

**PERMIT FOR METAL CLEANING, ETCHING OR PLATING
PROCESS(ES) OR OTHER PROCESS(ES) INVOLVING METAL CLEANING
AND/OR SURFACE PREPARATION**

**STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR MANAGEMENT**

1. Legal Firm Name: US Naval Submarine Base-New London
2. Address: Box 39, Groton, CT 06349-5039
3. Equipment Location: Building 174-Lower Base, Groton, Connecticut
4. Equipment Description (Model, I.D. #): An abrasive blast booth
with steel grit and aluminum oxide blasting media

Modification to permit issued on 03/19/01

PERMIT TO:

- Construct Operate Modify

FEDERAL REQUIREMENTS:

- NSPS (40 CFR Part 60) Subpart:
 NESHAPS (40 CFR Part 61) Subpart:
 MACT (40 CFR Part 63) Subpart:

OZONE NON-ATTAINMENT STATUS:

- severe (Major source if VOC or NOx > 25 TPY)
 serious (Major source if VOC or NOx > 50 TPY)

| | |
|-------------|-------------|
| Date Issued | Exp. Date |
| 09/10/2001 | |
| Town No. | Premise No. |
| 070 | 28 |
| Permit No. | Stack No. |
| 0231 | 11 |
| Permit Fee | |
| \$2,000.00 | |

TYPE OF POLLUTANT FOR WHICH THIS PREMISE IS A "MAJOR SOURCE":

| | | | | | | | | |
|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| EPA SOURCE CLASS: | TSP | SOx | NOx | CO | VOC | PM-10 | LEAD | OTHER |
| New Source | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Major Mod | <input type="checkbox"/> | | | | | | | |
| Minor Mod | <input checked="" type="checkbox"/> | | | | | | | |

ARTHUR J. ROCQUE, JR.
 COMMISSIONER, DEPARTMENT OF
 ENVIRONMENTAL PROTECTION
 OR DESIGNATED AGENT

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The conditions on all pages of this permit and attached appendices shall be verified at all times except those noted as design specifications. Design specifications need not be verified on a continuous basis; however, if requested by the Commissioner, demonstration of compliance shall be shown.

PART I. OPERATIONAL CONDITIONS

Enforceable Conditions:

1. Type of Abrasive Used: steel grit and aluminum oxide
2. Quantity of Abrasive Used: 2,396,160 lb/yr at a maximum blast capacity of 576 lb/hr and 90 psi

Design Specifications:

1. Blasting Type: Dry
2. Number of Nozzles: 1.0
3. Compressor Maximum Capacity 490 acfm at 100 psig
4. Stack Height (ft): 26.5
5. Exhaust Gas Flow Rate (acfm): 13,500
6. Minimum Distance of Stack to Property Line (ft): 100

PART II. CONTROL EQUIPMENT

Filter Specification

1. Make and Model: Donaldson-Torit Model No. DFT-4-32
2. Number of Filters in Use: 16
3. Air/Cloth Ratio: 1.6 cfm/ft²
4. Filtering Material: Synthetic fiber
5. Cleaning Method: Pulse Air
6. Pressure Drop (in. H₂O): ≥ 1 ≤ 6
7. Minimum Gas Flow Rate at Maximum Rated Capacity (acfm): 13,500
8. Design Removal Efficiency (%): 99.999 on particles size down to 0.5 microns
9. The permittee shall maintain the filter(s) in accordance with the manufacturer's specifications and shall activate the pulse air cleaner during blasting operations.
10. The permittee shall keep the blasting operations at a constant negative pressure.
11. The permittee shall install an interlock system such that the blasting can not operate unless the exhaust system is operating in conformance with this permit.
12. The permittee shall activate the pulse air cleaner prior to reaching a pressure differential of 6.0 in. H₂O across the filter and it shall be activated so as to maintain a pressure differential across the filter between 1 and 6 in. H₂O.

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**PART III. CONTINUOUS EMISSION MONITORING REQUIREMENTS AND ASSOCIATED
EMISSION LIMITS**

CEM shall not be required at this time.

PART IV. MONITORING, REPORTING, AND RECORD KEEPING REQUIREMENTS

1. Quantity of abrasive used shall be based on any consecutive twelve (12) month time period and shall be determined for each abrasive used by adding each month's abrasive use to that of the previous eleven (11) months. The Permittee shall make this calculation monthly.
2. The permittee shall record the date and details of all repairs and maintenance to the baghouse and exhaust systems.
3. The permittee shall record the pressure drop as in. H₂O across the filter at least once per operational shift of abrasive blasting.
4. The Permittee shall keep records on premise indicating continual compliance with all above conditions at all times and shall make them available upon request by the Commissioner for the duration of this permit, or for the previous five (5) years, whichever is less.

PART V. ALLOWABLE EMISSION LIMITS:

The Permittee shall meet the emission limits stated herein at all times.

| <u>Criteria Pollutants</u> | <u>#/hr</u> | <u>ASC* (ug/m³)</u> | <u>TPY</u> |
|--------------------------------|-------------|------------------------------------|------------|
| TSP/PM ₁₀ | 0.006 | | 0.012 |
| Pb | 6.73e-7 | 102.14 | 1.40e-6 |

| <u>Non-Criteria Pollutants</u> | <u>ASC* (ug/m³)</u> |
|------------------------------------|------------------------------------|
| Titanium oxide | 10,214.21 |
| Iron oxide | 3,404.74 |
| Calcium oxide | 1,361.89 |
| Barium | 340.47 |
| Cadmium | 13.62 |
| Chromium | 85.12 |
| Mercury | 6.81 |
| Selenium | 136.19 |

*allowable stack concentration

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Town No: 070 Premise No: 28 Permit No: 0231 Stack No: 11

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PART VI. STACK EMISSION TEST REQUIREMENTS

None at this time.

**PART VII. APPLICABLE REGULATORY REFERENCES (The Regulations of
Connecticut State Agencies, hereinafter referred to as the
Regulations)**

22a-174-3(a), (b), (f); 22a-174-18; 22a-174-20; 22a-174-29

These references are not intended to be all inclusive - other sections of the Regulations may apply.

PART VIII. SPECIAL REQUIREMENTS

During the initial year of operation, the monthly emission limit shall not exceed the annual limitation divided by six (6).

PART IX. ADDITIONAL TERMS AND CONDITIONS

1. This permit does not relieve the permittee of the responsibility to conduct, maintain and operate the regulated activity in compliance with all applicable requirements of any federal, municipal or other state agency. Nothing in this permit shall relieve the permittee of other obligations under applicable federal, state and local law.
2. Any representative of the DEP may enter the permittee's site in accordance with constitutional limitations at all reasonable times without prior notice, for the purposes of inspecting, monitoring and enforcing the terms and conditions of this permit and applicable state law.
3. This permit may be revoked, suspended, modified or transferred in accordance with applicable law.
4. This permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material, nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby. This permit shall neither create nor affect any rights of persons or municipalities who are not parties to this permit.

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PART IX. ADDITIONAL TERMS AND CONDITIONS, continued

5. Any document, including any notice, which is required to be submitted to the Commissioner under this permit shall be signed by a duly authorized representative of the permittee and by the person who is responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in the documents and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense." Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense in accordance with Connecticut General Statutes §22a-6, under §53a-157 of the Connecticut General Statutes.
6. Nothing in this permit shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the permittee by the Commissioner.
7. Within fifteen days of the date the permittee becomes aware of a change in any information submitted to the Commissioner under this permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the permittee shall submit the correct or omitted information to the Commissioner.
8. The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.
9. Any document required to be submitted to the Commissioner under this permit shall, unless otherwise specified in writing by the Commissioner, be directed to: Office of Assistant Director; Compliance & Field Operations Division; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

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