Facility Name: **Naval Submarine Base, Kings Bay**
City: Kings Bay
County: Camden
AIRS #: 04-13-039-00003

Application #: TV-17361
Date Application Received: December 18, 2006
Permit No: 9711-039-0003-V-02-0

Program	Review Engineers	Review Managers
SSPP	Brian Massengale	John Yntema
ISMP	Jeff Babb	DeAnna Oser
SSCP	Don McHugh	Darrell Crosby
Toxics	Don Holder	Karen Hays

Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Part 70 operating permit. Complex issues and unusual items are explained herein simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to the Naval Submarine Base, Kings Bay and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, the applicable requirements and their significance, and the methods for determining compliance with those applicable requirements. This narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Facility Identification

1. Facility Name: Naval Submarine Base, Kings Bay

2. Parent/Holding Company Name: U.S. Department of The Navy

3. Previous and/or Other Name(s): No previous names identified.

4. Facility Location

   1063 USS Tennessee Avenue
   Kings Bay 31547-2606 (Camden County)

5. Attainment, Non-attainment Area Location, or Contributing Area

   The base is located in a county designated as an attainment area for all criteria pollutants.

B. Site Determination

There are no applicable issues with regard to the site determination. There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

Permit Number and/or Off-Permit Change	Date of Issuance/ Effectiveness	Purpose of Issuance
9711-039-0003-V-01-0	June 19, 2002	Initial Title V Permit
9711-039-0003-V-01-1	August 11, 2004	502(b)(10) Permit for Part 70 Source
Off-permit change	June 26, 2007	Install small arms training facility.

D. Process Description

1. SIC Codes(s): 9711

2. Description of Product(s)

   This base does not have final products.

3. Overall Facility Process Description

Naval Submarine Base in Kings Bay, Georgia (NSB Kings Bay) performs the following functions:

1. Maintenance support and replenishment of TRIDENT submarines belonging to the Atlantic Fleet.
2. Operations support for TRIDENT fleet and Kings Bay activities.
3. Training support for TRIDENT submarine crews and other activities at Kings Bay.
4. Personnel support for all fleet and shore-based personnel directly engaged in support of Atlantic Fleet strategic operations at Kings Bay.

As part of the operations, Kings Bay owns and operates equipment which emits air pollution including boilers, hot water heaters, auxiliary power generation facilities, backup generators, organic liquid storage tanks, vehicle fueling stations, surface coating operations, a chemical cleaning line, cold solvent degreasing units, abrasive blasting operations, woodworking shops, and other miscellaneous emissions units.

4. Overall Process Flow Diagram

The base provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

This base has the potential to emit (pte) NO_X and SO_2 above 250 tons per year (tpy) and, without enforceable permit limits, would be classified as a major source for PSD regulations. However, with the four enforceable permit limits listed below, it is a minor source for PSD regulations. Military Bases are not among the 28 named source categories under PSD. PSD avoidance limits 1. through 3. below were previously implemented in the initial Title V permit. PSD avoidance limit No. 4. below has been added to this renewal to ensure compliance with the PSD avoidance strategy for sulfur dioxide emissions.

Emission Units	**No. 2 Fuel Oil Combustion Limit (Gallons/year (12-consecutive months))**
1. IC33 (D1), IC35 (D2), IC34 (D3)	315,000
2. IC24 (D4), IC25 (D5), IC26 (D6), IC27 (D7), IC28 (D8), IC29 (D9), IC30 (D10), IC31 (D11), IC32 (D12)	1,080,000
3. EC01 (G1), EC02 (G2), EC03 (G3), EC04 (G4)	2,400,000
Emission Units	**Sulfur Content Limit**
4. Basewide	Sulfur must be less than 0.5 percent, by weight in all fuel consumed at the base.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Yes			✓
PM_{10}	Yes			✓
SO_2	Yes			✓
VOC	Yes	✓		
NO_x	Yes	✓		
CO	Yes	✓		
TRS	Yes			✓
H_2S	Yes			✓
Individual HAP	Yes			✓
Total HAPs	Yes			✓

While the base is believed to be a true minor source for HAPs, they previously requested synthetic minor (SM) conditions for individual and total HAPs in order to make sure that this would never be an issue for any current or future MACTs that apply to major sources. These conditions were included in the renewal permit and require plant-wide record keeping requirements for HAPs and a requirement to report if HAPs ever do exceed the 9/24 tons per year limit.

3. MACT Standards

Kings Bay is not a major source with respect to hazardous air pollutants (HAP) as indicated above. It is not subject to any Part 63 NESHAPs. Note that a military surface coating NESHAP is now under development. It is not clear whether it will apply to area sources (i.e., facilities that are HAP minor sources).

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	No
Program Code 8 – Part 61 NESHAP	No
Program Code 9 - NSPS	No
Program Code M – Part 63 NESHAP	No
Program Code V – Title V	Yes

F. Toxic Impact Assessment

Recently, NSB Kings Bay was required to develop a base wide toxic impact baseline and to carry out a base wide ambient air impact assessment of HAPs and non-HAP toxic air pollutants (TAPs). This Toxic Impact Assessment (TIA) did not indicate any significant impact from HAPs/TAPs from the base.

As required, a Toxics Guideline assessment for HAPs and TAPs was received on April 16, 2007. The NSB Kings Bay had modeled 135 HAPs/TAPs, from a list of 383 compounds emitted at the base from the surface coating and solvent use operations. This base wide TIA was performed using the SCREEN3 computer model. The Maximum Ground Level Concentration (MGLC) for each HAP/TAP was determined at the nearest public receptor. This was compared to its Acceptable Ambient Concentration (AAC) threshold value for 15-minute, 24-hour, and annual averaging times as applicable. The initial assessment treated all the pollutants in a generic manner, meaning that (1) no distinction was made between different application methods for different materials, (2) no distinction was made between PM and VOC pollutants, and (3) no distinction was made for pollutants with very different properties. Initial modeling results (Tables 5-2, 5-4 and 5-6 in the TIA received on April 16, 2007) indicated that 35 pollutants had MGLCs that exceeded an AAC. NSB Kings Bay re-evaluated the failing pollutants in a more detailed manner, to demonstrate compliance with the AAC. This analysis differentiated between PM and VOC and then applied PM emissions reduction factors. The PM emissions reduction factors included a 75% transfer efficiency factor inside paint booths and 85% when sprayed outside paint booths, a 95 % overspray control factor, and an 80% particle fallout factor. For those pollutants that are not considered PM, the properties of the pollutants were examined to determine if in fact these pollutants were being emitted to the extent that would impact the public receptors. A less conservative approach was also used when calculating the application rate of each solvent, since the initial application rate was highly over estimated.

Using the above process, NSB Kings Bay demonstrated base-wide compliance with the Toxic Guidelines for HAPs/TAPs. However, initial review by the Division raised concern due to the tight tolerance shown in the results, comparing the MGLC to the AAC for several compounds, and questioned whether some of the assumptions made during the analysis were acceptable.

Therefore, the Division requested additional toxic analyses on those pollutants that did not pass the initial screening, using a more conservative approach. The Division allowed the base to use a transfer efficiency of 75% when spraying takes place inside a booth but only 30% for paint spraying outside booths. The particle size distribution fallout factor of 80% was not allowed to be used when estimating PM emissions. The Division recommended that pollutants with fast polymerization be modeled as if they were PM, using a transfer efficiency no higher than 75%. A re-evaluation of xylene was also recommended using the application rate from all sources where xylene would be present.

An additional Air Toxics Compliance Demonstration was received on January 18, 2008. It evaluated the failing pollutants using the Division's recommendations and applied a multiplying factor to each MGLC to ensure this evaluation was conservative. Xylene and methylene chloride continued to show almost no margin of compliance when comparing the annual MGLC to the AAC. However, this is not a concern, because extremely conservative emission rates were used. For these compounds the model was based on actual usage multiplied by a scaling factor to show compliance at potential higher throughput rates. Tables 3, 7, 8 and 9 submitted with the January 18, 2008 re-evaluation, illustrate that each compound's maximum concentrations is well below its AACs, even when a multiplication factor is used.

Therefore, the Division agrees that the base has demonstrated compliance with the Georgia Air Toxic Guidelines, since each of the predicted concentrations were less than AACs for each of the HAPs/TAPs evaluated.

The hot water heaters (EC01, EC02, EC03 and EC04) and generators (IC24 through IC35) at this base were not included in the modeling analysis, since combustion emissions are generally excluded from toxics assessments, the toxic compounds being very dilute.

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

Though it is believed that the base is a true Minor Source for HAPs, the base previously requested Synthetic Minor (SM) Status for individual and total HAPs, limiting any single HAP below 10 tons during any 12 consecutive months or any combination of listed HAPs below 25 tons during any 12 consecutive months. Since HAP emissions from fuel burning sources at this base are not counted towards the 10/25 limit, the existing HAP limits of 10/25 tpy have been replaced in this renewal permit by new limits of 9 tpy for any single HAP and 24 tpy for any combination of listed HAPs. These limits were set under the assumption that combustion emissions and other miscellaneous emissions of HAPs will not exceed 1.0 tpy and so base-wide HAP emissions are effectively limited to 10/25 tpy. By instituting these limits, the base avoids any future major source MACTs and any existing MACTs if they were minor before the applicability date. This SM limit is detailed in Condition 2.1.1.

To insure this base remains below the PSD major source threshold for sulfur dioxide, the base has accepted a sulfur content limit of 0.5 percent, by weight, in all fuels consumed basewide.

B. Applicable Rules and Regulations

Not Applicable

C. Compliance Status

The Title V renewal application submitted by this base contains a compliance certification, which was signed by the base's responsible official, certifying that "this base is in compliance with all applicable requirements effective as of the date of this certification and will continue to comply with such requirements." The Title V permit application contained no Form F.3 (compliance information for units out of compliance), which must be submitted if there is any non-compliance known by the company. The Division has no evidence to the contrary and therefore accepts the compliance certification.

D. Operational Flexibility

The NSB Kings Bay requested that the Division include an "emergency surge" provision in their Title V permit which would allow for temporary operational changes and surges necessary to meet a bona fide national security without these being considered in determining compliance with their Title V permit. Because the NSB Kings Bay (and other military bases) may be required to increase their operations as a result of a national security situation, short of invoking the Presidential Exemption provided in Section 118 of the CAA, the military developed a set of suggested Title V permit provisions which specify the conditions under which the base is allowed to implement temporary increases in operations (and emissions) due to a national security emergency. Their suggested provisions have already been put into permits for other Georgia military bases; they are included in this renewal Title V permit as Conditions 7.1.2 through 7.1.6.

E. Permit Conditions

Condition 2.1.1 limits base-wide HAPs below 9/24 tons during any 12 consecutive month period. This condition has been modified to replace the existing HAP limit of 10/25 tpy.

Condition 2.1.2 limits the sulfur content in fuel burning equipment at this base, to no more than 0.5 percent sulfur, by weight.

III. Regulated Equipment Requirements

A. Brief Process Description

A brief process description is specified in the narrative for initial Title V Permit No. 9711-039-0003-V-01-0. Please refer to that initial narrative. Likewise, there is useful information in the narrative for the permit amendment listed in Table 1 above.

B. Equipment List for the Process

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
EC01	Hot Water Heater No. 1 (55 MM Btu/hr)	391-3-1-.02(2)(d)2, 391-3-1-.02(2)(d)3, 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.3, 3.4.2, 3.4.3, 6.1.7, 6.2.8, 6.2.9, 6.2.10	None	None
EC02	Hot Water Heater No. 2 (55 MM Btu/hr)	391-3-1-.02(2)(d)2, 391-3-1-.02(2)(d)3, 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.3, 3.4.2, 3.4.3, 6.1.7, 6.2.8, 6.2.9, 6.2.10	None	None
EC03	Hot Water Heater No. 3 (55 MM Btu/hr)	391-3-1-.02(2)(d)2, 391-3-1-.02(2)(d)3, 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.3, 3.4.2, 3.4.3, 6.1.7, 6.2.8, 6.2.9, 6.2.10	None	None
EC04	Hot Water Heater No. 4 (12.34 MM Btu/hr)	391-3-1-.02(2)(d)2, 391-3-1-.02(2)(d)3, 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.3, 3.4.2, 3.4.3, 6.1.7, 6.2.8, 6.2.9, 6.2.10	None	None
IC33	Emergency Power and Peak-Shaving Generator D1	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.1, 3.4.1, 6.1.7, 6.2.6, 6.2.9, 6.2.10,	None	None
IC35	Emergency Power and Peak-Shaving Generator D2	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.1, 3.4.1, 6.1.7, 6.2.6, 6.2.9, 6.2.10	None	None
IC34	Emergency Power and Peak-Shaving Generator D3	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.1, 3.4.1, 6.1.7, 6.2.6, 6.2.9, 6.2.10	None	None
IC24	Emergency Power and Peak-Shaving Generator D4	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.2, 3.4.1, 6.1.7, 6.2.7, 6.2.9, 6.2.10	None	None
IC25	Emergency Power and Peak-Shaving Generator D5	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.2, 3.4.1, 6.1.7, 6.2.7, 6.2.9, 6.2.10	None	None
IC26	Emergency Power and Peak-Shaving Generator D6	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.2, 3.4.1, 6.1.7, 6.2.7, 6.2.9, 6.2.10	None	None

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
IC27	Emergency Power and Peak-Shaving Generator D7	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.2, 3.4.1, 6.1.7, 6.2.7, 6.2.9, 6.2.10	None	None
IC28	Emergency Power and Peak-Shaving Generator D8	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.2, 3.4.1, 6.1.7, 6.2.7, 6.2.9, 6.2.10	None	None
IC29	Emergency Power and Peak-Shaving Generator D9	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.2, 3.4.1, 6.1.7, 6.2.7, 6.2.9, 6.2.10	None	None
IC30	Emergency Power and Peak-Shaving Generator D10	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.2, 3.4.1, 6.1.7, 6.2.7, 6.2.9, 6.2.10	None	None
IC31	Emergency Power and Peak-Shaving Generator D11	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.2, 3.4.1, 6.1.7, 6.2.7, 6.2.9, 6.2.10	None	None
IC32	Emergency Power and Peak-Shaving Generator D12	Rule 391-3-1-.02(2)(b) Rule 391-3-1-.02(2)(g) 40 CFR Part 52.21 (PSD avoidance)	2.1.2, 3.2.2, 3.4.1, 6.1.7, 6.2.7, 6.2.9, 6.2.10	None	None
SC04	Open Painting – SWFLANT (Base Wide)	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	2.1.1, 3.4.1, 3.4.4, 6.1.7, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5, 6.2.10	None	None
SC09	Open Painting - TRF Dry Dock Paint Shop	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	2.1.1, 3.4.1, 3.4.4, 6.1.7, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5, 6.2.10	None	None
SC10	Open Painting – TRF Off-Crew Painting	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	2.1.1, 3.4.1, 3.4.4, 6.1.7, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5, 6.2.10	None	None
SC15	Open Painting – SUBASE (Base Wide)	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	2.1.1, 3.4.1, 3.4.4, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5, 6.2.10	None	None
SU12	Miscellaneous Solvent Use Operations – SUBASE		2.1.1, 6.1.7, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5, 6.2.10	None	None
SU14	Miscellaneous Solvent Use Operations – SWFLANT		2.1.1, 6.1.7, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5, 6.2.10	None	None
SC021-A SC021-B SC021-C	Surface Coating Spray Paint Booths	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	2.1.1, 3.4.1, 3.4.4, 3.4.5, 3.5.1, 3.5.3, 5.2.1, 5.2.2, 6.1.7, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5, 6.2.10, 6.2.11, 6.2.13	SF21-A1, SF21-A2, SF21-A3, SF21-A4, SF21-B1, SF21-B2, SF21-C	Dry filter overspray collectors.

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
AB011-A AB011-B AB011-C	Abrasive Blasting Booths	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(n)	2.1.1, 3.4.1, 3.4.4, 3.4.6, 3.5.2, 3.5.4, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 6.1.7, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5, 6.2.10, 6.2.12, 6.2.14	BH-A1, BH-A2, BH-B1, BH-B2, BH-C	Cartridge-type dust collectors.

* Generally applicable requirements contained in this permit may also apply to emission units listed above.

C. Equipment & Rule Applicability

As indicated in Table 1 above, since the issuance of Permit No. 9711-039-0003-V-01-0, the Permittee has previously been authorized to make two modifications. A 502(b)(10) change allowed the construction and operation of a new painting and depainting facility and an Off-permit change allowed the installation of a small arms training facility. However, these permit changes did not add to or modify any regulations specified in the initial Title V Permit. The Equipment and Rule Applicability is correctly specified in the initial Title V permit narrative for Permit No. 9711-039-0003-V-01-0. Please refer to that narrative.

D. Compliance Status

Refer to Section II C. of this Narrative.

E. Operational Flexibility

None applicable.

F. Permit Conditions

Condition 3.2.1 limits the combustion of No. 2 fuel oil in Peak-Shaving Generators IC33, IC35 and IC34 to 315,000 gallons per any twelve consecutive month period. This limit was in the initial Title V permit and will be incorporated in this renewal permit to ensure this base remains a PSD minor source.

Condition 3.2.2 limits the combustion of No. 2 fuel oil in Peak-Shaving Generators IC24 through IC32 to 1,080,000 gallons per any twelve consecutive month period. This limit was in the initial Title V permit and will be incorporated in this renewal permit to ensure this base remains a PSD minor source.

Condition 3.2.3 (previously Condition 3.2.4) limits the combustion of No. 2 fuel oil in Hot Water Heaters ECO1, ECO2, ECO3 and ECO4 to 2,400,000 gallons per any twelve consecutive month period. This limit was in the initial Title V permit and will be incorporated in this renewal permit to ensure this base remains a PSD minor source.

Based on conversations held with NSB Kings Bay (Michael Anderson, Air Program Manager) on December 12, 2007, EPD is aware that Emergency Power and Peak-Shaving Generator G6

(Emission Unit ID. IC36) was removed from the base in 2004. This emission unit was therefore omitted from the Title V Renewal application and this base wishes to have this emission unit and its associated conditions removed from the permit. This renewal permit has therefore removed PSD avoidance Condition 3.2.3, which limited the combustion of No. 2 fuel oil in Peak-Shaving Generator IC36 to 280,000 gallons per any twelve consecutive month period. Emission unit IC36 has been removed from Emission Unit Table 3.1 and will also be removed from the requirements of Condition Nos. 3.4.1 and 6.2.9.

Condition 3.4.1 (includes emission units from old Condition 3.4.6) subjects Generators IC24 through IC35, Surface Coating Operations SC04, SC09, SC10, SC15, SC021-A, SC021-B, SC021-C, and Abrasive Blasting Operations AB011-A, AB011-B and AB011-C to the Georgia Rule for Air Quality Control 391-3-1-.02(2)(b) visible emission limit of 40 percent opacity. Condition 3.4.6 has been combined with Condition 3.4.1, in this renewal permit, since the emission units in these conditions are all subject to Georgia Rule(b).

Condition 3.4.2 limits particulate matter from Hot Water Heaters EC01, EC02, EC03 and EC04 in accordance with Georgia Rule for Air Quality Control 391-3-1-.02(2)(d). This PM limit was in the initial Title V permit and will be incorporated in this renewal permit.

Condition 3.4.3 subjects Hot Water Heaters EC01, EC02, EC03 and EC04 to Georgia Rule for Air Quality Control 391-3-1-.02(2)(d)3, "Fuel-burning Equipment", limiting opacity to 20 percent. This opacity limit was in the initial Title V permit and will be incorporated in this renewal permit.

Old Condition 3.4.4 subjected fuel burning equipment to Rule (g), limiting the sulfur dioxide in fuel to 2.5 percent sulfur, by weight. This condition has been removed; since the Permittee has accepted a sulfur limit of 0.5 percent, by weight, a 2.5% limit is no longer necessary.

Condition 3.4.4 (previously Conditions 3.4.5 and 3.4.7) subjects Surface Coating Operations SC04, SC09, SC10, SC15, SC021-A, SC021-B, and SC021-C; and Abrasion Blasting Operations AB011-A, AB011-B and AB011-C to Georgia Rule for Air Quality Control 391-3-1-.02(2)(e), "Particulate Emission from Manufacturing Processes". Conditions 3.4.5 and 3.4.7 have been combined to form one condition in this renewal permit, since all the emission units in these conditions are subject to Georgia Rule(e).

Conditions 3.4.5 and 3.4.6 (previously Conditions 3.4.8 and 3.4.9) insure compliance with Rule (b) and (e) by requiring the dry filter overspray collectors and cartridge-type dust collectors to be in operation while the associated spray paint booths and abrasive blasters are in operation. These requirements were placed in Amendment No. 9711-039-0003-V-01-1 and will be incorporated in this renewal permit.

Conditions 3.5.1 and 3.5.2 require an adequate supply of dry filters and cartridge dust collectors to be on hand to replace any defective dry filter or cartridge dust collector in each dry filter overspray collector and each baghouse, respectively. These requirements were placed in Amendment No. 9711-039-0003-V-01-1 and will be incorporated in this renewal permit.

New Conditions 3.5.3 and 3.5.4 require the Permittee to replace, dry filters when the pressure drop reaches one inch of water column, and cartridge dust collectors when the pressure drop reached eight inches of water column. These conditions have been added to this renewal as a result of the Permittee's submittal of the pressure drop levels, indicating proper filter change out frequencies.

IV. Testing Requirements (with Associated Record Keeping and Reporting)

A. General Testing Requirements

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

None applicable.

V. Monitoring Requirements

A. General Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

1. Individual Equipment:

Since the issuance of Permit No. 9711-039-0003-V-01-0, the Permittee has requested one permit amendment. Below is a discussion of Monitoring Requirements affected by the recent amendment to this base.

Conditions 5.2.1 a and 5.2.1 b require the Permittee to monitor and record the dry filter pressure drop across each overspray dry filter system on Surface Coating Operations SC021-A, SC021-B and SC021-C; and the dust collector pressure drop across each dust collector system on Abrasion Blasting Operations AB011-A, AB011-B, and AB011-C. This condition was added in Amendment No. 9711-039-0003-V-01-1 to include the new surface coating operations and the new abrasive blasting operations and will be incorporated in this renewal Title V permit.

Condition 5.2.2 requires periodic dry filter and baghouse inspections, as well as specifying record keeping and corrective actions, for each dry filter and baghouse inspection that indicates improper operation. This condition was added in Amendment No. 9711-039-0003-V-01-1, to include the new dry filters and baghouses, and will be incorporated in this renewal Title V permit.

Old Conditions 5.2.3 and 5.2.4 required the base to establish the range of pressure drop across each dry filter and baghouse dust collector system that indicates proper operation. These pressure drop values have been established and incorporated into Conditions 3.5.3 and 3.5.4. Therefore, the requirements of Conditions 5.2.3 and 5.2.4 have been fulfilled and are no longer needed. This renewal has omitted these conditions.

New Condition 5.2.3 identifies pollutant specific emission unit(s) (PSEU) at this facility that are subject to the Compliance Assurance Monitoring (CAM) Rule in 40 CFR 64.

New Condition 5.2.4 subjects emission unit AB011-A to CAM requirements. The Permittee is required to measure the pressure drop and perform maintenance inspections on each cartridge-type dust collector.

Old Condition 6.1.7b. iv. was removed since Peak-Shaving Generator IC36 was removed from the base in 2004. This PSD avoidance condition is no longer necessary. The remaining Conditions in 6.1.7b. have been renumbered accordingly.

Condition 6.1.7c. i. was added in Amendment No. 9711-039-0003-V-01-1 and requires excursion reporting for filter replacement failures on the dry filters in accordance with Condition 3.5.3.

Condition 6.1.7c. ii. was added in Amendment No. 9711-039-0003-V-01-1 and requires excursion reporting for failure to perform cartridges replacements in the baghouses in accordance with Condition 3.5.4.

Condition 6.1.7c. iii was added in Amendment No. 9711-039-0003-V-01-1 and requires excursion reporting for any improper operation or adverse condition of an overspray dry filter system or a baghouse dust collector during an inspection.

Conditions 6.1.7c. iv. and 6.1.7c. v. were added in Amendment No. 9711-039-0003-V-01-1 and require excursion reporting for any failure to operate the dry filters and/or baghouses when the associated surface coating unit and/or abrasion unit is operating, respectively.

C. Compliance Assurance Monitoring (CAM)

The Abrasive Blasting Booth AB011-A is a pollutant specific emission unit (PSEU) controlled by Cartridge-type dust collectors BH-A1 and BH-A2. This unit is subject to the Compliance Assurance Monitoring (CAM) Provisions of 40 CFR 64 because it (1) is located at a major source with respect to Title V of the Clean Air act; (2) is subject to an emission standard; (3) it uses an add-on control device, specifically cartridge-type dust collectors, in order to achieve compliance with the emission standard; and (4) the pre-controlled potential PM emission rate for this unit is greater than 100 tpy. As already indicated in Section V.B, Conditions 5.2.3 and 5.2.4 have been added to this Title V renewal to include these CAM requirements.

VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

B. Specific Record Keeping and Reporting Requirements

Record keeping and reporting requirements specified in Permit No. 9711-039-0003-V-01-0 are discussed in the initial Title V permit narrative. Please refer to this narrative.

Since the issuance of Permit No. 9711-039-0003-V-01-0, at the request of the Permittee, the permit was amended once. Below is a discussion of record keeping and reporting requirements affected by the recent modification to this base.

Condition 6.2.2 (includes previous Condition 6.2.11) requires retention of 5 years of Material Safety Data Sheets for all materials containing HAPs used in surface coating operations SC04, SC09, SC10, SC15, SC021-A, SC021-B and SC021-C; and miscellaneous solvent-consuming operations with Source Codes SU12 and SU14. This renewal permit includes the surface coating units added in Amendment No. 9711-039-0003-V-01-1, in old Condition 6.2.11, in this condition.

Condition 6.2.3 requires the facility to calculate the monthly HAP emissions per Division Guidelines and make a record if individual HAP emissions for any month exceed 0.74 tons or if the total HAP emissions exceed 1.99 tons for any month. This condition has been modified to accommodate the new monthly calculations associated with the new HAP limits.

Condition 6.2.5 (previously Condition 6.2.16) requires the base to report the twelve-consecutive month rolling total emissions of each listed HAP on a semiannual basis. This condition was added in Amendment No. 9711-039-0003-V-01-1 to help assure compliance with the SM limit requested by the base, and will be incorporated in this renewal.

Old Conditions 6.2.8 and 6.2.11c. were not included in this renewal permit, since Peak-Shaving Generator IC36 was removed from the base in 2004. Tracking the quantity of No. 2 fuel oil combusted in this unit, as well as reporting requirements for this unit, are no longer necessary.

Since some conditions have been combined and others eliminated, Conditions 6.2.6 through 6.2.14 (previously Conditions 6.2.5 through 6.2.15) have been renumbered.

Condition 6.2.11 describes record keeping, notification, and reporting requirements for each overspray dry filter change, in accordance to Condition 3.5.3. Failure to perform filter replacement as prescribed must be reported in accordance with Condition 6.1.7 and indicated on

the log. This requirement was added in Amendment No. 9711-039-0003-V-01-1, to incorporate the new surface coating operations, and will be included in this renewal.

Condition 6.2.12 describes record keeping, notification, and reporting requirements for each dust collector cartridge change-out, in accordance to Condition 3.5.4. Failure to perform dust collector replacement as prescribed must be reported in accordance with Condition 6.1.7 and indicated on the log. This requirement was added in Amendment No. 9711-039-0003-V-01-1, which incorporated the new abrasive blasting operations. It will be included in this renewal.

Condition 6.2.13 requires the base to log any failures to operate the dry filter overspray collector which controls a spray paint booth (Emission Unit ID Nos. SC021-A, SC021-B or SC021-C) during its operation; Condition 6.1.7 requires reporting of any failure to operate a dry filter during spray painting operation. This requirement was added in Amendment No. 9711-039-0003-V-01-1, which incorporated the new surface coating operations. It will be included in this renewal.

Condition 6.2.14 requires the base to log any failures to operate a dust collector, which controls an abrasion blasting booth (Emission Unit ID No. AB011-A, AB011-B or AB011-C) during its operation; Condition 6.1.7 requires reporting of any failure to operate a dust collector during abrasion blasting operation. This requirement was added in Amendment No. 9711-039-0003-V-01-1, which incorporated the new abrasive blasting operations. It will be included in this renewal.

VII. Specific Requirements

A. Operational Flexibility

The NSB Kings Bay requested that the Division include an "emergency surge" provision in their renewal Title V permit allowing for temporary operational changes and surges necessary to meet a bona fide national security without these being considered in determining compliance with their Title V permit. Because the NSB Kings Bay may be required to increase their operations as a result of a national security situation, the military developed a set of suggested Title V permit provisions which specify the conditions under which the base is allowed to implement temporary increases in operations (and emissions) due to a national security emergency. The Division has agreed to include these provisions into the Title V Permit. These new conditions can be found in Conditions 7.1.2 through 7.1.6.

B. Alternative Requirements

Not Applicable.

C. Insignificant Activities

A complete list of insignificant activities is included at the end of the Title V Permit as Attachment B. These insignificant units may also be found in sections D.1 (Insignificant Activities Checklist) of the Title V application.

D. Temporary Sources

Not Applicable.

E. Short-Term Activities

The NSB Kings Bay requested approval for the disposal of energetic materials as short-term activity. This includes unspent ammunitions and/or live explosives. About 75 lbs of material will be destroyed by open burning or open detonation 10 times per year.

F. Compliance Schedule/Progress Reports

Not Applicable.

G. Emissions Trading

Not Applicable.

H. Acid Rain Requirements

Not Applicable.

I. Stratospheric Ozone Protection Requirements

The Kings Bay listed 56 R-22 chillers that use CFC's, HCFC's, or other stratospheric ozone depleting substances as listed in 40 CFR Part 82, Subpart A. The Kings Bay facility is subject to the following: 40 CFR Part 82, Subpart B – servicing motor vehicle air conditioners, Subpart C – Ban on nonessential products containing Class I and II substances, Subpart D – federal procurement, Subpart F – recycling and emissions reduction, and Subpart H – Halon emission Reductions.

J. Pollution Prevention

Not Applicable.

K. Specific Conditions

Condition 7.14.1 requiring the Permittee to perform and submit a Toxic Impact Assessment (TIA) for the entire facility has been fulfilled and is no longer necessary. Therefore, this condition has been removed.

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Addendum to Narrative

The Division issued draft Title V Permit 9711-039-0003-V-02-0 to the Naval Submarine Base in Kings Bay, Georgia on January 29, 2008. The announced public comment deadline for the draft permit was March 21, 2008. Written comments dated March 19, 2008 were received from the Naval Submarine Base on March 21, 2008.

Below are EPD's responses to questions and issues raised by the Naval Submarine Base.

(1) The Naval Submarine Base has requested that the Division clarify the scope of the HAP synthetic minor limit in Condition 2.1.1, which limits emissions of any single HAP to 9 tpy and total HAPs to 24 tpy, on base-wide emissions. However, according to the narrative, this 9/24 tpy limit only applies to the surface coating and solvent use operations, though the intention is to effectively limit any single HAP from the base to 10 tpy and total HAPs to 25 tpy. This is sufficient because HAP emissions from combustion sources have been shown to not exceed 1 tpy. The Naval Submarine Base has requested that Condition 2.1.1 be placed in Section 3.2, with the language changed to indicate that it only applies to HAPs from the surface coating and solvent equipment.

Division Response

The Division realizes that HAP emission at this base are only tracked from surface coating and solvent use operation records, and that HAP emissions from fuel burning sources at this base will not exceed 1 tpy and so need not be counted towards the 9/24 limit. Therefore, the following conditions have been modified for clarity.

Condition 2.1.1 has been moved and placed in Section 3.2 "Equipment Emission Caps and Operating Limits" as Condition 3.2.4. It has been modified to specify that it is necessary to track only the surface coating and solvent use operations.

The language in Conditions 6.1.7 b.iv., 6.1.7b.v. and 6.2.1 have been modified to specify that only surface coating and solvent emission units are subject to HAP emission record keeping requirements.

Table 3.1 "Emission Units" has been updated to specify the appropriate conditions for each unit.

As discussed in this narrative's Section II, Facility Wide Requirements, combustion and miscellaneous emissions are assumed to emit HAPs at a rate of no more than 1 tpy. As long as combustion and miscellaneous HAP emissions remain below 1 tpy and HAP emission from the surface coating and solvent use operations remain below the 9/24 limit specified in Condition 3.2.4, this Base will maintain its SM status for HAP emissions.

(2) The base has pointed out a typographic error in Condition 5.2.4.

Division Response

The Division has corrected this error in Condition 5.2.4 table.

(3) The Base has requested the removal of Section 8.24, since the Base does not have incinerators.

Division Response

Section 8.24 contains template conditions put into all Title V permits and thus will remain in this Title V permit. Note: The reason this condition is there is that the Base, or any other facility, is allowed by the rules to install certain types of incinerators without needing a permit. Such incinerators would be subject to the rules cited in Section 8.24.

(4) The base requested clarification regarding whether Section 8.23 applies to their enzymatic or zero-VOC cleaners, as well as solvent based cleaners.

Division Response

From discussions with Michael Anderson with the Naval Base and a review of the MSDS for enzymatic or zero-VOC cleaners (Ozzy Juice), it is clear that this water based cleaner used at the Naval base contains low VOCs and is a biodegradable cleaner that does not contain halogenated solvents. Therefore, this cleaner is a Non-HAP degreaser and therefore the use of it, is considered an insignificant source according to Rule 391-3-1-.03(10)(g)4. Therefore, it is not subject to Section 8.23 conditions. However, cold cleaner degreaser units, using solvents will be subject to Rule 391-3-1-.02(ff), if emissions of VOCs from degreasing are 100 tpy or greater. That is the reason for inclusion of Section 8.23.