STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

General Dynamics – OTS, Inc. **York County** **Saco, Maine** **A-434-71-U-M**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Amendment #2**

FINDINGS OF FACT

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

General Dynamics – OTS, Inc. (General Dynamics) was issued Air Emission License A-434-71-S-R/A on December 29, 2015, permitting the operation of emission sources associated with their military weapons manufacturing facility. The license was subsequently amended on May 18, 2020 (A-434-71-T-M).

General Dynamics has requested a minor revision to their license in order to clarify that the use of a HEPA filter in the spray booth filtration system is only required when applying paint containing chromium.

B. Application Classification

All rules, regulations, or statutes referenced in this air emission license amendment refer to the amended version in effect as of the date this license amendment was issued.

This amendment will increase licensed emissions by less than 4 ton/year for each single pollutant not including greenhouse gases (GHG) and less than 8 ton/year for all pollutants combined not including GHG. Therefore, this modification is determined to be a minor revision and has been processed as such. The following table quantifies the effect of using a MERV 8 filter or equivalent (with no paints containing chromium) compared to emissions using a HEPA filter (with paints containing chromium) in the spray booth filtration system.

Regulated Pollutant	With HEPA Filter (TPY)	With MERV 8 Filter (TPY)	Change (TPY)
PM	0.006	0.9	0.9
HAP	0.1	0.1	0
Chromium	0.0003	--	--
VOC	9.0	9.0	0.0
Total	9.1	10.0	0.9

C. Minor Revision Description

In March 2001, General Dynamics was issued minor revision A-434-71-I-M for the installation of a new spray booth. The spray booth was installed to apply coatings to manufactured products by means of high volume/low pressure (HVLP) spray guns with a maximum application rate of 0.75 gallons per hour and was equipped with particulate matter and VOC controls. The system was designed with paint arrestors followed by a two-stage filtration system consisting of a pre-filter and a HEPA filter to remove PM. At that time, it was expected that some of the paint applied could contain up to 6% chromium VI. As such, this equipment was subject to 06-096 C.M.R. ch. 135, *Hexavalent Chromium Particulate Emission Standard*, which has since been repealed. The use of a three-stage PM control system designed to achieve 99.9% PM reduction (0.3 microns) was considered Best Achievable Control Technology (BACT) for this process with potential chromium emissions.

Since installation of this spray booth, chromium-containing paints have not been used as frequently as expected (less than 1 gallon since the spray booth was installed). General Dynamics has requested that the license be amended to clarify that a HEPA filter is not required except when applying paints containing chromium. When applying non-chromium containing paints, filters such as MERV 8 filters can achieve estimated PM reductions of 84.9% of 3-10 micron-sized particles. The Department finds the use of MERV 8 filters or the equivalent as Best Practical Treatment (BPT) for the spray booth when not applying paints containing chromium.

The spray booth and associated pollution control system shall be operated and maintained according to the manufacturer's emission-related written instructions, or General Dynamics shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the unit in a manner consistent with good air pollution control practices for minimizing emissions.

D. Annual Emissions

The following table provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee. Only licensed equipment is included. Please note, this information provides the basis for fee calculation only and should not be construed to represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

Equipment	PM	PM_{10}	SO_2	NO_x	CO	VOC
Boilers	5.40	5.40	22.66	6.43	3.67	0.24
Heat Treat	0.79	0.79	0.01	1.55	1.30	0.09
Generator	0.04	0.04	0.01	0.53	0.11	0.04
Fire Pump #1	0.02	0.02	0.01	0.24	0.05	0.02
Cr. Plating	-	-	-	-	-	-
Mn Plating	-	-	-	-	-	-
Spray Booth	*0.9	*0.9	-	-	-	9.0
Evaporator	-	-	-	-	-	2.6
Degreasers	-	-	-	-	-	3.0
Firing Ranges	-	-	-	-	2.04	-
Totals**	**7.2**	**7.2**	**22.7**	**8.8**	**7.2**	**15.0**

* PM emissions change due to this minor revision

Pollutant	**Tons/year**
Single HAP	9.9
Total HAP	24.9

II. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	**Tons/Year**
PM_{10}	25
SO_2	50
NO_x	50
CO	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license amendment.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-434-71-U-M subject to the conditions found in Air Emission License A-434-71-S-R/A and A-434-71-T-M and the following Specific Conditions.

Severability. The invalidity or unenforceability of any provision of this License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License Amendment shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

SPECIFIC CONDITIONS

The following replaces Specific Condition (21) E. and adds (21) L. in license A-434-71-S-R/A:

(21) Spray Booth

E. General Dynamics is required to utilize paint arrestors followed by a two-stage filtration system consisting of a pre-filter and a HEPA filter to remove PM from the spray booth exhaust when applying paints containing chromium. Filters with removal efficiencies better than or equivalent to MERV 8 filters may be used instead of the HEPA filter when applying paints that do not contain chromium.
[06-096 C.M.R. ch 115, BPT]

L. The spray booth and associated pollution control system shall be operated and maintained according to the manufacturer's emission-related written instructions, or General Dynamics shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the equipment in a manner consistent with good air pollution control practices for minimizing emissions.
[06-096 C.M.R. ch 115, BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS 1st DAY OF October, 2021.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____ for ____
MELANIE LOYZIM, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-434-71-S-R/A.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 9/24/2021
Date of application acceptance: 9/24/2021

Date filed with the Board of Environmental Protection:

This Order prepared by Lisa P. Higgins, Bureau of Air Quality.

FILED
OCT 05, 2021
State of Maine
Board of Environmental Protection