate matter emissions.

(12) CRN-0155-04-17-BB25, located in Building 155, constructed in 1986, using a dry filter to control particulate matter emissions.

(13) CRN-0169-01-24-EE22, located in Building 169, constructed in 1950, using a dry filter to control particulate matter emissions.

(14) CRN-2520-01-17-Y26, located in Building 2520, constructed in 1968, using a water wall to control particulate matter emissions.

(15) Bomb Finishing Line, with a maximum capacity of thirteen (13) units per hour and Projectile Renovation Operations with a maximum capacity of 120 units per hour, consisting of the following units:

(i) CRN-2728-01-12-N42, located in Building 2728, constructed in 1999, using a dry filter to control particulate matter emissions.

(ii) CRN-2728-02-12-N42, located in Building 2728, constructed in 1999, using a dry filter to control particulate matter emissions.

(iii) CRN-2728-03-12-N42, located in Building 2728, constructed in 1999, using a dry filter to control particulate matter emissions.

(16) CRN-3234-09-17-U26, located in Building 3234, constructed in 1994, using a dry filter to control particulate matter emissions.

(17) CRN-3234-10-17-U26, located in Building 3234, constructed in 1994, using a dry filter to control particulate matter emissions.

(18) CRN-3234-15-17-U26, located in Building 3234, constructed in 1994, using a dry filter to control particulate matter emissions.

(19) CRN-0109-01-23-GG14, located in Building 109, constructed in 1981, using a dry filter to control particulate matter emissions.

(20) CRN-0174-01-24-FF21, located in Building 174, constructed in 1986, using a dry filter to control particulate matter emissions.

(21) CRN-0198-01-23-II15, located in Building 198, constructed in 1975, using a dry filter to control particulate matter emissions.

(22) CRN-0227-01-23-HH12, located in Building 227, constructed prior to 1991, using a dry filter to control particulate matter emissions.

(23) CRN-0227-02-23-HH12, located in Building 227, constructed prior to 1991, using a dry filter to control particulate matter emissions.

(24) CRN-2074-03-16-DD13, located in Building 2074, constructed in 1987, using a dry filter to control particulate matter emissions.

(25) CRN-2697-01-17-W24, located in Building 2697, constructed in 1983, using a dry filter to control particulate matter emissions.

(26) CRN-2713-01-17-X23, located in Building 2713, constructed in 1979, using a dry filter to control particulate matter emissions.

(27) CRN-2805-01-23-GG19, located in Building 2805, constructed in 1969, using a dry filter to control particulate matter emissions.

(28) CRN-2805-02-23-GG19, located in Building 2805, constructed in 1995, using a dry filter to control particulate matter emissions.

(29) CRN-3168-02-17-V28, located in Building 3168, constructed in 1988, using a dry filter to control particulate matter emissions.

(30) CRN-0106-02-23-HH13, located in Building 106, equipped with four (4) HVLP guns to paint metal vehicles components, with a maximum primer usage of 5.82

lbs/hr and a maximum topcoat usage of 4.8 lbs/hr, using dry filters to control particulate matter emissions, and exhausting through stack PBS2. This paint booth is also equipped with one (1) 1.5 MMBtur/hr natural gas burner for paint curing.

(e) One (1) Asphaltic Coating Operation, identified as CRN-0155-05-17-BB25, located in Building 155, with a maximum usage of 3.64 tons per hour, using an electrostatic precipitator for PM control, and exhausting to stack CRN-0155-05-17-BB25-S.

(f) Open Burning/Open Detonation:

(1) Open Burning of Ordnance at the Ammunition Burning Ground, identified as CRN-ABG-01-19-DD43, with a maximum usage of 2.3 mmlb/yr (1150 tons/yr) of Dunnage; 0.64 mmlb/yr (320 tons/yr) of Explosive; 4.7 mmlb/yr (2350 tons/yr) of Propellant.

(2) Open Detonation of Ordnance at the Demolition Range, identified as CRN-DR-01-24-KK21, with a maximum usage of 0.13 mmlb/yr (65 tons/yr) of Dunnage; 1.6 mmlb/yr (800 tons/yr) of Explosive; 0.52 mmlb/yr (260 tons/yr) of Propellant.

(3) Open Burning of Ordnance at the Old Rifle Range, identified as CRN-ORR-01-24-JJ24, with a maximum usage of 0.15 mmlb/yr (75 tons/yr) of Dunnage; 0.032 mmlb/yr (16 tons/yr) of Explosive; 0.012 mmlb/yr (6 tons/yr) of Propellant.

(4) Fast and Slow Cookoff at the Ordnance Test Area, identified as CRN-OTA-01-29-WW18, with a maximum usage of 10,000 units of various ordnance per year.

(g) One (1) Chromic Acid Anodizing Tank, identified as CRN-3234-13-17-U26, located in Building 3234, equipped with a packed-bed scrubber, and exhausting to stack CRN-3234-13-17-U26-S.

(h) One (1) Stripping Tank (open-top vapor degreaser), constructed in 1992, identified as CRN-3234-12-17-U26, located in Building 3234, and exhausting to stack CRN-3234-12-17-U26-S.

(i) One (1) Vapor Degreaser, identified as CRN-0106-03-23-HH13, located in Building 106, with a maximum Natural Orange usage of 0.5 gallons per day, equipped with cooling/condensing coils and a cover to control VOC emissions, and exhausting to stack CRN-0106-03-23-HH13-S.

(j) Mixing and pouring equipment in Building 200 used as a plastic bonded explosive line, constructed in 1984, consisting of mixing and pouring operations, using a carbon adsorption system with a wet scrubber to control particulate matter emissions.

(k) Explosive Bomb Loading Operation, constructed in 1987, consisting of:

(1) screening and weighing aluminum powder in Building 2714, using a baghouse for particulate control; and

(2) screening and weighing TNT in Building 153, using a wet scrubber for particulate control; and

(3) melting and mixing aluminum powder and TNT in Building 152, using a wet scrubber for particulate control.

(l) One natural gas-fired rotary kiln furnace in Building 69, used for white phosphorous conversion to phosphoric acid, constructed in 1983, and equipped with an integral variable throat venturi scrubber.

(m) Service Station (Gasoline/Diesel Dispensing), identified as CRN-3280-04-17-X23, located in Building 3280, with a maximum usage of 350,000 gallons of unleaded gasoline per year, and 350,000 gallons of diesel per year.

(1) Two (2) Above ground vertical fixed-roof cone tanks, storing unleaded gasoline, constructed in 1995, identified as:

(A) CRN-3280-01-17-X23, located in Building 3280, with a maximum capacity of 11,600 gallons (43.9 m^3), and equipped with a vapor recovery system of 99.9+% removal efficiency;

(B) CRN-3280-02-17-X23, located in Building 3280, with a maximum capacity of 11,600 gallons (43.9 m^3), and equipped with a vapor recovery system of 99.9+% removal efficiency.

(n) Testing of Fuses, Boosters, and other Explosive Devices

(1) One (1) containment chamber in Building 2167, constructed in 1986, used to test burn pyrotechnic items.

(2) One (1) test cell in Building 3235, constructed in 1991, used to test lithium batteries, using a vertical packed-bed tower to control particulate matter emissions.

(3) One (1) containment chamber in Building 142, constructed in 1995, used to test detonation of fuses, boosters and other explosive devices, using a baghouse to control particulate matter emissions.

(o) Eighteen (18) autoclaves and one (1) belt flaker located in Building 160, used for the demilitarization of 750 pound bombs, with a combined maximum capacity of 2,000 lbs/hr, using six (6) wet scrubbers to control particulate matter emissions.

(p) One (1) C-4 extruder process line, located in Building 2172, with a maximum manufacturing capacity of forty (40) 1.2 pound C-4 blocks per minute.

(q) One (1) contained detonation chamber, identified as P01, located in Building 3339, with a maximum capacity of 7500 pounds per hour gross weight of munitions, 750 pounds per hour net explosive weight (NEW), equipped with one (1) baghouse for particulate control, and exhausting to stack S01.

(r) One (1) mobile plasma treatment system (MPTS), identified as P02, located near Building 69, with a maximum capacity of 3600 pounds per hour gross weight of explosives, 500 pounds per hour net explosive weight (NEW), equipped with one (1) afterburner for VOC and CO control, one (1) semi-dry scrubber for HCl and PM control, and one (1) Selective Catalytic Reduction (SCR) unit for NO_x control and exhausting at stack S02. The semi-dry scrubber is composed of an evaporative cooler, sodium bicarbonate injection, and a pulse-jet baghouse.

(s) One (1) diesel-fueled 4160-volt, 1000 kW generator which powers the MPTS exhausting at stack S03.

(t) One (1) flare manufacturing process located in Buildings 2504 and 145, with a maximum manufacturing capacity of 180 pounds of magnesium teflon viton (MTV) compound per day.

(u) One (1) flare manufacturing process, located in Building 198, with a maximum manufacturing capacity of 150 pounds of magnesium teflon viton (MTV) compound per day, discharging to Stacks 1 through 11.

(v) One (1) APE 1236 rotary kiln incinerator, identified as P03, used to deactivate (combust) the munitions and associated components, with a maximum feed rate of 240 pounds of net explosive weight (NEW) per hour and a maximum heat input rate of 3 MMBtu/hr. The waste stream vents through one (1) cyclone (identified as C05, for PM control), one (1) 8 MMBtu/hr natural gas-fired afterburner (identified as C06, for VOC and CO control), and one (1) baghouse (identified as C07, for PM control) and exhausts through stack S03.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

(a) This stationary source also includes the following insignificant activities:

(1) Natural gas-fired combustion sources with heat input less than ten million (10,000,000) Btu per hour, identified as:

(A) Natural gas-fired boilers, existing and in operation before September 21, 1983, located in the following buildings:

(i) boiler in each of the following buildings: 1, 2, 4, 12, 14, 17, 18, 38, 45, 181, 224, 300, 479, 1817, 1909, 2037, 2038, 2044, 2059, 2074, 2167, 2506, 2516, 2682, 2693, 2701, 2720, 2721, 2748, 2749, 2889, 2931, 2964, 2987, 2993, 3006

(ii) boilers in each of the following buildings: 7, 2521

(B) Natural gas-fired boilers, constructed after September 21, 1983, located in the following buildings:

(i) one boiler in each of the following buildings: 5, 8, 10, 34, 36, 40, 47, 66, 77, 105, 128, 363, 365, 366, 966, 1141, 1149, 2036, 2041, 2045, 2694, 2807, 2921, 3109, 3149, 3168, 3173, 3188, 3234, 3235, 3239, 3243, 3250

(ii) two boilers in each of the following buildings: 39, 180, 364, 2035, 2674, 2906

(iii) four boilers in each of the following buildings: 3241, 3251

(2) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input less than six million (6,000,000) Btu per hour.

(3) Fuel oil-fired combustion sources with heat input less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.

(A) 1.63 mmBtu fuel oil-fired boiler, constructed in July 1983, located in Building 74.

(B) 0.275 mmBtu/hr fuel oil-fired boiler, constructed in September 1990, located in Building 2918.

(C) Two (2) 1.3 mmBtu/hr natural gas/fuel oil-fired boilers, identified as Cleaver Brooks CRN-0180-01-17-W22 and CRN-0180-02-17-W22, constructed in 1999, located in Building 180.

(4) Equipment powered by internal combustion engines of less than 500,000 Btu/hour capacity, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.

(5) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage tank of less than 10,500 gallon capacity.

(6) A petroleum fuel, other than gasoline, dispensing facility, having a storage tank of less than 10,500 gallon capacity, and dispensing less than 230,000 gallons per month.

(7) Storage tanks less than one thousand (1,000) gallons in capacity with annual throughputs less than twelve thousand (12,000) gallons.

(8) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

(9) Machining where an aqueous cutting coolant continuously floods the machine interface.

(10) Solvent recycling systems with less than 100 gallon batch capacity.

(11) Activities associated with the treatment of wastewater streams with an oil and grease content less than 1% by volume.

(12) Activities associated with the transportation and treatment of sanitary sewage, provided discharge to the treatment plant is under the control of the owner/operator, that is, an on site sewage treatment facility.

(13) Natural draft cooling towers circulating less than or equal to 340,000 gallons per day.

(14) Quenching operations used with heat treating processes.

(15) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(16) Paved and unpaved roads and parking lots with public access.

(17) Asbestos abatement projects regulated by 326 IAC 14-10.

(18) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks and fluid handling equipment.

(19) Blowdown for any of the following: sight glass, boiler, compressors, pumps and cooling tower.

(20) On-site fire and emergency response training approved by the department.

(21) Gasoline generators not exceeding 110 hp.

(22) Diesel generators not exceeding 1800 hp.

(23) Natural gas turbines not exceeding 16,000 hp.

(24) Stationary fire pumps.

(25) Filter or coalescer media changeout.

(26) A laboratory as defined in 326 IAC 2-7-1(21)(D).

(27) Activities with emissions equal to or less than thresholds:

Lead(Pb=0.6 ton/year or 3.29 lbs/day
Carbon Monoxide(CO)=25 lbs/day
Sulfur Dioxide(SO2)=5 lbs/hour or 25 lbs/day
Particulate matter(PM)=5 lbs/hour or 25 lbs/day
Nitrogen Oxides (NOx)=5 lbs/hour or 25 lbs/day
Volatile Organic Compounds (VOC)=3 lbs/hour or 15 lbs/day

(1) Alphos tank, located in Building 2521.
(2) Brown oxide line, located in Building 38
(3) Bubble tester. Located in Building 2931
(4) Coating, phosphorous, located in Building 1884
(5) Curing room, located in Building 3148
(6) Four (4) Detonations Cells, located in Building 142
(7) Electrical discharge, located in Building 198
(8) Environmental chamber, located in Building 2167
(9) Explosives chamber, located in Building 142
(10) Explosives removal (Steam-out and Autoclave), located in Building 160
(11) Explosives mixing, located in Building 200
(12) Explosives molding, located in Building 126
(13) Heating oil bath, located in Building 39
(14) Two (2) hood, fumes, located in 2940
(15) Hood, vent, located in Building 38
(16) Hood, vent, located in Building 174
(17) Hood, vent, located in Building 226
(18) One (1) incinerator used for the destruction of classified materials, located in Building 45
(19) Infrared dry, located in Building 2036
(20) Three (3) injection molders, located in Building 198
(21) IR Heater, located in Building 38
(22) Mold release unit, located in 226
(23) Oven, located in Building 2940
(24) Curing oven, located in Building 226
(25) Three (3) drying ovens, located in Building 3234
(26) Laboratory oven, located in Building 109
(27) Paint booth, located in Building 2044
(28) Fugitive emissions from painting
(29) Passivation process
(30) PDL Foam, located in Building 2698
(31) Plating lines A, B, and C, located in Building 3234
(32) Quench tank, located in Building 125
(33) Rust inhibitor, located in Building 1884
(34) Solvent hand wiping, located in Building 155
(35) Solvent System, located in Building 226
(36) Miscellaneous solvent usage in Building 2728
(37) Nineteen (19) above ground storage tanks
(38) Seventy (70) underground storage tanks
(39) One (1) fuel storage tank, located at Building 2760

(40) Paint stripper, resistant, located in Building 38
(41) Tank, brighteners, located at Building 1884
(42) Vapor carbon fluid, located in Building 125
(43) Washer, roller, located in Building 18
(44) Washout unit, located in Building 18
(45) Six (6) Underground Storage Tanks, identified as:
  (1) CRN-0003-02-17-U21
  (2) CRN-2737-06-12-M41
  (3) CRN-2737-07-12-M41
  (4) CRN-2984-02-17-W22
  (5) CRN-2984-03-17-W22
  (6) CRN-3149-02-16-DD12

(46) Fourteen (14) Air Compressors:

  (1) Davey, located in the Car Shop, with a maximum capacity of 365 acfm;
  (2) Davey, located in Building 1820, with a maximum capacity of 365 acfm;
  (3) Davey, located in Building 1820, with a maximum capacity of 365 acfm;
  (4) Davey, located in Building 1820, with a maximum capacity of 365 acfm;
  (5) Ingersoll, located in Building 1820, with a maximum capacity of 250 acfm;
  (6) Davey, located in Building 1820, with a maximum capacity of 125 acfm;
  (7) Sullair, located in Building 160, with a maximum capacity of 600 acfm;
  (8) Sullair, located in Building 198, with a maximum capacity of 600acfm;
  (9) Sullair, located in Building 105, with a maximum capacity of 750 acfm;
  (10) Davey, located in Building 2391, with a maximum capacity of 125 acfm;
  (11) Davey, located in Building 2394, with a maximum capacity of 125 acfm;
  (12) Ingersoll, located at Sullivan Lake, with a maximum capacity of 375 acfm;
  (13) Ingersoll, located in Building 224, with a maximum capacity of 750 acfm; and
  (14) Ingersoll, located in Building 200, with a maximum capacity of 750 acfm.

(47) One (1) Krypton Leak Test Unit, constructed in 1990, identified as CRN-2931-05-17-V25, with a maximum capacity of 1.0 ci/year, and exhausting to stack CRN-2931-05-17-V25.

(48) One (1) Dispo Spray Booth, Model L130, with a maximum capacity of nine (9) twelve (12) ounce paint cans per month, with no overspray and used for repairing small microwave warfare components consisting of aluminum and glass.

(49) one (1) closed loop conversion process, used to convert ammonium picrate to picric acid with a maximum production capacity of 7 tons of picric acid per day, and exhausting to stacks S2 and V1.

(50) One (1) strand burner, located in Building 142, used for a maximum of 25 tests of differing materials per day, with no pollution control.

(28) Emissions from research and development activities as defined in 326 IAC 2-7-1(21)(E): One (1) experimental catalytic converter equipped diesel-fired generator, located at the test platform at Building 3235.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) Nineteen (19) Abrasive Blasting Units:

(1) CRN-0104-03-23-HH16, located in Building 104, constructed in 1983, with a maximum capacity of 1000 lbs/yr (0.5 tons per year (TPY)) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-0104-03-23-HH16-S.

(2) CRN-0106-02-23-HH13, located in Building 106, constructed in 1988, with a maximum capacity of 3000 lbs/yr (1.5 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0106-02-23-HH13-S1, S2.

(3) CRN-0107-05-23-HH13, located in Building 107, constructed in 1980, with a maximum capacity of 4433 lbs/yr (2.2 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-05-23-HH13-S.

(4) CRN-0107-06-23-HH13, located in Building 107, constructed in 1980, with a maximum capacity of 4433 lbs/yr (2.2 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-06-23-HH13-S.

(5) CRN-0107-07-23-HH13, located in Building 107, constructed in 1980, with a maximum capacity of 4433 lbs/yr (2.2 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-07-23-HH13-S.

(6) CRN-2171-01-17-DD22, located in Building 2171, constructed in 1970, with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-2171-01-17-DD22-S.

(7) CRN-2521-07-02-J17, located in Building 2521, constructed after 1987, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2521-07-02-J17-S.

(8) CRN-2521-08-02-J17, located in Building 2521, constructed after 1987, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emission, and exhausting to stack CRN-2521-08-02-J17-S.

(9) CRN-2521-09-2-J17, located in Building 2521, constructed after 1987, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2521-09-2-J17-S.

(10) CRN-2930-06-17-V25, located in Building 2930, constructed in 1993, with a maximum capacity of 1000 lbs/yr (0.5 TPY)abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2930-06,07,08-17-V25-S.

SECTION D.1 FACILITY OPERATION CONDITIONS (Continued)

Facility Description [326 IAC 2-7-5(15)]

(11) CRN-2930-07-17-V25, located in Building 2930, constructed in 1993,with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2930-06,07,08-17-V25-S.

(12) CRN-2930-08-17-V25, located in Building 2930, constructed in 1993, with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-2930-06,07,08-17-V25-S.

(13) CRN-3234-14-17-U26, located in Building 3234, constructed in 1993, with a maximum capacity of 36,036 lbs/yr (18.0 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-3234-14-17-U26-S.

(14) CRN-0107-08-23-HH13, located in Building 107, constructed in 1993, with a maximum capacity of 700 lbs/yr (0.4 TPY) abrasive used, using a baghouse to control particulate matter emissions, and exhausting to stack CRN-0107-08-23-HH13-S.

(15) CRN-0227-03-23-HH12, located in Building 227, constructed before 1991, with a maximum capacity of 3000 lbs/yr (1.5 TPY) abrasive used, using baghouse to control particulate matter emissions, and exhausting to stack CRN-0227-03-23-HH12-S.

(16) CRN-3168-03-17-V28, located in Building 3168, constructed in 1988, with a maximum capacity of 1000 lbs/yr (0.5 TPY) abrasive used, using a filter system to control particulate matter emissions, and exhausting to stack CRN-3168-03-17-V28-S.

(17) CRN-0107-09-23-HH13, located in Building 107, constructed in 1993, with a maximum capacity of 700 lbs/yr (0.35 TPY) abrasive used, using a baghouse to control emissions, and exhausting to stack CRN-0107-08-23-HH13.

(18) One (1) barrel blast system, located in Building 107, identified as CRN-0107-06-23-HH13, to be constructed in 2005, with a maximum throughput rate of 960 pounds of steel parts per hour and a maximum abrasive usage of 17,875 pounds of steel shots per hour, controlled by a dust collector, and exhausting through stack ABS1.

(19) One (1) vertical descaling machine, located in Building 107, identified as CRN-0107-07-23-HH13, to be constructed in 2005, with a maximum throughput rate of 2,500 pounds of steel parts per hour and a maximum abrasive usage of 143,000 pounds of steel shots per hour, controlled by a dust collector, and exhausting through stack ABS2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter Emissions Limitations [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from following abrasive blasting units:

(1) CRN-0104-03-23-HH16, located in Building 104;
(2) CRN-0106-02-23-HH13, located in Building 106;
(3) CRN-0107-05-23-HH13, located in Building 107;
(4) CRN-0107-06-23-HH13, located in Building 107;
(5) CRN-0107-07-23-HH13, located in Building 107;
(6) CRN-2171-01-17-DD22, located in Building 2171;
(7) CRN-2521-07-02-J17, located in Building 2521;
(8) CRN-2521-07-02-J17, located in Building 2521;
(9) CRN-2521-09-02-J17, located in Building 2521;
(10) CRN-2930-06-17-V25, located in Building 2930;
(11) CRN-2930-07-17-V25, located in Building 2930;
(12) CRN-2930-08-17-V25, located in Building 2930;
(13) CRN-3234-14-17-U26, located in Building 3234;
(14) CRN-0107-08-23-HH13, located in Building 107;
(15) CRN-0227-03-23-HH12, located in Building 227;
(16) CRN-3168-03-17-V28, located in Building 3168;
(17) CRN-0107-09-23-HH13, located in Building 107,

shall not exceed 0.551 pounds per hour when operating at a process weight rate less than 100 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), allowable particulate emissions from the barrel blast system and the vertical descaling machine shall be limited to the limits listed in the table below:

Unit Description	Max. Throughput Rate (lbs/hr)	Particulate Emission Limit (lbs/hr)
Barrel Blast System	960	2.51
Vertical Descaling Machine	2,500	4.76

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

D.1.2 PSD Minor Limits [326 IAC 2-2]

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with PM/PM10 emission limits listed in the table below:

Unit Description	PM Emission Limits (lbs/hr)	PM10 Emission Limits (lbs/hr)
Barrel Blast System	1.00	0.50
Vertical Descaling Machine	4.50	2.80

With the above limits, the emissions from the modification in 2005 are limited to less than 25 tons/yr for PM and less than 15 tons/yr for PM10. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.1.3 Minor Source Modifications [326 IAC 2-7-10.5(d)]

Pursuant to 326 IAC 2-7-10.5(d)(5)(C) (Minor Source Modifications), the dust collectors equipped with the barrel blast system and the vertical descaling machine shall comply with the following limits when the barrel blast system or the vertical descaling machine is in operation:

(a) At least 99% control efficiency; and

(b) No visible emissions.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for the barrel blast system, the vertical descaling machine, and their control devices.

Compliance Determination Requirements

D.1.5 Particulate Matter (PM)

In order to comply with Conditions D.1.1, D.1.2, and D.1.3, the filter systems and baghouses for PM control shall be in operation at all times the abrasive blasting operations are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the stack exhausts for stacks ABS1 and ABS2 shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.1.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collectors used in conjunction with the barrel blast system and the vertical descaling machine, at least once per shift when the barrel blast system or the vertical descaling machine is in operation. When for any one reading, the pressure drop across the dust collectors is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.8 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the barrel blast system and the vertical descaling machine. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.1.9 Broken Bag or Filter System Failure Detection

In the event that bag or filter system failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain records of once per shift visible emission notations of stacks ABS1 and ABS2.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain the once per shift records of the Inlet and outlet differential static pressure during normal operation of the dust collectors for the barrel blast system and the vertical descaling machine.

(c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the results of the inspections required under Condition D.1.8.

(d) To document compliance with Condition D.1.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Source Modification and a Part 70 Minor Permit Modification

Source Background and Description

Source Name:	Naval Surface Warfare Center - Crane Division
Source Location:	300 Highway 361, Crane, Indiana 47522
County:	Martin
SIC Code:	9711, 3483
Operation Permit No.:	T101-7341-00005
Operation Permit Issuance Date:	May 15, 2001
Minor Source Modification No.:	101-21188-00005
Minor Permit Modification No.:	101-21373-00005
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed a modification application from Naval Surface Warfare Center - Crane Division (NSWC Crane) relating to the construction and operation of the following emission units and pollution control devices:

(a)(18) One (1) barrel blast system, located in Building 107, identified as CRN-0107-06-23-HH13, to be constructed in 2005, with a maximum throughput rate of 960 pounds of steel parts per hour and a maximum abrasive usage of 17,875 pounds of steel shots per hour, controlled by a dust collector, and exhausting through stack ABS1.

(a)(19) One (1) vertical descaling machine, located in Building 107, identified as CRN-0107-07-23-HH13, to be constructed in 2005, with a maximum throughput rate of 2,500 pounds of steel parts per hour and a maximum abrasive usage of 143,000 pounds of steel shots per hour, controlled by a dust collector, and exhausting through stack ABS2.

History

On May 5, 2005, NSWC Crane submitted an application to the OAQ requesting to add two (2) new blasting machines with dust collectors. NSWC Crane is an existing military base where ammunition, rockets, and other military ordnance are manufactured, stored, and disposed. Their Part 70 permit (T101-7341-00005) was issued on May 15, 2001.

Upon further review, IDEM, OAQ made the following changes to the Minor Permit Modification #0101-21373-00005:

(a) In accordance with the credible evidence rule (62 Fed. Reg. 8314, Feb 24, 1997); Section 113(a) of the Clean Air Act, 42 U.S. C. § 7413 (a); and a letter from the United States Environmental Protection Agency (USEPA) to IDEM, OAQ dated May 18, 2004, all permits must address the use of credible evidence; otherwise, U.S. EPA will object to the permits. A new condition - B.25 has been incorporated into the revised permit to address credible evidence.

(b) The mailing address for IDEM, OAQ has been changed as follows:

100 North Senate Avenue~~, P.O. Box 6015~~
Indianapolis, Indiana 4620~~46-6015~~

This change has been made throughout the whole permit.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
ABS1	Blaster	13	1.0	1,000	Building Temp
ABS2	Blaster	13	1.0	2,500	Building Temp

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification and the Part 70 Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 5, 2005. Additional information was received on May 27, 2005 and June 15, 2005.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (page 1).

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	108
PM10	108
SO_2	--
VOC	--
CO	--
NO_x	--

Justification for Modification

This modification is being performed through a Part 70 Minor Source Modification pursuant to 326 IAC 2-7-10.5(d)(4)(C) because (1) the potential to emit PM/PM10 of this modification will be limited to less than 25 tons/yr by using particulate control devices with 99% control efficiency and zero opacity; and (2) the potential to emit PM/PM10 of this modification before control is less than the PSD major source threshold of 250 tons/yr. The permit modification is being performed through a Part 70 Minor Permit Modification pursuant to 326 IAC 2-7-12(b) because this modification meets all the requirements in 326 IAC 2-7-12(b)(1).

County Attainment Status

The source is located in Martin County.

Pollutant	Status
PM10	Attainment
PM2.5	Attainment or Unclassifiable
SO_2	Attainment
NO_x	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Martin County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

(b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Martin County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Significant Deterioration (PSD) and 326 IAC 2-2.

(c) Martin County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Fugitive Emissions
Since this type of operation is not in one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	Greater than 250
PM10	Greater than 250

SO_2	Greater than 100, Less than 250
VOC	Greater than 250
CO	Greater than 250
NOx	Greater than 250

(a) This existing source is a major stationary source because at least one of the attainment regulated pollutants is emitted at a rate of two hundred fifty (250) tons per year or more, and it is not in one (1) of the twenty-eight (28) listed source categories.

(b) These emissions are based on the Technical Support Document (TSD) for T101-7341-00005, issued May 15, 2001.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Barrel Blast System*	Less than 0.15	Less than 0.15	-	-	-	-	-
Vertical Descaling Machine*	Less than 0.93	Less than 0.93	-	-	-	-	-
PTE of this Modification	Less than 1.08	Less than 1.08	-	-	-	-	-
PSD Significant Thresholds	25	15	40	40	100	40	NA

* Pursuant to 326 IAC 2-7-10.5(d)(4)(C), the dust collectors associated with the barrel blast system and the vertical descaling machine shall achieve at least 99% control efficiency.

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14, 326 IAC 20, 40 CFR 61, and 40 CFR Part 63) applicable to this modification.

(c) This modification does involve a pollutant-specific emissions unit (vertical descaling machine):

(1) With the potential to emit before controls equal to or greater than one hundred (100) tons per year, and

(2) That is subject to an emission limit and has a control device (dust collector) that is necessary to meet that limit.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring (CAM), are applicable to the proposed vertical descaling machine. Since the post control emissions from this unit are less than the major source thresholds, the CAM requirements will be addressed in the source's first Part 70 renewal permit.

State Rule Applicability - Barrel Blast System and Vertical Descaling Machine

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The existing source is a PSD major source and is not in one of the 28 source categories. The potential to emit before control from this modification is greater than 15 tons/yr for PM10 and greater than 25 tons/yr for PM. In order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with PM/PM10 emission listed in the table below:

Unit Description	PM Emission Limits (lbs/hr)	PM Emission Limits (lbs/hr)
Barrel Blast System	1.00	0.50
Vertical Descaling Machine	4.50	2.80

This is equivalent to 24.0 tons/yr of PM and 14.5 tons/yr of PM10 emissions. The operation of dust collectors ensures compliance with the limits above. With the above limits, the emissions from the modification in 2005 are limited to less than 25 tons/yr for PM and less than 15 tons/yr for PM10. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 2-7-10.5(d) (Minor Source Modifications)

Pursuant to 326 IAC 2-7-10.5(d)(4)(C), the dust collectors equipped with the barrel blast system and the vertical descaling machine will be used to limit the PM/PM10 from these units to less than 25 tons/yr, and shall comply with the following limits when the barrel blast system or the vertical descaling machine is in operation:

(a) At least 99% control efficiency; and

(b) No visible emissions.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The allowable particulate emissions from the barrel blast system and the vertical descaling machine shall be limited to the limits listed in the table below:

Unit Description	Max. Throughput Rate (lbs/hr)	Particulate Emission Limit (lbs/hr)
Barrel Blast System	960	2.51

Unit Description	Max. Throughput Rate (lbs/hr)	Particulate Emission Limit (lbs/hr)
Vertical Descaling Machine	2,500	4.76

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

According to the emission calculations (see Appendix A), the potential to emit PM from the proposed barrel blast system and the vertical descaling machine is less than the limits above. Therefore, the barrel blast system and the vertical descaling machine are in compliance with 326 IAC 6-3-2. The use of dust collectors ensures compliance with these limits.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

1. The proposed the barrel blast system and the vertical descaling machine, which will be controlled by dust collectors, have applicable compliance monitoring conditions as specified below:

   (a) Visible emissions notations of the dust collector stack exhausts (stacks ABS1 and ABS2) shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C -

Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

(b) The Permittee shall record the total static pressure drop across the dust collectors used in conjunction with the barrel blast system and the vertical descaling machine, at least once per shift when the barrel blast system or the vertical descaling machine is in operation. When for any one reading, the pressure drop across the dust collectors is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

(c) An inspection shall be performed each calendar quarter of all bags controlling the barrel blast system and the vertical descaling machine. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced. In the event that bag failure has been observed:

(1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit.

These monitoring conditions are necessary because the dust collectors used to control particulate emissions from the barrel blast system and the vertical descaling machine must operate properly to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 2-7-10.5 (Minor Source Modifications), and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

Proposed Changes

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

(a) ~~Seventeen (17)~~ **Nineteen (19)** Abrasive Blasting Units:

. . .

(18) One (1) barrel blast system, located in Building 107, identified as CRN-0107-06-23-HH13, to be constructed in 2005, with a maximum throughput rate of 960 pounds of steel parts per hour and a maximum abrasive usage of 17,875 pounds of steel shots per hour, controlled by a dust collector, and exhausting through stack ABS1.

(19) One (1) vertical descaling machine, located in Building 107, identified as CRN-0107-07-23-HH13, to be constructed in 2005, with a maximum throughput rate of 2,500 pounds of steel parts per hour and a maximum abrasive usage of 143,000 pounds of steel shots per hour, controlled by a dust collector, and exhausting through stack ABS2.

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314][326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) ~~Seventeen (17)~~ **Nineteen (19)** Abrasive Blasting Units:

. . .

(18) One (1) barrel blast system, located in Building 107, identified as CRN-0107-06-23-HH13, to be constructed in 2005, with a maximum throughput rate of 960 pounds of steel parts per hour and a maximum abrasive usage of 17,875 pounds of steel shots per hour, controlled by a dust collector, and exhausting through stack ABS1.

(19) One (1) vertical descaling machine, located in Building 107, identified as CRN-0107-07-23-HH13, to be constructed in 2005, with a maximum throughput rate of 2,500 pounds of steel parts per hour and a maximum abrasive usage of 143,000 pounds of steel shots per hour, controlled by a dust collector, and exhausting through stack ABS2.

. . .

D.1.1 Particulate Matter Emissions Limitations [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from following abrasive blasting units:

(1) CRN-0104-03-23-HH16, located in Building 104;
(2) CRN-0106-02-23-HH13, located in Building 106;
(3) CRN-0107-05-23-HH13, located in Building 107;
(4) CRN-0107-06-23-HH13, located in Building 107;
(5) CRN-0107-07-23-HH13, located in Building 107;
(6) CRN-2171-01-17-DD22, located in Building 2171;
(7) CRN-2521-07-02-J17, located in Building 2521;
(8) CRN-2521-07-02-J17, located in Building 2521;
(9) CRN-2521-09-02-J17, located in Building 2521;
(10) CRN-2930-06-17-V25, located in Building 2930;

(11) CRN-2930-07-17-V25, located in Building 2930;
(12) CRN-2930-08-17-V25, located in Building 2930;
(13) CRN-3234-14-17-U26, located in Building 3234;
(14) CRN-0107-08-23-HH13, located in Building 107;
(15) CRN-0227-03-23-HH12, located in Building 227;
(16) CRN-3168-03-17-V28, located in Building 3168;
(17) CRN-0107-09-23-HH13, located in Building 107,

shall not exceed 0.551 pounds per hour when operating at a process weight rate less than 100 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), allowable particulate emissions from the barrel blast system and the vertical descaling machine shall be limited to the limits listed in the table below:

Unit Description	Max. Throughput Rate (lbs/hr)	Particulate Emission Limit (lbs/hr)
Barrel Blast System	960	2.51
Vertical Descaling Machine	2,500	4.76

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ **where E = rate of emission in pounds per hour and P = process weight rate in tons per hour**

D.1.2 PSD Minor Limits [326 IAC 2-2]

In order to make the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with PM/PM10 emission limits listed in the table below:

Unit Description	PM Emission Limits (lbs/hr)	PM10 Emission Limits (lbs/hr)
Barrel Blast System	1.00	0.50
Vertical Descaling Machine	4.50	2.80

With the above limits, the emissions from the modification in 2005 are limited to less than 25 tons/yr for PM and less than 15 tons/yr for PM10. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.1.3 Minor Source Modifications [326 IAC 2-7-10.5(d)]

Pursuant to 326 IAC 2-7-10.5(d)(5)(C) (Minor Source Modifications), the dust collectors equipped with the barrel blast system and the vertical descaling machine shall comply with the following limits when the barrel blast system or the vertical descaling machine is in operation:

(a) At least 99% control efficiency; and

(b) No visible emissions.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for the barrel blast system, the vertical descaling machine, and their control devices.

Compliance Determination Requirements

D.1.2~~5~~ Particulate Matter (PM)

In order to comply with Conditions D.1.1, D.1.2, and D.1.3, ~~T~~**t**he filter systems and baghouses for PM control shall be in operation at all times the abrasive blasting operations are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the stack exhausts for stacks ABS1 and ABS2 shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.1.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collectors used in conjunction with the barrel blast system and the vertical descaling machine, at least once per shift when the barrel blast system or the vertical descaling machine is in operation. When for any one reading, the pressure drop across the dust collectors is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C-Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.8 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the barrel blast system and the vertical descaling machine. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.1.~~3~~**9** Broken Bag or Filter System Failure Detection

In the event that bag or filter system failure has been observed:

(a) **For multi-compartment units,** ~~T~~the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. ~~Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions)~~ **Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.**

(b) For single compartment baghouses, **if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then** failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain records of once per shift visible emission notations of stacks ABS1 and ABS2.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain the once per shift records of the Inlet and outlet differential static pressure during normal operation of the dust collectors for the barrel blast system and the vertical descaling machine.

(c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the results of the inspections required under Condition D.1.8.

(d) To document compliance with Condition D.1.4, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the proposed Part 70 Minor Source Modification No. 101-21188-00005, and the operation of this proposed modification shall be subject to the conditions of the proposed Part 70 Minor Permit Modification No. 101-21373-00005.

Appendix A: Emission Calculations
PM and PM10 Emissions
From the Barrel Blast System and the Vertical Descaling Machine

Company Name: Naval Surface Warfare Center, Crane Division
Address: 300 Highway 361, Crane, Indiana 47522
MSM: 101-21188-00005
Reviewer: ERG/YC
Date: June 15, 2005

Type of Abrasive Used: Steel Shots

Unit ID	Unit Description	Dust Collected* (lbs/hr)	Control Device	Control Efficiency	PTE of PM/PM10 before Control (lbs/hr)	PTE of PM before Control (tons/yr)	PTE of PM10 after Control (lbs/hr)	PTE of PM10 after Control (tons/yr)
CRN-0107-06-23-HH13	Barrel Blast System	3.50	dust collector	99.0%	3.54	15.5	0.04	0.15
CRN-0107-07-23-HH13	Vertical Descaling Machine	21.0	dust collector	99.0%	21.2	92.9	0.21	0.93
Total						**108**		**1.08**

* This information was provided by the manufacturer.

Methodology

PTE of PM/PM10 before Control (lbs/hr) = Dust Collected (lbs/hr) / Control Efficiency (%)
PTE of PM/PM10 before Control (tons/yr) = Dust Collected (lbs/hr) / Control Efficiency (%) x 8760 hr/yr x 1 ton/2000 lbs
PTE of PM/PM10 after Control (lbs/hr) = PTE of PM/PM10 before Control (lbs/hr) x (1 - Control Efficiency)
PTE of PM/PM10 after Control (tons/yr) = PTE of PM/PM10 before Control (lbs/hr) x (1 - Control Efficiency) x 8760 hr/yr x 1 ton/2000 lbs