



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

**Bath Iron Works Corporation
Sagadahoc County
Bath, Maine
A-333-77-3-A**

**Departmental
Findings of Fact and Order
New Source Review
NSR #3**

FINDINGS OF FACT

After review of the air emissions 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 Annotated (M.R.S.A.), Section 344 and Section 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Bath Iron Works Corporation
LICENSE TYPE	06-096 CMR 115, Minor Modification
NAICS CODES	336611
NATURE OF BUSINESS	Shipbuilding and Repair
FACILITY LOCATION	Bath, Maine

B. Amendment Description

Bath Iron Works Corporation (BIW) submitted an application for a minor modification to incorporate several facility upgrades and a fuel change into their license.

The upgrades include:

- the construction of a new Boiler Plant including the construction of a new stack
- relocation of 4 existing boilers into the new Boiler Plant
- the construction of a new Blast and Paint Building
- the expansion of the existing PO2/Ultra Hall
- Removal of Boilers #9 and #10
- Switch to distillate fuel as a back-up fuel to natural gas instead of the previously licensed #5 fuel oil.

C. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate</u>	<u>Fuel Type, % sulfur</u>	<u>Stack #</u>
Boiler #1	29.3	28725 scf/hr 195.5 gal/hr	Natural gas and distillate fuel (0.05%S)	2
Boiler #2	29.3	28725 scf/hr 195.5 gal/hr	Natural gas and distillate fuel (0.05%S)	1a
Boiler #3	29.3	28725 scf/hr 195.5 gal/hr	Natural gas and distillate fuel (0.05%S)	2
Boiler #11	29.3	28725 scf/hr 195.5 gal/hr	Natural gas and distillate fuel(0.05%S)	2
Boiler #12	25.1	24608 scf/hr 167.5 gal/hr	Natural gas and distillate fuel (0.05%S)	2

D. Application Classification

The application for a minor modification does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing or record keeping.

BIW plans on relocating Boilers #1, #3, #11, and #12 to the new Boiler Plant and removing Boilers #9 and #10 from service. In addition, BIW will be switching from #5 fuel oil to distillate fuel as a back-up fuel.

The modification of a major source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Increase Levels" as given in *Definitions Regulation*, 06-096 Code of Maine Rules (CMR) 100 (as amended).

The emission increases are determined by subtracting the baseline emissions based on firing #5 fuel oil during the two calendar years preceding the modification from the projected actual emissions. Baseline emissions were based on an average yearly amount of fuel fired in 2009 and 2010 equating to 1,745,184 gallons/year. The projected actual emissions were based on the firing of distillate fuel at a total heat input of 392,200 MMBtu/year.

The baseline actual emissions and projected actual emissions were calculated using BIW's license emission limits. The results of the comparison are as follows:

Pollutant	Baseline Actual Emissions 2009/2010 (TPY)	Projected Actual Emissions (TPY)	Net Change (TPY)	Significant Emission Increase Levels
PM	15.5	15.7	0.2	25
PM ₁₀	15.5	15.7	0.2	15
PM _{2.5}	6.5	9.8	3.3	10
SO ₂	68.8	9.8	-59.0	40
NO _x	64.6	28.6	-36.0	40
CO	4.4	16.2	11.8	100
VOC	0.2	1.1	0.9	40
CO _{2e}	22,740	<75,000	<75,000	75,000

The emission increases listed in the table above are below the significant emission increase levels for all pollutants, therefore, this modification is determined to be a minor modification under 06-096 CMR 115 (as amended) since the changes being made are not addressed or prohibited in the Part 70 air emission license. This amendment will be incorporated into the Part 70 air emission license no later than 12 months from commencement of the requested operation and will be incorporated as part of the renewal currently in process.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in 06-096 CMR 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

Process Description

BIW is proposing to modify the current boiler configuration at its Bath, Maine facility which will include building demolition, construction, boiler relocation and removal.

As part of this minor modification, Boilers, #1, #3, #11, and #12 will be relocated to a new Boiler Plant that will be constructed just north of the existing South Hyde Boiler Room. Emission from these boilers will exhaust to a new shared stack (Stack #2) that will be 85 feet in height and 48 inches in diameter. Boilers #9 and #10 will be removed and will no longer require licensing. Boiler #2 will remain at the north end of the facility in the Main Boiler Room and will continue to exhaust through Stack #1a, currently listed in this existing license. All boilers in operation will be dual fuel boilers, firing primarily natural gas with the ability to utilize distillate fuel as back-up. BIW will no longer fire #5 fuel oil at this facility. BIW will be licensed to combust distillate fuel with a maximum sulfur content of 0.05% and will continue to fire the previously licensed natural gas (A-333-77-2-A).

The switch from #5 fuel oil to distillate fuel with a lower sulfur content will result in a reduction of sulfur dioxide and nitrogen oxide emissions.

BACT for firing distillate fuel in the boilers is good combustion control based on similar licensed sources. The Department finds firing distillate fuel and natural gas in Boilers #1, #2, #3, #11 and #12 is BACT.

The BACT emission limits for the boilers were based on the following:

Distillate Fuel

- PM/PM₁₀ – 0.08 lb/MMBtu based BACT
- PM_{2.5} – 0.05 lb/MMBtu based on BACT
- SO₂ – based on firing distillate fuel containing no more than 0.05% sulfur by weight; 0.05 lb/MMBtu
- NO_x – 20 lb/1000 gal based on AP-42, Table 1.3-1
- CO – 5 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
- VOC – 0.34 lb/1000 gal based on AP-42, Table 1.3-3, dated 5/10
- Opacity – 06-096 CMR 101

The emissions from the boilers when firing distillate fuel are as follows:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 (29.3 MMBtu/hr)	2.34	2.34	1.47	1.47	4.28	1.07	0.07
Boiler #2 (29.3 MMBtu/hr)	2.34	2.34	1.47	1.47	4.28	1.07	0.07
Boiler #3 (29.3 MMBtu/hr)	2.34	2.34	1.47	1.47	4.28	1.07	0.07
Boiler #11 (29.3 MMBtu/hr)	2.34	2.34	1.47	1.47	4.28	1.07	0.07
Boiler #12 (25.1 MMBtu/hr)	2.01	2.01	1.26	1.26	3.66	0.92	0.06

(A heat value of 137,000 Btu/gal was used for distillate fuel)

Visible emissions from Stacks #1a and #2 shall not exceed 20% on a 6 minute block average, except for no more than one (1) six (6) minute block average in a 3 hour period when firing distillate fuel.

Visible emissions from Stacks #1a and #2 shall not exceed 10% opacity on a 6 minute block average basis, except for no more than one (1) six (6) minute block average in a 3 hour period when firing natural gas.

Prior to July 1, 2016, the distillate fuel fired at BIW shall not exceed a maximum sulfur content of 0.05%, by weight. Per 38 MRSA §603-A(2)(A)(3), beginning July 1, 2016, or on the date specified in the statute, the facility shall fire distillate fuel with a maximum sulfur content limit of 0.005% by weight (50 ppm), and beginning January 1, 2018, or on the date specified in the statute, the facility shall fire distillate fuel with a maximum sulfur content limit of 0.0015% by weight (15 ppm). The specific dates contained in this paragraph reflect the current dates in the statute as of the effective date of this license; however, if the statute is revised, the facility shall comply with the revised dates upon promulgation of the statute revision.

Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur by weight of the fuel delivered, as applicable. Records of annual fuel use shall be kept on a 12-month rolling total basis.

The Department approves allowing the firing of natural gas and distillate fuel in Boilers #1, #2, #3, #11 and #12. The conversion of #5 to distillate fuel results in a reduction of most pollutants. The Annual Emissions table has been adjusted to reflect these changes. The current license requirements in Air Emission License A-333-70-I-R and A-333-77-2-A will continue to apply including: recordkeeping of the type and amount of each type of fuel consumed.

B. Incorporation into the Part 70 Air Emission License

The requirements in this 06-096 CMR 115 New Source Review amendment shall apply to the facility upon completion of the requested changes. Per *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (as amended), Section 1(C)(8), for a modification that has undergone NSR requirements or been processed through 06-096 CMR 115, the source must then apply for an amendment to the Part 70 license within one year of commencing the proposed operations as provided in 40 CFR Part 70.5.

C. Annual Emissions

1. BIW shall be restricted to the following annual emissions, based on a 12 month rolling total. The tons per year limits were calculated based on the following:

- Boilers #1, #2, #3, #11 and #12 combined heat input of 392,200 MMBtu per year based on firing of natural gas and/or distillate fuel (0.05% sulfur by weight maximum).
- North Stores Generator operational limit of 500 hours per year (0.05% sulfur by weight maximum).
- Main Boiler Generator operational limit of 500 hours per year (0.05% sulfur by weight maximum).
- Dry Dock Diesel #1 and #2 combined operational limit of 500 hours per year (0.05% sulfur by weight maximum).
- Painting Operations VOC emissions of 99.9 tons per year,

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

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boilers	15.7	15.7	9.8	28.6	*16.2	*1.1
North Stores Generator	0.2	0.2	0.1	4.3	1.2	0.1
Main Boiler Generator	0.1	0.1	0.1	4.3	0.9	0.3
(2) Dry Dock Diesels	0.7	0.7	0.3	19.5	5.2	0.6
Painting Operations	--	--	--	--	--	99.9
Total	16.7	16.7	10.3	56.7	23.4	102.0

* Natural gas firing maximum emission

III. AMBIENT AIR QUALITY ANALYSIS

BIW submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. An additional ambient air quality analysis is not required for this renewal.

A. Overview

A refined modeling analysis was performed to show that emissions from BIW, in conjunction with other sources, will not cause or contribute to violations of National Ambient Air Quality Standards (NAAQS) for SO₂, PM₁₀, PM_{2.5}, NO₂ or CO.

It has been determined that BIW does not consume SO₂, PM₁₀ or PM_{2.5} increment, therefore, a Class II increment analyses was not performed for these pollutants. Because BIW's Class II NO₂ increment impacts were evaluated as part of a previous licensing effort and there is no NO₂ emissions increase being proposed, a Class II NO₂ increment analysis was not required for this licensing action.

Since the current licensing action for BIW represents a minor modification, it has been determined by the Department that an assessment of Class I Air Quality Related Values (AQRVs) is not required.

B. Model Inputs

The American Meteorological Society/EPA Regulatory Model including Plume Rise Model Enhancements (AERMOD-PRIME), is a refined model which was used to address standards in all areas. The modeling analysis accounted for the potential of building wake and cavity effects on emissions from all modeled stacks that are below their calculated formula GEP stack heights.

All modeling was performed in accordance with all applicable requirements of the Maine Department of Environmental Protection, Bureau of Air Quality (MEDEP-BAQ) and the United States Environmental Protection Agency (USEPA).

A valid five-year hourly off-site meteorological database was used in the AERMOD-PRIME refined modeling analysis. Wind data was collected at a level of fifteen meters above ground level at the Owl's Head meteorological monitoring site during the five-year period 2005-2009. When necessary, surface data collected at the Knox County Regional Airport were substituted for any missing surface data. All other missing data were interpolated or coded as missing, per EPA guidance. In addition, hourly Knox County Regional Airport data, from the same time period, were used to supplement the primary surface dataset for the

required variables that were not explicitly collected at the Owl's Head monitoring site.

Surface meteorological data was combined with concurrent hourly cloud cover and upper-air data obtained from the Gray National Weather Service (NWS). Missing cloud cover and/or upper-air data values were interpolated or coded as missing, per USEPA guidance.

All necessary representative micrometeorological surface variables (surface roughness, Bowen ratio and albedo) for inclusion into AERMOD-PRIME were calculated from procedures specified by USEPA.

C. Point-source Stack Parameters

Point-source parameters used in the modeling for BIW are listed in Table III-1.

TABLE III-1 : Point Source Stack Parameters

Facility/Stack	Stack Base Elevation (m)	Stack Height (m)	GEP Stack Height (m)	Stack Diameter (m)	UTM Easting NAD83 (m)	UTM Northing NAD27 (m)
CURRENT/PROPOSED						
Bath Iron Works						
Stack 1a (Boiler #2)	3.05	31.09	55.30	1.02	434,561	4,862,146
Stack 2 (Boilers #1, #3, #11, #12)	3.05	25.91	66.30	1.22	434,625	4,861,699

Emission parameters for BIW for MAAQS modeling are listed in Table III-2.

For the purpose of determining predicted impacts, the following assumptions were used:

- all NO_x emissions were conservatively assumed to convert to NO₂,
- all particulate emissions were conservatively assumed to convert to PM₁₀ and
- PM_{2.5} particulate emissions were explicitly modeled as PM_{2.5}.

TABLE III-2 : Stack Emission Parameters

Facility/Stack	Averaging Periods	SO ₂ (g/s)	PM ₁₀ (g/s)	PM _{2.5} (g/s)	NO ₂ (g/s)	CO (g/s)	Stack Temp (K)	Stack Velocity (m/s)
MAXIMUM LICENSE ALLOWED								
Bath Iron Works								
Stack 1a (Boiler #2)	All	0.18	0.30	0.18	0.54	0.30	450.00	5.17
Stack 2 (Boilers #1, #3, #11, #12)	All	0.71	1.14	0.71	2.08	1.17	450.00	13.84

D. Single Source Modeling Impacts

AERMOD-PRIME refined modeling was performed for a total of three operating scenarios that represented a range of maximum, typical and minimum operations. Modeling results for BIW alone are shown in Table III-3.

Maximum predicted impacts that exceed their respective significance level are indicated in boldface type.

TABLE III-3 : Maximum AERMOD - PRIME Impacts from BIW Alone

Pollutant	Averaging Period	Max Impact ($\mu\text{g}/\text{m}^3$)	Receptor UTM E (m)	Receptor UTM N (m)	Receptor Elevation (m)	Class II Significance Level ($\mu\text{g}/\text{m}^3$)
SO ₂	1-hour	38.42	434,469	4,861,526	2.93	10^a
	3-hour	31.82	434,418	4,861,526	5.46	25
	24-hour	15.14	434,469	4,861,526	2.93	5
	Annual	1.60	434,496	4,861,660	5.43	1
PM ₁₀	24-hour	24.22	434,469	4,861,526	2.93	5
PM _{2.5}	24-hour	15.05	434,469	4,861,526	2.93	none^b
	Annual	1.26	434,497	4,861,640	4.46	none^b
NO ₂	1-hour	103.67	434,469	4,861,526	2.93	10^a
	Annual	4.66	434,496	4,861,660	5.43	1
CO	1-hour	66.33	434,469	4,861,526	2.93	2000
	8-hour	38.85	434,469	4,861,526	2.93	500

^a Interim Significant Impact Level (SIL) adopted by Maine

^b Previous Significant Impact Levels (SIL) remanded by USEPA in 2013

E. Combined Source Modeling Impacts

For predicted modeled impacts from BIW alone that exceeded significance levels, as indicated in boldface type in Table III-3, other sources not explicitly included in the modeling analysis must be accounted for by using representative background concentrations for the area.

Background concentrations, listed in Table III-4, are derived from representative Central Maine rural background data.

TABLE III-4 : Background Concentrations

Pollutant	Averaging Period	Background Concentration ($\mu\text{g}/\text{m}^3$)	Date
SO ₂	1-hour	24	2009-2011 ¹
	3-hour	18	2008-2010 ²
	24-hour	11	
	Annual	1	
PM ₁₀	24-hour	47	2003-2004 ³
PM _{2.5}	24-hour	17	2008-2010 ⁴
	Annual	5	
NO ₂	1-hour	43	2009-2012 ¹
	Annual	4	2010-2012 ¹

¹ MicMac Site - Presque Isle

² MacFarland Hill - Acadia National Park

³ Jay Hill - Bomaster Site, Androscoggin River Valley

⁴ Greenville Site - Greenville

The Department examined other sources whose impacts would be significant in or near BIW's predicted significant impact area. Due to BIW's location, extent of the significant impact area and other nearby source's emissions, the Department has determined that no other sources would be considered for combined source modeling.

For pollutant averaging periods that exceeded significance levels, the maximum modeled impacts for all sources were added with conservative rural background concentrations to demonstrate compliance with NAAQS, as shown in Table III-5. Because impacts for all pollutants using this method meet all NAAQS, no further modeling analyses need to be performed.

TABLE III-5 : Maximum Combined Source Impacts ($\mu\text{g}/\text{m}^3$)

Pollutant	Averaging Period	Max Impact ($\mu\text{g}/\text{m}^3$)	Receptor UTM E (m)	Receptor UTM N (m)	Receptor Elevation (m)	Back-Ground ($\mu\text{g}/\text{m}^3$)	Max Total Impact ($\mu\text{g}/\text{m}^3$)	NAAQS ($\mu\text{g}/\text{m}^3$)
SO ₂	1-hour	38.42	434,469	4,861,526	2.93	24	62.42	196
	3-hour	31.82	434,418	4,861,526	5.46	18	49.82	1300
	24-hour	15.14	434,469	4,861,526	2.93	11	26.14	365
	Annual	1.60	434,496	4,861,660	5.43	1	2.60	80
PM ₁₀	24-hour	24.22	434,469	4,861,526	2.93	47	71.22	150
PM _{2.5}	24-hour	15.05	434,469	4,861,526	2.93	17	32.05	35
	Annual	1.26	434,497	4,861,640	4.46	5	6.26	12
NO ₂	1-hour	103.67	434,469	4,861,526	2.93	43	146.67	188
	Annual	4.66	434,496	4,861,660	5.43	4	8.66	100

F. Increment

It has been determined that BIW does not consume SO₂, PM₁₀ or PM_{2.5} increment, therefore, a Class II increment analyses was not performed for these pollutants. Because BIW's Class II NO₂ increment impacts were evaluated as part of a previous licensing effort and there is no NO₂ emissions increase being proposed, a Class II NO₂ increment analysis was not required for this licensing action.

Since the current licensing action for BIW represents a minor modification, it has been determined by the Department that an assessment of Class I Air Quality Related Values (AQRVs) is not required.

G. Summary

It has been demonstrated that emissions from BIW will not cause or contribute to violations of National Ambient Air Quality Standards (NAAQS) for SO₂, PM₁₀, PM_{2.5}, NO₂ or CO.

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,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-333-77-3-A pursuant to the preconstruction licensing requirements of 06-096 CMR 115 and subject to the standard and special conditions below.

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

(1) **Distillate Fuel**

A. Distillate Fuel sulfur requirements

1. Prior to July 1, 2016, the distillate fuel fired in the boilers shall not exceed a maximum sulfur content based of 0.05%, by weight. [06-096 CMR 115, BACT]
2. Beginning July 1, 2016, the facility shall fire distillate fuel with a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
3. Beginning January 1, 2018, the facility shall fire distillate fuel with a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
4. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur by weight of the fuel delivered, as applicable. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. [06-096 CMR 115, BACT, 40 CFR Subpart Dc]

B. Fuel Use Limits

1. BIW shall be limited to a combined heat input of 392,200 MMBtu/year in Boilers #1, #2, #3, #11 and #12 firing natural gas and/or distillate fuel based on a 12 month rolling total. [06-096 CMR 115]
2. BIW shall maintain records on a monthly basis of total distillate fuel and natural gas consumed in Boilers #1, #2, #3, #11 and #12. [06-096 CMR 115 and A-333-71-K-A (7/13/2000), BPT]

(2) **Boilers #1, #2, #3, #11, and #12**

A. Emissions from Boilers #1, #2, #3, #11, and #12 shall not exceed the following when firing distillate fuel:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.08	06-096 CMR 115, BACT
PM ₁₀	0.08	06-096 CMR 115, BACT
PM _{2.5}	0.05	06-096 CMR 115, BACT

B. Emission limits when firing distillate fuel [06-096 CMR 115, BACT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	2.34	2.34	1.47	1.47	4.28	1.07	0.07
Boiler #2	2.34	2.34	1.47	1.47	4.28	1.07	0.07
Boiler #3	2.34	2.34	1.47	1.47	4.28	1.07	0.07
Boiler #11	2.34	2.34	1.47	1.47	4.28	1.07	0.07
Boiler #12	2.01	2.01	1.26	1.26	3.66	0.92	0.06

C. Visible emissions

1. Visible Emissions from Stacks #1a and #2, when firing only natural gas, shall not exceed 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period.
[06-096 CMR 115, BACT]
2. Visible Emissions from Stacks #1a and #2, when firing distillate fuel, shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in any 3-hour period.
[06-096 CMR 115, BACT]

- D. 1. Stack #1a (serving Boiler #2) shall remain at a minimum of 102 feet above ground level. Compliance shall be based on "as-built" construction drawings and conditions. [A-333-70-H-A (3/4/1995), BPT]
2. Stack #2 shall be installed at a minimum of 85 feet above ground level. Compliance shall be based on "as-built" construction drawings and conditions.
[06-096 CMR 115, BACT]

- (3) BIW shall submit an application to incorporate this amendment into the Part 70 air emission license no later than 12 months from commencement of the requested operation. [06-096 CMR 140, Section 1(C)(8)]

DONE AND DATED IN AUGUSTA, MAINE THIS 13 DAY OF June, 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Maia Allen Robert Cora for*
PATRICIA W. AHO, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: April 4, 2014
Date of application acceptance: April 7, 2014

Date filed with the Board of Environmental Protection:

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

