Attachment
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ATTACHMENT 4

FACILITY EMISSION CAP DISCUSSION

ATTACHMENT 4
FACILITY EMISSION CAP DISCUSSION

To obtain the maximum degree of operational flexibility, Biopol is seeking to establish Facility Emission Caps (FECs) for NO_x, PM_{10} (short-term and long-term), and perchloroethylene, pursuant to IDAPA 58.01.01.176-181. In accordance with these regulations, the FECs are determined by summing three components:

- Baseline Emissions
- Operational Variability Component
- Growth Component

In Attachment 2 to this application, the potential emissions from each source were calculated based on the assumption that each source would operate at its rated capacity on a continuous basis. Actual emissions were calculated, based on expected operating levels and schedules. Since the facility is new, the actual emissions represent the baseline component of the FEC. The difference between actual and potential emissions represents the operational variability component. The potential emissions from the equipment that Biopol anticipates installing in later phases of the project represents the growth component. Tables 4-1, 4-2, 4-3, and 4-4 summarize these emission rates for NO_x, long-term PM_{10}, short-term PM_{10}, and perchloroethylene, respectively.

Table 4-1. FEC FOR NO_X EMISSIONS

Source ID	Source	Baseline Emissions, ton/yr	Operational Variability, ton/yr	Growth, ton/yr	Total Emissions, ton/yr
HB-1	125-hp Boiler	0.30	1.0	---	1.3
HB-2	125-hp Boiler	0.30	1.0	---	1.3
HB-3	125-hp Boiler	---	---	1.3	1.3
HB-4	125-hp Boiler	---	---	1.3	1.3
SB-2	50-hp Boiler	---	---	0.5	0.5
CU-3	1,000-kW Electric Generator	1.24	1.85	---	3.09
AHU-1	Air Handling Unit – U.S. Mites Inoculation Area	0.0032	0.011	---	0.014
AHU-2	Air Handling Unit – U.S. Mites Process Support	0.0026	0.008	---	0.011
AHU-3	Air Handling Unit – SSM Pollen Lab	0.0345	0.117	---	0.151
AHU-4	Air Handling Unit – PD/QC Lab	0.0299	0.101	---	0.131
AHU-6	Air Handling Unit – Administration Building	0.0040	0.014	---	0.018
AHU-7	Air Handling Unit – Timothy Pollen Building	---	---	0.129	0.129
AHU-8	Air Handling Unit – Ragweed Pollen Building	---	---	0.129	0.129
AHU-9	Air Handling Unit – Birch Pollen Building	---	---	0.129	0.129
AHU-10	Air Handling Unit – Spanish Mites Building	---	---	0.221	0.221
AHU-11	Air Handling Unit – SSM Expansion	---	---	0.151	0.151
TOTAL NO_x FEC		**1.914**	**4.101**	**3.859**	**9.874**

Table 4-2. FEC FOR PM_{10} EMISSIONS (LONG-TERM)

Source ID	Source	Baseline Emissions, ton/yr	Operational Variability, ton/yr	Growth, ton/yr	Total Emissions, ton/yr
HB-1	125-hp Boiler	0.05	0.15	---	0.20
HB-2	125-hp Boiler	0.05	0.15	---	0.20
HB-3	125-hp Boiler	0.05	0.15	---	0.20
HB-4	125-hp Boiler	---	---	0.20	0.20
SB-2	50-hp Boiler	---	---	0.08	0.08
CU-3	1,000-kW Electric Generator	0.04	0.07	---	0.11
AHU-1	Air Handling Unit – U.S. Mites Inoculation Area	0.0005	0.0015	---	0.002
AHU-2	Air Handling Unit – U.S. Mites Process Support	0.0004	0.0016	---	0.002
AHU-3	Air Handling Unit – SSM Pollen Lab	0.0052	0.0178	---	0.023
AHU-4	Air Handling Unit – PD/QC Lab	0.0045	0.0155	---	0.020
AHU-6	Air Handling Unit – Administration Building	0.0006	0.0024	---	0.003
AHU-7	Air Handling Unit – Timothy Pollen Building	---	---	0.020	0.020
AHU-8	Air Handling Unit – Ragweed Pollen Building	---	---	0.020	0.020
AHU-9	Air Handling Unit – Birch Pollen Building	---	---	0.020	0.020
AHU-10	Air Handling Unit – Spanish Mites Building	---	---	0.034	0.034
AHU-11	Air Handling Unit – SSM Expansion	---	---	0.023	0.023
T-21	Timothy Fluid Bed Dryer	0.004	1.876	---	1.88
T-37	Timothy Pneumatic Conveyor Release	0.03	0.16	---	0.19
B-30	Birch Fluid Bed Dryer	---	---	1.88	1.88
B-36	Birch Pneumatic Conveyor Release	---	---	0.19	0.19
R-27	Ragweed Fluid Bed Dryer	---	---	1.88	1.88
R-39	Ragweed Pneumatic Conveyor Release	---	---	0.19	0.19
SM-40	Spanish Mites Media Prep Room	---	---	0.47	0.47
SM-38	Spanish Mites Pneumatic Conveyor Release	---	---	0.113	0.113
A-5	Administration House Vacuum System	0.03	0.16	---	0.19

Source ID	Source	Baseline Emissions, ton/yr	Operational Variability, ton/yr	Growth, ton/yr	Total Emissions, ton/yr
B-31	Birch Pollen House Vacuum System	---	---	0.19	0.19
R-28	Ragweed Pollen House Vacuum System	---	---	0.19	0.19
T-22	Timothy Pollen House Vacuum System	0.03	0.16	---	0.19
SM-25	Spanish Mites House Vacuum System	---	---	0.19	0.19
P-1	U.S. Mites/SSM Building Exhaust	0.83	4.558	---	5.388
P-2	Process Development/Quality Assurance Lab	0.29	1.593	---	1.883
TOTAL LONG-TERM PM_{10} FEC		**1.4152**	**9.0658**	**5.69**	**16.171**

Table 4-3. FEC FOR PM_{10} EMISSIONS (SHORT-TERM)

Source ID	Source	Baseline Emissions, lb/hr	Operational Variability, lb/hr	Growth, lb/hr	Total Emissions, lb/hr
HB-1	125-hp Boiler	0.05	---	---	0.05
HB-2	125-hp Boiler	0.05	---	---	0.05
HB-3	125-hp Boiler	---	---	0.05	0.05
HB-4	125-hp Boiler	---	---	0.05	0.05
SB-2	50-hp Boiler	---	---	0.02	0.02
CU-3	1,000-kW Electric Generator	0.22 (50% load)	0.22	---	0.44
AHU-1	Air Handling Unit – U.S. Mites Inoculation Area	0.0005	---	---	0.0005
AHU-2	Air Handling Unit – U.S. Mites Process Support	0.0004	---	---	0.0004
AHU-3	Air Handling Unit – SSM Pollen Lab	0.052	---	---	0.052
AHU-4	Air Handling Unit – PD/QC Lab	0.0045	---	---	0.0045
AHU-6	Air Handling Unit – Administration Building	0.0006	---	---	0.0006

Source ID	Source	Baseline Emissions, lb/hr	Operational Variability, lb/hr	Growth, lb/hr	Total Emissions, lb/hr
AHU-7	Air Handling Unit – Timothy Pollen Building	---	---	0.0045	0.0045
AHU-8	Air Handling Unit – Ragweed Pollen Building	---	---	0.0045	0.0045
AHU-9	Air Handling Unit – Birch Pollen Building	---	---	0.0045	0.0045
AHU-10	Air Handling Unit – Spanish Mites Building	---	---	0.0077	0.0077
AHU-11	Air Handling Unit – SSM Expansion	---	---	0.0052	0.0052
T-21	Timothy Fluid Bed Dryer	0.43	---	---	0.43
T-37	Timothy Pneumatic Conveyor Release	0.04	---	---	0.04
B-30	Birch Fluid Bed Dryer	---	---	0.43	0.43
B-36	Birch Pneumatic Conveyor Release	---	---	0.04	0.04
R-27	Ragweed Fluid Bed Dryer	---	---	0.43	0.43
R-39	Ragweed Pneumatic Conveyor Release	---	---	0.04	0.04
SM-40	Spanish Mites Media Prep Room	---	---	0.11	0.11
SM-38	Spanish Mites Pneumatic Conveyor Release	---	---	0.26	0.26
A-5	Administration House Vacuum System	0.04	---	---	0.04
B-31	Birch Pollen House Vacuum System	---	---	0.04	0.04
R-28	Ragweed Pollen House Vacuum System	---	---	0.04	0.04
T-22	Timothy Pollen House Vacuum System	0.04	---	---	0.04
SM-25	Spanish Mites House Vacuum System	---	---	0.04	0.04
P-1	U.S. Mites/SSM Building Exhaust	1.23	---	---	1.23
P-2	Process Development/Quality Assurance Lab	0.43	---	---	0.43
TOTAL SHORT-TERM PM_{10} FEC		**2.588**	**0.22**	**1.5764**	**4.3844**

Table 4-4. FEC FOR PERCHLOROETHYLENE EMISSIONS

Source ID	Source	Baseline Emissions, ton/yr	Operational Variability, ton/yr	Growth, ton/yr	Total Emissions, ton/yr
P-1	U.S. Mites/SSM Building Exhaust	0.08	0.086	---	0.166
TOTAL PERCHLOROETHYLENE FEC		**0.08**	**0.086**	**---**	**0.166**

NON-FEC EMISSION LIMITS

Since a FEC can be established only though dispersion modeling, and modeling was not required for CO, VOC, and SO_x, this application does not propose FECs for these pollutants. However, it is necessary to establish emission limits for them. Tables 4-5, 4-6, and 4-7 summarize the calculated CO emissions from combustion sources. Tables 4-8a and 4-8b summarize the calculated TAP emissions and proposed TAP emission limits, respectively. To allow for operating variability, we propose that a 20 percent margin be added to the calculated emission values for CO, VOC, SO_x, and TAPs.

Table 4-5. CO EMISSION LIMITS

Source ID	Source	lb/hr	ton/yr
HB-1	125-hp Boiler	0.5	2.2
HB-2	125-hp Boiler	0.5	2.2
HB-3	125-hp Boiler	0.5	2.2
HB-4	125-hp Boiler	0.5	2.2
SB-2	50-hp Boiler	0.2	0.9
CU-3	1,000-kW Electric Generator	7.71	1.93
AHU-1	Air Handling Unit – U.S. Mites Inoculation Area	0.005	0.023
AHU-2	Air Handling Unit – U.S. Mites Process Support	0.004	0.019
AHU-3	Air Handling Unit – SSM Pollen Lab	0.058	0.23
AHU-4	Air Handling Unit – PD/QC Lab	0.050	0.22
AHU-6	Air Handling Unit – Administration Building	0.007	0.029
AHU-7	Air Handling Unit – Timothy Pollen Building	0.050	0.217
AHU-8	Air Handling Unit – Ragweed Pollen Building	0.050	0.217
AHU-9	Air Handling Unit – Birch Pollen Building	0.050	0.217
AHU-10	Air Handling Unit – Spanish Mites Building	0.085	0.372
AHU-11	Air Handling Unit – SSM Expansion	0.058	0.253
TOTAL CO EMISSIONS		**10.327**	**13.427**
PROPOSED CO EMISSION LIMITS (120%)		**12.39**	**16.11**

Table 4-6. VOC EMISSION LIMITS

Source ID	Source	lb/hr	ton/yr
HB-1	125-hp Boiler	0.03	0.14
HB-2	125-hp Boiler	0.03	0.14
HB-3	125-hp Boiler	0.03	0.14
HB-4	125-hp Boiler	0.03	0.14
SB-2	50-hp Boiler	0.01	0.06
CU-3	1,000-kW Electric Generator	1.74	0.44
AHU-1	Air Handling Unit – U.S. Mites Inoculation Area	<0.001	0.002
AHU-2	Air Handling Unit – U.S. Mites Process Support	<0.001	0.001
AHU-3	Air Handling Unit – SSM Pollen Lab	0.0038	0.017
AHU-4	Air Handling Unit – PD/QC Lab	0.0033	0.014
AHU-6	Air Handling Unit – Administration Building	<0.001	0.002
AHU-7	Air Handling Unit – Timothy Pollen Building	0.0032	0.014
AHU-8	Air Handling Unit – Ragweed Pollen Building	0.0032	0.014
AHU-9	Air Handling Unit – Birch Pollen Building	0.0032	0.014
AHU-10	Air Handling Unit – Spanish Mites Building	0.0056	0.024
AHU-11	Air Handling Unit – SSM Expansion	0.0038	0.017
P-1	U.S. Mites/SSM Building Exhaust	1.107	0.40
P-2	PD/QC Lab	0.082	0.103
SM-23	Spanish Mites Washing	4.73	6.14
TOTAL VOC EMISSIONS		**7.82**	**7.84**
PROPOSED VOC EMISSION LIMITS (120%)		**9.38**	**9.41**

Table 4-7. SO_x EMISSION LIMITS

Source ID	Source	lb/hr	ton/yr
HB-1	125-hp Boiler	<0.001	0.02
HB-2	125-hp Boiler	<0.001	0.02
HB-3	125-hp Boiler	<0.001	0.02
HB-4	125-hp Boiler	<0.001	0.02
SB-2	50-hp Boiler	<0.001	0.01
CU-3	1,000-kW Electric Generator	0.49	0.12
AHU-1	Air Handling Unit – U.S. Mites Inoculation Area	<0.001	<0.001
AHU-2	Air Handling Unit – U.S. Mites Process Support	<0.001	<0.001
AHU-3	Air Handling Unit – SSM Pollen Lab	<0.001	0.002
AHU-4	Air Handling Unit – PD/QC Lab	<0.001	0.002
AHU-6	Air Handling Unit – Administration Building	<0.001	<0.001
AHU-7	Air Handling Unit – Timothy Pollen Building	<0.001	0.002
AHU-8	Air Handling Unit – Ragweed Pollen Building	<0.001	0.002
AHU-9	Air Handling Unit – Birch Pollen Building	<0.001	0.002
AHU-10	Air Handling Unit – Spanish Mites Building	<0.001	0.003
AHU-11	Air Handling Unit – SSM Expansion	<0.001	0.002
TOTAL SO_x EMISSIONS		**0.505**	**0.228**
PROPOSED SO_x EMISSION LIMITS (120%)		**0.61**	**0.27**

Table 4-8a. CALCULATED TAP EMISSIONS

TAP	Calculated Emissions		EL, lb/hr
	lb/hr	ton/yr	
Acetone	15.2	19.79	119
Isopropyl alcohol	0.12	0.16	65.3
Ethanol	4.93	6.39	125
Methanol	0.009	0.013	17.3
Tetrachloroethylene[a]	0.86	0.08	0.013

Table 4-8b. PROPOSED TAP EMISSION LIMITS (120%)

TAP	Calculated Emissions		EL, lb/hr
	lb/hr	ton/yr	
Acetone	18.2	23.7	119
Isopropyl alcohol	0.14	0.19	65.3
Ethanol	5.92	7.67	125
Methanol	0.01	0.016	17.3
Tetrachloroethylene	1.03	0.10	0.013

COMPLIANCE WITH FEC REQUIREMENTS

FECs area available only to non-major sources. As shown on Form EI-CP1 and in Attachment 2 (Emission Calculations), the potential emissions from the facility are less than the major source thresholds.

IDAPA 58.01.01.176 through 181 require that emission caps be determined through an ambient air quality dispersion modeling analysis. Attachment 3 contains the report on the refined modeling that was performed in support of the FECs and emission limits summarized above. This analysis was performed in accordance with DEQ's modeling guidance and in close consultation with a Mr. Kevin Schilling of DEQ's modeling group. This analysis demonstrates that even under the worst-case scenario, the facility will not cause an exceedance of any National Ambient Air Quality Standards, nor will it adversely impact a Class I PSD area.

The proposed FECs for NO_x, PM_{10}, and tetrachloroethylene are consistent with the averaging periods of the respective ambient air quality standard or Acceptable Ambient Concentration. Where appropriate, both long-term and short-term FECs are proposed.

Monitoring for each combustion source (boilers, electric generator, and air handling units) will be performed to satisfy the regulatory requirements. Specifically, the boilers and air handling units will be equipped with fuel usage meters to monitor monthly fuel usage; the electric generator will be equipped with a non-resettable hour meter to track the operation schedule. Fuel usage in the electric generator will also be monitored to provide information on the power output of the unit. Monitored parameters will be recorded in a permanent, bound logbook on a monthly basis and will be made available to DEQ upon request.

The process sources (including fluidized bed dryers, filter dryers, pan dryers, lab hoods, housekeeping vacuum systems, and other sources) will be monitored using material balances on the types and amounts of materials used and recovered. Biopol will develop spreadsheets to calculate emissions from the recorded process data..

Emissions will be calculated on a monthly and 12-month rolling basis using approved emission factors, test data, material balances, or other methods approved by EPA and DEQ. Biopol will submit an annual emission report to DEQ on or before the anniversary date of the permit's issuance. Monthly and 12-month rolling emissions from each source will be included in this report to demonstrate that emissions remained below the FECs and other emission limits throughout the reporting period. The report will also include a summary of emission sources added to and removed from the facility during the reporting period, as well as any changes in fuels, raw materials, or processing methods that have an impact on emissions.

Any material changes at the facility will be evaluated to determine whether the potential exists for an exceedance of the FEC or other emission limit, and whether the potential exists for an increase in ambient air quality concentration of a FEC pollutant. If a positive finding is made concerning either of these tests, Biopol will contact DEQ to discuss the appropriate mechanism for permitting the change.

Attachment
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ATTACHMENT 5

REGULATORY APPLICABILITY – FEDERAL AND IDAHO AIR QUALITY REGULATIONS

ATTACHMENT 5

REGULATORY APPLICABILITY – FEDERAL AND IDAHO AIR QUALITY REGULATIONS

5.1	U.S. Environmental Protection Agency Regulations		5-1
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5.2	Idaho Department of Environmental Quality Regulations		5-4

5.0 REGULATORY REVIEW

The Post Falls facility source is required to comply with regulations promulgated by the U.S. Environmental Protection Agency (EPA) and the Idaho Department of Environmental Quality (Department) with respect to emissions of air contaminants. This section identifies the federal and state regulations applicable to the proposed project:

5.1 U.S. ENVIRONMENTAL PROTECTION AGENCY REGULATIONS

The following federal regulatory programs have potential applicability to Biopol:

- New Source Performance Standards (NSPS)
- National Emission Standards for Hazardous Air Pollutants (NESHAP), including Maximum Achievable Control Technology (MACT) standards,
- Chemical Accident Prevention Provisions
- Compliance Assurance Monitoring
- Prevention of Significant Deterioration (PSD)
- Nonattainment New Source Review (NSR)

5.1.1 New Source Performance Standards (NSPS)

The NSPS currently apply to approximately 80 categories of sources. These standards list emission limitations and operating requirements specific to each source category for new or modified sources. There are two standards with potential applicability to the Post Falls facility: 40 CFR 60, Subpart DC (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), and 40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines).

40 CFR 60 Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Affected Emission units:

1. Boilers

This subpart applies to boilers constructed after June 9, 1989 with rated heat input greater than 10 MMBTU/hr. Since the Biopol boilers are rated at 6.25 MMBTU/hr, this subpart does not apply.

40 CFR 60 Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Affected Emission units:

1. Electric Generator

40 CFR 60, Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines applies to stationary internal combustion engines manufactured after April 1, 2006; therefore, the electric generator at the Post Falls facility will be subject to this rule. A generator compliant with the Subpart IIII requirements will be installed. Biopol will comply with all applicable portions of this rule, which are listed below.

40 CFR 60.4205(b) – Emission Limits:

NO_x + NMHC:	6.4 gm/kW-hr
CO:	3.5 gm/kW-hr
PM:	2.0 gm/kW-hr
Smoke:	20% opacity during acceleration mode 15% opacity during lugging mode 50% during the peaks in either the acceleration mode or lugging mode

40 CFR 60.4206 – Emission limits must be met over the useful life of the engine.

40 CFR 60.4207 – Fuel Requirements:

40 CFR 60.4207(a) Effective 10/1/07, oil must meet sulfur content < 500 ppm, and either cetane index > 40, or Aromatic content < 35% (volume).

40 CFR 60.4207(b) Effective 10/1/10, oil must meet sulfur limit of 15 ppm

40 CFR 60.4209 – Monitoring Requirements:

40 CFR 60.4209(a) Install a non-resettable hour meter prior to startup

40 CFR 60.4211 – Compliance Requirements:

40 CFR 60.4211(a)	Operate and maintain engine in accordance with manufacturer's written instructions
40 CFR 60.4211(c)	Purchase engine meeting emission standards and install and configure engine in accordance with manufacturer's specification.
40 CFR 60.4211(d)(1)	Conduct initial performance test
40 CFR 60.4211(d)(2)	Establish operating parameters to be monitored continuously and submit petition for agency approval.
40 CFR 60.4211(e)	Engine may be operated for readiness testing for no more than 100 hours per year.

40 CFR 60.4212 – Testing Requirements:

40 CFR 60.4212(a)	Test in accordance with 40 CFR 1039, Subpart F.
40 CFR 60.4212(c)	Emissions must not exceed the NTE (Not-to-Exceed) numerical requirements (NTE = 1.25 x emission standard)

40 CFR 60.4124 – Notification, Reporting & Recordkeeping Requirements:

40 CFR 60.4214(b)	Owners of emergency engines are not required to submit initial notification.

5.1.2 National Emission Standards for Hazardous Air Pollutants (NESHAP), including Maximum Achievable Control Technology (MACT)

The proposed facility will emit limited amounts of hazardous air pollutants (HAPs). The facility will not be a major source of HAPs and will, therefore, not be subject to any of the established MACT standards.

5.1.3 40 CFR 68: Chemical Accident Prevention Provisions

The Chemical Accident Prevention Provisions apply to facilities that have at least one regulated compound in a process in an amount greater than its threshold quantity. The Post Falls facility will not be using regulated materials above threshold quantities. Therefore, the facility will not be subject to this rule.

5.1.4 40 CFR 64: Compliance Assurance Monitoring

The CAM Rule applies to major facilities having at least one controlled emission with pre-control emission in excess of the major source thresholds. The Post Falls facility will not be a major facility; therefore, the CAM rule will not apply.

5.1.5 Prevention of Significant Deterioration

PSD applies to major new sources and major modifications at major existing sources located in areas that are meeting the National Ambient Air Quality Standards (NAAQS) (i.e., attainment areas). Although the Post Falls facility will be located in an attainment area, it will not be a major source, so the PSD requirements will not apply.

5.1.6 Nonattainment New Source Review

NSR applies to major new sources and major modifications to major existing sources located in an area that is not achieving one or more ambient air quality standards. The Post Falls facility

will not be located in a nonattainment area and will not be a major facility. Therefore, the NSR requirements will not apply.

5.2 IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY REGULATIONS

State air quality regulations are contained in ID 58.01.01 of the Rules for the Control of Air Pollution in Idaho of the Idaho Department of Environmental Quality (Department). The key sections of the Department's regulations as applicable to this Permit to Construct are summarized below:

IDAPA 58.01.01.000
LEGAL AUTHORITY

The Board of Environmental Quality is authorized to promulgate rules for the Department of Environmental Quality governing air pollution pursuant to Sections 39-105 and 39-107, Idaho Code.

IDAPA 58.01.01.001
TITLE AND SCOPE

These rules shall be cited as IDAPA 58.01.01, Rules of the Department of Environmental Quality, IDAHA 58.01.01, "Rules for the Control of Air Pollution in Idaho". These rules provide for the control of air pollution in Idaho.

IDAPA 58.01.01.002
WRITTEN INTERPRETATIONS

The Department of Environmental Quality has written statements which pertain to the interpretation of the rules of this chapter, or to the documentation of compliance with the rules of this chapter.

IDAPA 58.01.01.003
ADMINISTRATIVE APPEALS

Persons may be entitled to appeal agency actions authorized under this chapter pursuant to IDAPA 58.01.23, "Rules of Administrative Procedure Before the Board of Environmental Quality".

IDAPA 58.01.01.004
CATCHLINES

Catchlines within this chapter are not to be utilized in the interpretation of the rules.

IDAPA 58.01.01.005-011
DEFINITIONS

The purpose of Sections 005 through 011 is to assemble definitions used throughout this chapter.

IDAPA 58.01.01.106
ABBREVIATIONS

List of abbreviations.

IDAPA 58.01.01.107
INCORPORATIONS BY REFERENCE

Unless expressly provided otherwise, any reference in these rules to any document identified in subsection 107.03 shall constitute the full incorporation into these rules of that document for the purposes of the reference, including any notes and appendices therein.

IDAPA 58.01.01.121
COMPLIANCE REQUIREMENTS BY DEPARTMENT

Any person engaged in an activity which may violate the air quality provisions of the Act, violate an air quality order issued or entered in accordance with the Act or these rules, or violate any of these rules, may be required by the Department to do any of the following including schedule, report, records, etc.

IDAPA 58.01.01.122
INFORMATION ORDERS BY THE DEPARTMENT

The Department may issue information orders.

IDAPA 58.01.01.123
CERTIFICATION OF DOCUMENTS

Section 123 requires all documents to contain a certification by a responsible individual. ***This application for a Permit to Construct is signed in accordance with this requirement.***

IDAPA 58.01.01.124
TRUTH, ACCURACY AND COMPLETENESS OF DOCUMENTS

All documents submitted to the Department shall be truthful, accurate and complete.

IDAPA 58.01.01.125
FALSE STATEMENTS

No person shall knowingly make any false statement, representation, or certification in any form, notice, notice or report required under any permit, or any applicable rule or order in force pursuant thereto.

IDAPA 58.01.01.126
TAMPERING

No person shall knowingly render inaccurate any monitoring device or method required under any permit, or any applicable rule or order in force pursuant thereto.

IDAPA 58.01.01.127
FORMAT OF RESPONSES

All responses and information submitted to the Department shall be provided in a format approved by the Department.

IDAPA 58.01.01.128
CONFIDENTIAL INFORMATION

Information obtained by the Department under these rules is subject to public disclosure. ***Biopol is not claiming any information in this application as confidential.***

IDAPA 58.01.01.130 - 136
STARTUP, SHUTDOWN, SCHEDULED MAINTENANCE, SAFETY MEASURES, UPSET AND BREAKDOWN.

The purpose of Sections 130 through 136 is to establish procedures and requirements to be implemented in all excess emissions events and to establish criteria to be applied by the Department in determining whether to take enforcement action to impose penalties for an excess emissions event where the excess emissions are caused by startup, shutdown, scheduled maintenance, upset or breakdown of any emissions unit or which occur as a direct result of the implementation of any safety measure.

IDAPA 58.01.01.140 - 149
VARIANCES

The purpose of Sections 140 through 149 is to establish procedures for obtaining variances.

IDAPA 58.01.01.155
CIRCUMVENTION

No person shall willfully cause or permit the installation or use of any device or use of any means that conceals emissions of pollutants that would otherwise violate the provisions of this chapter without resulting in a reduction in the total amount of emissions.

IDAPA 58.01.01.156
TOTAL COMPLIANCE

Where more than one section of these rules applies to a particular situation, all such rules must be met for total compliance, unless provided for otherwise in these rules. ***Biopol will comply with all relevant sections of the regulations.***

IDAPA 58.01.01.157
TEST METHODS AND PROCEDURES

The purpose of this Section is to establish procedures and requirements for test methods and results.

IDAPA 58.01.01.160 - 164
PROVISIONS GOVERNING SPECIFIC ACTIVITIES AND CONDITIONS.

Sections 160 through 164 establish provisions governing specific activities and conditions. Test methods and procedures shall comply with Section 157.

IDAPA 58.01.01.175-181
PROCEDURES AND REQUIREMENTS FOR PERMITS ESTABLISHING A FACILITY EMISSIONS CAP

The purpose of Sections 175 through 181 is to establish uniform procedures to obtain a Facility Emissions Cap (FEC) for stationary sources or facilities. ***This application is for a facility emissions cap through a Permit-to-Construct and has been prepared in accordance with IDAPA 58.01.01 Sections 175 through 181.***

IDAPA 58.01.01.200-228
PROCEDURES AND REQUIREMENTS FOR PERMITS TO CONSTRUCT

The purpose of Sections 200 through 228 is to establish uniform procedures and requirements for the issuance of "Permits to Construct".

IDAPA 58.01.01.201
PERMIT TO CONSTRUCT REQUIRED

No owner or operator may commence construction or modification of any stationary source, facility, major facility or major modification without first obtaining a permit to construct from the Department which satisfies the requirements of Sections 200 through 228 unless the source is exempted in any of Sections 220 through 223, or the owner or operator complies with Section 213 and obtains the required permit to construct, or the owner or operator complies with Sections 175 through 181, or the source operates in accordance with all of the applicable provisions of a permit by rule. ***The enclosed application demonstrates Biopol's acknowledgement of and compliance with this requirement.***

IDAPA 58.01.01.202
APPLICATION PROCEDURES

Application for a permit to construct must be made using forms furnished by the Department, or by other means prescribed by the Department. ***The enclosed application includes all required forms.***

IDAPA 58.01.01.203
PERMIT REQUIREMENTS FOR NEW AND MODIFIED STATIONARY SOURCES

No permit to construct shall be granted for a new or modified stationary source unless the applicant shows to the satisfaction of the Department that emission standards are met, NAAQS are met, Toxic Air Pollutant standards are met. ***Biopol's compliance with this requirement is documented in Attachment 2 (Emission Calculations) and Attachment 3 (Screening Modeling Report).***

IDAPA 58.01.01.204
PERMIT REQUIREMENTS FOR NEW MAJOR FACILITIES OR MAJOR MODIFICATIONS IN NONATTAINMENT AREAS

New major facilities or major modifications proposed for locations in a nonattainment area and which would be major for the nonattainment regulated air pollutant are considered nonattainment new source review (NSR) actions and are subject to the requirements in Section 204. ***The proposed facility is not a major source and is not being located in a nonattainment area.***

IDAPA 58.01.01.205
PERMIT REQUIREMENTS FOR NEW MAJOR FACILITIES OR MAJOR MODIFICATIONS IN ATTAINMENT OR UNCLASSIFIABLE AREAS

The prevention of significant deterioration (PSD) program is a construction permitting program for new major facilities and major modifications to existing major facilities located in areas in attainment or in areas that are unclassifiable for any criteria air pollutant. ***The proposed facility is not a major source.***

IDAPA 58.01.01.206
OPTIONAL OFFSETS FOR PERMITS TO CONSTRUCT

The owner or operator of any proposed new or modified stationary source, new major facility, or major modification, which cannot meet the requirements of Subsections 202.01.c.vi., 203.02, 203.03, 204.02.d., 205.01 (40 CFR 52.21(k)), and 209.02.b.vi, may propose the use of an emission offset in order to meet those requirements and thereby obtain a permit to construct.

IDAPA 58.01.01.207
REQUIREMENTS FOR EMISSION REDUCTION CREDIT

In order to be credited in a permit to construct, any emission reduction credit must satisfy the requirements of Section 460.

IDAPA 58.01.01.208
DEMONSTRATION OF NET AIR QUALITY BENEFIT

The demonstration of net air quality benefit shall meet requirements for VOCs, Other Regulated Air Pollutants and Mobile sources.

IDAPA 58.01.01.209
PROCEDURE FOR ISSUING PERMITS

General procedures for permits to construct.

IDAPA 58.01.01.210
DEMONSTRATION OF PRECONSTRUCTION COMPLIANCE WITH TOXIC STANDARDS

Affected Emission units

1. U.S. Mites/Small Scale Manufacturing Operations
2. Process Development/Quality Control Laboratory
3. Pollen Processing
4. Spanish Mites Processing

In accordance with Section 203.03, the applicant shall demonstrate preconstruction compliance with Section 161 to the satisfaction of DEQ. The accuracy, completeness, execution, and results of the demonstration are all subject to review and approval by the Department. ***Biopol will be emitting one toxic pollutant, perchloroethylene, above the screening emission level. A refined modeling analysis was performed for perchloroethylene emissions from the Small Scale Manufacturing Building at the volumes Biopol expects to use. The analysis predicted ambient concentrations below the Acceptable Ambient Concentration set forth in IDAPA 58.01.01.586.***

IDAPA 58.01.01.211
CONDITIONS FOR PERMITS TO CONSTRUCT

The Department may impose any reasonable conditions upon an approval.

IDAPA 58.01.01.212
OBLIGATION TO COMPLY

Responsibility to comply with all requirements.

IDAPA 58.01.01.213
PRE-PERMIT CONSTRUCTION

This Section describes how owners or operators may commence construction or modification of certain stationary sources before obtaining the required permit to construct. Biopol is not seeking Pre-permit construction.

IDAPA 58.01.01.214
DEMONSTRATION OF PRECOSTRUCTION COMPLIANCE FOR NEW AND RECONSTRUCTED MAJOR SOURCES OF HAZARDOUS AIR POLLUTANTS

All owners or operators of major sources of hazardous air pollutants which are subject to an applicable Maximum Available Control Technology (MACT) standard promulgated by EPA pursuant to Section 112 of the Clean Air Act and 40 CFR Part 63 shall comply with the applicable MACT standard and such owners or operators are not subject to Subsections 214.04 and 214.05. ***No MACT standards apply to the equipment being installed.***

IDAPA 58.01.01.220
GENERAL EXEMPTION CRITERIA FOR PERMIT TO CONSTRUCT EXEMPTIONS.

Sections 220 through 223 may be used by owners or operators to exempt certain sources from the requirement to obtain a permit to construct. ***No exemption from permitting requirements is being sought.***

IDAPA 58.01.01.221
CATEGORY I EXEMPTION

No permit to construct is required for a source that satisfies the criteria set forth in Section 220 and Section 221.

IDAPA 58.01.01.222
CATEGORY II EXEMPTION

Affected Emission Units:

1. Boilers (5)
2. Air Handling Units (10)
3. Toxic Air Pollutants (facility-wide)

No permit to construct is required for the following sources.
01.d. Stationary internal combustion engines used exclusively for emergency purposes which are operated less than five hundred (500) hours per year and are fueled by natural gas, propane gas, liquefied petroleum gas, distillate fuel oils, residual fuel oils, and diesel fuel; waste oil, gasoline, or refined gasoline shall not be used. ***Since the proposed electric generator will be used for testing in addition to emergency power generation, it does not qualify as an emergency generator, and hence, is not eligible for this exemption.***

02.c. Fuel burning equipment for indirect heating and for heating and reheating furnaces using natural gas, propane gas, liquefied petroleum gas or biogas (gas produced by the anaerobic decomposition of organic material through a controlled process) with hydrogen sulfide concentrations less than two hundred (200) ppmv exclusively with a capacity of less than fifty (50) million BTU per hour input. ***The boilers and air handling units are all rated at less than 50 MMBTU/hr and operate by indirect heat transfer. Therefore, they are eligible for this exemption.***

IDAPA 58.01.01.223
EXEMPTION CRITERIA, RECORDKEEPING, AND REPORTING FOR TOXIC AIR POLLUTANT EMISSIONS

Affected Emission Units:

1. Small Scale Manufacturing Operations
2. Timothy, Birch, and Ragweed Building Fluid Bed Dryers
3. Timothy, Birch, and Ragweed Building Filter/Dryers (De-fatting)

No permit to construct for toxic air pollutants is required for a source that satisfies any of the exemption criteria listed, the recordkeeping requirements at Subsection 220.02, and reporting requirements indicated. ***As indicated above, the facility will emit one toxic air pollutant, perchloroethylene, above the corresponding screening emission level. A refined modeling analysis showed that the resultant ambient concentration will be less than the acceptable ambient concentration level. All other TAPs will be emitted below their respective screening emission levels. Therefore, all TAP emissions should be exempted.***

IDAPA 58.01.01.224
PERMIT TO CONSTRUCT APPLICATION FEE

All applications for a permit to construct shall submit a permit to construct application fee of one thousand dollars ($1,000) to the Department at the time of the original submission of the application. ***The fee is being submitted with the application.***

IDAPA 58.01.01.225
PERMIT TO CONSTRUCT PROCESSING FEE

A permit to construct processing fee, calculated by the Department pursuant to the categories provided in the table, shall be paid to the Department by the person receiving the permit.

IDAPA 58.01.01.226
PAYMENT OF FEES FOR PERMITS TO CONSTRUCT

The permit to construct application fee shall be submitted with the application. ***The fee is enclosed with this application.***

IDAPA 58.01.01.227
RECEIPT AND USAGE OF FEES

Permit to construct application and processing fee receipts shall be deposited by the Department into a stationary source permit account.

IDAPA 58.01.01.228
APPEALS

A person may be able to file an appeal within thirty-five days of the date the person receives an assessment from the Department under Section 225, in accordance with ISAPA 58.01.23, "Rules of Administrative Procedure Before the Board of Environmental Quality".

IDAPA 58.01.01.300 - 399
PROCEDURES AND REQUIREMENTS FOR TIER I OPERATING PERMITS.

The purposes of Sections 300 through 399 are to establish requirements and procedures for the issuance of Tier I operating permits. ***Biopol is not proposing a Tier I operating permit for the proposed construction.***

IDAPA 58.01.01.400 - 410
PROCEDURES AND REQUIREMENTS FOR TIER II OPERATING PERMITS.

The purpose of Sections 400 through 410 is to establish uniform procedures for the issuance of Tier II operating permits. ***Biopol is not proposing a Tier II operating permit for the proposed construction.***

IDAPA 58.01.01.440
REQUIREMENTS FOR ALTERNATIVE EMISSION LIMITS (BUBBLES)

The owner or operator of any facility may apply to the Department for a Tier I or Tier II operating permit (or a revision thereto) to authorize an alternative emission limit for any stationary source or emission unit within the facility. ***Biopol is not applying for an alternative emission limit.***

IDAPA 58.01.01.441
DEMONSTRATION OF AMBIENT EQUIVALENCE

The demonstration of ambient equivalence applies to VOC trades and other trades.

IDAPA 58.01.01.460
REQUIREMENTS FOR EMISSION REDUCTION CREDIT

In order to be credited in a permit to construct, Tier I operating permit or Tier II operating permit any emission reduction must satisfy certain requirements.

IDAPA 58.01.01.461
REQUIREMENTS FOR BANKING EMISSION REDUCTION CREDITS (ERC'S)

Biopol is not requesting the banking of emission reduction credits.

IDAPA 58.01.01.500
REGISTRATION PROCEDURES AND REQUIREMENTS FOR PORTABLE EQUIPMENT

Biopol is not proposing to install portable equipment.

IDAPA 58.01.01.510 - 516
STACK HEIGHTS AND DISPERSION TECHNIQUES

The purpose of Section s 510 through 516 is to establish criteria for good engineering practice for stack heights and dispersion techniques. ***Biopol is not relying on a stack height in excess of GEP stack height in its dispersion modeling analyses.***

IDAPA 58.01.01.550 - 562
AIR POLLUTION EMERGENCY RULE

The purpose of Sections 550 through 562 is to define criteria for an air pollution emergency, to formulate a plan for preventing or alleviating such an emergency, and to specify rules for carrying out the plan. ***Biopol will develop and implement air emergency procedures, if required.***

IDAPA 58.01.01.563 - 574
TRANSPORTATION CONFORMITY

The purpose of Sections 563 through 574 is to adopt and implement Section 176© of the Clean Air Act (CAA), as amended, and the related requirements of 23 USC 109(j), with respect to the conformity of transportation plans, programs and projects developed, funded or approved by the United States Department of Transportation, and by metropolitan planning organizations or other recipients of funds under Title 23 USC or the Federal Transit Laws. ***No transportation planning is required for this permit application.***

IDAPA 58.01.01.575 - 587
AIR QUALITY STANDARDS AND AREA CLASSIFICATION

The purpose of Sections 575 through 587 is to establish air quality standards for the State of Idaho which define acceptable ambient concentrations consistent with established air quality criteria.. ***Biopol has demonstrated through emission calculations and dispersion modeling that it will not adversely impact established ambient air quality standards.***

IDAPA 58.01.01.577
AMBIENT AIR QUALITY STANDARDS FOR SPECIFIC AIR POLLUTANTS (PM_{10}, CO, SO_x, NO_x, Pb, O_3)

IDAPA 58.01.01.577.01 PM_{10} Standards

1. House Vacuum Units (5)
2. Electric Generator
3. Boilers (5)
4. Air Handling Units (10)
5. Manufacturing Process and PD/QC Laboratory Operations

IDAPA 58.01.01.577.01.a Primary and Secondary Standards

IDAPA 58.01.01.577.01.a.i Annual Standard
Fifty (50) micrograms per cubic meter, as an annual arithmetic mean.

IDAPA 58.01.01.577.01.a.ii 24-hour Standard
One hundred fifty (150) micrograms per cubic meter, as a maximum 24-hour concentration.

IDAPA 58.01.01.577.02 Sulfur Oxide Standards

1. Electric Generator
2. Boilers (5)
3. Air Handling Units (10)

IDAPA 58.01.01.577.02.a Primary sulfur oxide standards are:

IDAPA 58.01.01.577.02.a.i Annual Standard
Eighty (80) micrograms per cubic meter, as an annual arithmetic mean.

IDAPA 58.01.01.577.02.a.ii 24-hour Standard
Three hundred sixty-five (365) micrograms per cubic meter, as a maximum 24-hour concentration.

IDAPA 58.01.01.577.02.b Secondary Standards
One thousand three hundred (1,300) micrograms per cubic meter, as a maximum three (3) hour standard.

IDAPA 58.01.01.03 Ozone Standards

Primary and secondary air quality standards are 0.12 ppm (235 micrograms per cubic meter) – maximum one-hour concentrations not to be exceeded more than once per year.

1. Electric Generator
2. Boilers (5)
3. Air Handling Units (10)
4. Manufacturing Process and PD/QC Laboratory Operations

IDAPA 58.01.01.577.04 Nitrogen Dioxide Standards

Primary and secondary air quality standards are one hundred (100) micrograms per cubic meter (0.50 ppm) – annual arithmetic mean.

1. Electric Generator
2. Boilers (5)
3. Air Handling Units (10)

IDAPA 58.01.01.577.05 Carbon Monoxide Standards

Primary and secondary air quality standards are:

1. Electric Generator
2. Boilers (5)
3. Air Handling Units (10)

IDAPA 58.01.01.577.05.a Eight (8) Hour Carbon Monoxide Standard

Ten (10) milligrams per cubic meter (9 ppm) – maximum eight (8) hour standard concentration not to be exceeded more than once per year.

IDAPA 58.01.01.577.05.b One (1) Hour Monoxide Standard

Forty (40) milligrams per cubic meter (35 ppm) – maximum one (1) hour concentration not to be exceeded more than once per year.

IDAPA 58.01.01.578

DESIGNATION OF ATTAINMENT, UNCLASSIFIABLE, AND NONATTAINMENT AREAS

The Department shall annually review the available ambient air quality data and when appropriate, redesignate areas as attainment, unclassifiable, or nonattainment with the standards in 40 CFR Part 50.

IDAPA 58.01.01.579-582
BASELINES FOR PREVENTION OF SIGNIFICANT DETERIORATION

Emissions from the proposed facility will not trigger the PSD requirements.

IDAPA 58.01.01.585
TOXIC AIR POLLUTANTS NON-CARCINOGENIC INCREMENTS

Affected Emission Unit

1. Small Scale Manufacturing Operations (U.S. Mites)
2. Product Development Laboratory
3. Timothy Pollen Fluidized Bed Dryer
4. Timothy Pollen Filter/Dryer (De-fatting)
5. Birch Pollen Fluidized Bed Dryer
6. Birch Pollen Filter/Dryer
7. Ragweed Pollen Fluidized Bed Dryer
8. Ragweed Pollen Filter/Dryer

The screening emissions levels (EL) and acceptable ambient concentrations (AAC) for non-carcinogens are as provided in the table. ***Attachments 2 and 3 demonstrate that the facility will not exceed the AACs for any TAP.***

IDAPA 58.01.01.586
TOXIC AIR POLLUTANTS CARCINOGENIC INCREMENTS

Affected Emission Unit

1. U.S. Mites/Small Scale Manufacturing Operations

The screening emissions levels (EL) and acceptable ambient concentrations (AAC) for carcinogens are as provided in the table.

IDAPA 58.01.01.590
NEW SOURCE PERFORMANCE STANDARDS

The owner or operator of any stationary source shall comply with 40 CFR Part 60 as applicable to the stationary source. Reference NSPS under Federal Requirements. ***The proposed Electric Generator will be subject to and will meet all requirements of the NSPS for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII). Biopol will***

demonstrate compliance with the emission limits by obtaining test data for a similar engine or by conducting a performance test, installing an hour meter, keeping of operating hours and fuel use, and calculating emissions on a monthly basis.

IDAPA 58.01.01.591
NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

The owner or operator of any stationary source shall comply with 40 CFR Part 61 and 40 CFR Part 63 as applicable to the stationary source. Reference NESHAPS under Federal Requirements. ***None. The facility will not emit any HAPs regulated by 40 CFR Part 61 and will not be subject to any of the MACT standards in 40 CFR Part 63.***

IDAPA 58.01.01.600 - 617
RULES FOR CONTROL OF OPEN BURNING

The purpose of Sections 600 through 617 is to reduce the amount of emission and minimize the impact of open burning to protect human health and the environment from air pollutants resulting from open burning. ***Biopol will not conduct any unlawful open burning during construction or operation of the facility.***

IDAPA 58.01.01.625
VISIBLE EMISSIONS

A person shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three (3) minutes in any 60-minute period which is greater than 20 percent (20%) opacity as determined by procedures contained in the Procedures Manual for Air Pollution Control, Section II Evaluation of Visible Emissions Manual.

1. House Vacuum Units (5)
2. Electric Generator
3. Boilers (5)
4. Air Handling Units (10)
5. Timothy Pollen Processing (Fluid Bed Dryer/Separator)
6. Birch Pollen Processing
7. Ragweed Pollen Processing

The Electric Generator will be a 2007 model, certified to meet EPA's Tier 2 engine standards. The other combustion sources will likewise be new units, burning clean fuel (natural gas). The House Vacuum Units and the Fluid Bed Dryers/Separators in the Timothy, Birch, and Ragweed Buildings will incorporate high-efficiency filters. Therefore, no visible emission violations are expected.

IDAPA 58.01.01.650
RULES FOR THE CONTROL OF FUGITIVE DUST

The purpose of Sections 650 through 651 is to require that all reasonable precautions be taken to prevent the generation of fugitive dust. ***There are no fugitive dust sources at the facility.***

IDAPA 58.01.01.651
GENERAL RULES

All reasonable precautions shall be taken to prevent particulate matter from becoming airborne. In determining what is reasonable, consideration will be given to factors such as the proximity of dust emitting operations to human habitations and/or activities and atmospheric conditions which might affect the movement of particulate matter. Some of the reasonable precautions may include, but are not limited to, the following: use of control equipment and paving. ***The facility incorporates highly efficient filtration on particulate sources. All roadways will be paved.***

IDAPA 58.01.01.675
FUEL BURNING EQUIPMENT – PARTICULATE MATTER

The purpose of Sections 675 through 681 is to establish particulate matter emission standards for fuel burning equipment.

1. House Vacuum Units (5)
2. Electric Generator
3. Boilers (5)
4. Air Handling Units (10)

IDAPA 58.01.01.676
STANDARDS FOR NEW SOURCES

A person shall not discharge into the atmosphere from any fuel burning equipment with a maximum rated input of ten (10) million BTUs per hour or more, and commencing operation on or after October 1, 1979, particulate matter in excess of the concentrations shown in the table. Biopol in not expecting to install any equipment with a maximum rated input of ten (10) million BTUs per hour or more. ***None of the sources at the facility have rated heat inputs in excess of 10 MMBTU/hr.***

IDAPA 58.01.01.677 - 681
STANDARDS FOR MINOR AND EXISTING SOURCES

A person shall not discharge into the atmosphere from any fuel burning equipment in operations prior to October 1, 1979, or with a maximum rated input of less than ten (10) million BTU per hour, particulate matter in excess of the concentrations shown in the table. ***There are no sources at the facility that were constructed prior to 1979. All fuel burning equipment is rated at less than 10 MMBTU/hr. Calculations show that particulate emissions are less than 0.05 gr/dscf, corrected to 3% O_2.***

IDAPA 58.01.01.700
PARTICULATE MATTER – PROCESS WEIGHT LIMITATIONS

The purpose of Sections 700 through 703 is to establish particulate matter emission limitations for process equipment.

1. Timothy Pollen Fluid Bed Dryer/Separator
2. Birch Pollen Fluid Bed Dryer/Separator
3. Ragweed Pollen Fluid Bed Dryer/Separator

These sources are equipped with cyclones and HEPA filters for extremely high particulate removal efficiency.

IDAPA 58.01.01.701
PARTICULATE MATTER – NEW EQUIPMENT PROCESS WEIGHT LIMITATIONS

No person shall emit into the atmosphere from any process or process equipment commencing operation on or after October 1, 1979, particulate matter in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour.

If PW is less than 9250 pounds per hour, $E=0.045(PW)^{0.60}$

1. Timothy Pollen Fluid Bed Dryer/Separator
2. Birch Pollen Fluid Bed Dryer/Separator
3. Ragweed Pollen Fluid Bed Dryer/Separator

The lowest limit in this regulation is 1 lb/hr. The Fluid Bed Dryer/Separator will emit approximately 0.003 lb/hr.

IDAPA 58.01.01.702
PARTICULATE MATTER – EXISTING EQUIPMENT PROCESS WEIGHT LIMITATIONS

The facility is not an existing facility.

IDAPA 58.01.01.703
PARTICULATE MATTER – OTHER PROCESSES

No person with processes exempt under Subsection 702.02.b. shall emit particulate matter to the atmosphere from any process or process equipment in excess of the amount shown in the indicated equations and table. ***Biopol is not seeking exemption for any process sources.***

IDAPA 58.01.01.725 - 729
RULES FOR SULFUR CONTENT OF FUELS

The purpose of Sections 725 through 729 is to prevent excessive ground level concentrations of sulfur dioxide from fuel burning sources in Idaho. ***Biopol will purchase diesel fuel that meets these requirements.***

IDAPA 58.01.01.750 - 751
PROCEDURES AND REQUIREMENTS FOR TIER I OPERATING PERMITS

The purpose of Sections 750 through 751 is to prevent the emission of fluorides such that the accumulation of fluorine in feed and forage for livestock does not exceed the safe limits specified. ***The facility will not emit any fluorides.***

IDAPA 58.01.01.760 - 764
RULES FOR THE CONTOL OF AMMONIA FROM DAIRY FARMS

The purpose of Sections 760 through 764 is to set forth the requirements for the control of ammonia through best management practices (BMPs) for certain size dairy farms. ***This requirement does not apply to the Biopol facility.***

IDAPA 58.01.01.775
RULES FOR THE CONTROL OF ODORS

The purpose of Sections 775 through 776 is to control odorous emissions from all sources for which no gaseous emission control rules apply.

IDAPA 58.01.01.776
GENERAL RULES

No person shall allow, suffer, cause or permit the emission of odorous gases, liquids or solids into the atmosphere in such quantities as to cause air pollution. ***Because of nature, type, and design of the facility, it is unlikely that emissions will be injurious to health or interfere unreasonably with the enjoyment of life or property.***

IDAPA 58.01.01.785 - 788
RULES FOR CONTROL OF INCINERATORS

The purpose of Sections 785 through 788 is to prevent excessive emission of particulate matter from incinerators. ***Biopol is not proposing to install an incinerator.***

IDAPA 58.01.01.790 - 799
RULES FOR THE CONTROL OF NONMETALLIC MINERAL PROCESSING PLANTS

The purpose of Sections 790 through 799 is to set forth the requirements for nonmetallic mineral processing plants. ***This regulation does not apply to the proposed facility.***

IDAPA 58.01.01.800 - 802
PERMIT BY RULE

The purposes of Sections 800 through 802 are to establish requirements for permit by rule. ***Biopol is not seeking coverage under a permit by rule.***

IDAPA 58.01.01.805 - 808
RULES FOR CONTROL OF HOT-MIX ASPHALT PLANTS.

The purposes of Sections 805 through 808 are to establish for hot-mix asphalt plants restrictions on the emission of particulate matter. ***This regulation does not apply to the proposed facility.***

IDAPA 58.01.01.815 - 826
RULES FOR CONTROL OF KRAFT PULPING MILLS

The purposes of Sections 815 through 826 are to establish for kraft pulping mills restrictions additional to the general rules presented in this Chapter; to formulate a schedule for compliance with the restrictions; and to formalize the policy of the Department concerning emissions control from kraft pulping mills. ***This regulation does not apply to the proposed facility.***

IDAPA 58.01.01.835 - 839
RULES FOR CONTROL OF RENDERING PLANTS

The purposes of Sections 835 through 839 are to establish for rendering plants limitations on the emission of odors. ***This regulation does not apply to the proposed facility.***

IDAPA 58.01.01.845 - 848
RULES FOR CONTROL OF SULFUR OXIDE EMISSIONS FROM SULFURIC ACID PLANTS

The purposes of Sections 845 through 848 are to establish sulfur oxide emission limits for sulfuric acid plants using elemental sulfur for the production of sulfuric acid. ***This regulation does not apply to the proposed facility.***

IDAPA 58.01.01.855 - 858
COMBINED ZINC AND LEAD SMELTERS

The purposes of Sections 855 through 858 are to establish requirements for combined zinc and lead smelters. ***This regulation does not apply to the proposed facility.***

IDAPA 58.01.01.859 - 860
STANDARDS OF PERFORMANCE FOR MUNICPAL SOLID WASTE LANDFILLS

The purposes of Sections 859 through 860 are to establish requirements for municipal solid waste landfills. ***This regulation does not apply to the proposed facility.***

IDAPA 58.01.01.861 - 862
STANDARDS OF PERFORMANCE FOR HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS

The purposes of Sections 861 through 862 are to establish requirements for hospital/medical/infectious waste incinerators. ***This regulation does not apply to the proposed facility.***

EXEMPTION CRITERIA AND REPORTING REQUIREMENTS FOR TOXIC AIR POLLUTANT (TAP) EMISSIONS CHECKLIST

Department of Environmental Quality - Air Quality Division
Exemption Criteria and Reporting Requirements for Toxic Air Pollutant (TAP) Emissions Checklist

This checklist is designed to assist in documenting that a facility qualifies and complies with the *Exemption Criteria and Reporting Requirements for Toxic Air Pollutants*, IDAPA 58.01.01.223.

☒ Refer to the Rule. Read the *Exemption Criteria and Reporting Requirements for Toxic Air Pollutant Emissions,* IDAPA 58.01.01.223 (Section 223), Rules for the Control of Air Pollution in Idaho.

General Information

☒ Fugitive toxic air pollutant emissions shall not be considered in determining whether a source meets the applicable exemption criteria. A list of toxic air pollutants is given in Section 585 and 586.

☒ Toxic air pollutants are regulated in accordance with Section 210 only from emission units constructed or modified on or after July 1, 1995.

☒ Record Retention. In accordance with Section 220 the source shall maintain documentation on site which shall identify the exemption determined to apply to the source and verify that the source qualifies for the identified exemption. Documentation shall be kept for the life of the source (but not less than five years) or until a permit to construct or operating permit is issued which covers operation of the source.

☒ Annual Report. Facilities that have exempted toxic air pollutant emissions in accordance with a Level I, Level II, or Level III exemption shall submit a report labeled "Toxic Air Pollutant Exemption Report" by May 1 each year for exemptions claimed during the previous 12 month period. The report shall state the date construction has or will commence and shall include copies of all exemption determinations by the owner or operator for Level I, Level II, or Level III exemptions (Section 223.05).

Below Regulatory Concern (BRC) Exemption (Section 223.01)

☒ Calculate the uncontrolled emissions (Section 210.05) of each toxic air pollutant from new emissions units. Uncontrolled emission rates are emissions at maximum capacity without the effect of physical or operational limitations. See Quantification of Emission Rates (Section 210.02). Show calculations and state all assumptions.

☐ Calculate the increase of TAP emissions from modified emissions units. Show calculations and state all assumptions. The increase in emissions for a modified emission unit is determined by subtracting the potential to emit the TAP before the modification from the uncontrolled potential to emit after the modification. In conducting this analysis please note the following for TAP modification determinations:

- Uncontrolled emission rates after the modification are emissions at maximum capacity without the effect of physical or operational limitations.
- When determining the emissions increase from existing permitted emissions units the emission rate before the modification is equivalent to the emission limits contained in the permit for the TAPs or, if there no emission limits in the permit, by determining what the emission rate is under the physical or operational limitations contained in the permit.
- *The modification test for TAPs described above only applies to TAPs and should not be used for other modification tests. For pollutants regulated by the Clean Air Act modification is determined according to Section 006.55 & 007.05.*

☐ Aggregate the uncontrolled emissions of each TAP from new and modified emissions units.

☐ The source qualifies for a BRC exemption if the uncontrolled emission rate for all toxic air pollutants is less than or equal to 10% of the screening emission levels (EL) listed in Section 585 & 586.

Level I Exemption (Section 223.02)

☒ The uncontrolled emission rate from all new and modified emissions units shall be less than the applicable screening emission levels (EL) listed in Section 585 & 586; or the uncontrolled ambient concentration for all toxic air pollutants shall be less than the applicable ambient concentration increment listed in Sections 585 & 586. Calculate and document the uncontrolled emission rate from new and modified sources as described above.

☒ Aggregate the uncontrolled emissions of each TAP from new and modified emissions units.

☐ The source qualifies for a Level I exemption if the aggregated uncontrolled emissions from the new and modified emission units is less than or equal to all applicable screening emission levels (EL) listed in Section 585 and 586.

☐ Model the uncontrolled emissions for each TAP from new emissions units and the increase in emissions from all modified emissions units. Refer to Quantification of Ambient Concentrations (Section 210.03) and the State of Idaho Air Quality Modeling Guideline (http://www.deq.idaho.gov/air/data_reports/publications.cfm#model). Maintain electronic input, output, and BIPinput modeling files.

☒ The source qualifies for a Level I exemption if the uncontrolled ambient concentration from each new and modified emission unit is less than or equal to all applicable acceptable ambient concentration increments listed in Section 585 and 586.

Level II and Level III Exemptions (Sections 223.03 & 223.04)

☐ A stationary source may choose to document a Level II or Level III exemption. However Level II and Level III exemption criteria are more stringent than Level I exemption criteria. Consequently there is little practical use for these levels of exemptions. Therefore, this checklist does not detail Level II or Level III exemption criteria.

TOXIC AIR POLLUTANT (TAP) PRECONSTRUCTION COMPLIANCE APPLICATION COMPLETENESS CHECKLIST

Department of Environmental Quality - Air Quality Division
Toxic Air Pollutant (TAP) Preconstruction Compliance Application Completeness Checklist

This checklist is designed to aid the applicant in submitting a complete preconstruction compliance demonstration for toxic air pollutants (TAPs) in permit to construct applications.

I. Actions Needed Before Submitting Application

☒ Refer to the Rule. Read the Demonstration of Preconstruction Compliance with Toxic Standards contained in IDAPA 58.01.01.210 (Section 210) Rules for the Control of Air Pollution in Idaho. Toxic air pollutants are regulated in accordance with Section 210 only from emission units constructed or modified on or after July 1, 1995.

Determine if a new (constructed after June 30, 1995) emission unit has the potential to emit a toxic air pollutant (TAP) listed in IDAPA 58.01.01.585 (Section 585) or IDAPA 58.0101.586 (Section 586). Potential toxic air pollutants can be determined by reviewing commonly available emission factors, such as EPA's AP-42, or calculating emissions using a mass balance. For toxic air pollutants that are emitted but not listed in Section 585 and 586, contact the Air Permit Hotline at 877-5PERMIT.

Determine if the proposed construction or modification is exempt from the need to obtain a permit to construct in accordance with IDAPA 58.01.01.220-223. Use the Exemption Criteria and Reporting Requirements for Toxic Air Pollutants IDAPA 58.01.01.223 checklist to assist you in the exemption determination. For all sources that do not qualify for an exemption in accordance with IDAPA 58.01.01.220-223 complete the following checklist and submit it with the permit application. Please note that fugitive TAP emissions are not included in the IDAPA 58.01.01.223 exemption determination, but fugitive TAP emissions are included in the analysis if a permit is required.

Will the new or modified source result in new or increased emissions of toxic air pollutants?

☒ Yes. If yes, continue to section II.

☐ No. If no, no further action is required.

II. Application Content

If a new source has the potential to emit a TAP, or if a modification to an existing source increases the potential to emit of a TAP, then one of the following methods (A-J) of demonstrating TAP preconstruction compliance must be documented for each TAP. Standard methods are one of A-C. The applicant may also use one of the specialized methods in D-J. Fugitive TAP emissions shall be included in the analysis. The compliance methods are based on the requirements of Section 210. Applicants are often able to demonstrate preconstruction TAP compliance using a combination of methods A and B.

Emission Calculations

Emissions calculation methodologies used are dependent on whether a specific TAP is a non-carcinogen or a carcinogen and whether the compliance method chosen from the list below calls for controlled or uncontrolled emissions. Non-carcinogens are regulated as a 24-hour averaged increment and values used for comparison to the non-carcinogen screening emissions level (EL) should be the maximum controlled or uncontrolled emissions quantity during any 24-hour period divided by 24. Carcinogens are regulated as a long term increment and values used for

comparison to the carcinogen EL should be the maximum controlled or uncontrolled emissions quantity during any 1 year period divided by 8760.

Modeling Analyses

Atmospheric dispersion modeling is required when applicable TAP emissions quantities exceed ELs. Modeling analyses should be conducted in accordance with IDAPA 58.01.01.210.03. Quantification of Ambient Concentrations and the State of Idaho Air Quality Modeling Guideline (http;//www.deq.idaho.gov/air/data_reports/publications.cfm#model). For non-carcinogen 24-hour increments, compliance is demonstrated using the maximum modeled 24-hour-averaged concentration from available meteorological data (typically a five-year data set). For carcinogen long-term increments, compliance is demonstrated using the maximum modeled average concentration for the duration of the data set (one-year to five-year data set).

A submitted modeling report should clearly specify modeled emissions rates and results. All electronic model input files should be submitted, including BPIP input files.

Compliance Methods

Fill in letter(s) (A-J) from the list below for TAP compliance demonstration method(s) used: A,B.

A. TAPs Compliance Using Uncontrolled Emissions (Section 210.05)

☒ Calculate the uncontrolled emissions (Section 210.05) of each TAP from new emissions units. Uncontrolled emission rates are emissions at maximum capacity without the effect of physical or operational limitations. See Quantification of Emission Rates (Section 210.02). Show calculations and state all assumptions.

☐ Calculate the increase of TAP emissions from modified emissions units. Show calculations and state all assumptions. The increase in emissions for a modified emission unit is determined by subtracting the potential to emit the TAP before the modification from the uncontrolled potential to emit after the modification. In conducting this analysis please note the following for TAP emission rate increase determinations:

Uncontrolled emission rates after the modification are emissions at maximum capacity without the effect of physical or operational limitations.

When determining the emissions increase from existing permitted emissions units the emission rate before the modification is equivalent to the emission limits contained in the permit for the TAPs or, if there no emission limits in the permit, by determining what the emission rate is under the physical or operational limitations contained in the permit.

☐ Aggregate the uncontrolled emissions for each TAP from all new emissions units with the increase in emissions from all modified emissions units.

☒ If the aggregated emissions increase for each TAP from the new and modified units, as determined above, are less than or equal to the respective TAP screening emissions level (EL) then preconstruction compliance with toxic standards has been demonstrated and no further analysis is required. Submit a table comparing the uncontrolled emissions rate to the applicable EL.

If aggregated emissions are greater than the respective screening emissions level (EL) for any pollutants, use another compliance demonstration method for those pollutants, such as methods B, C, or D.

B. TAP Compliance Using Uncontrolled Ambient Concentration (Section 210.06)

☒ Determine the uncontrolled emissions of each TAP from new emission units and the increase in emissions from all modified emissions units as described above in compliance Method A. Show calculations and state all assumptions.

☒ Model the uncontrolled emissions of each TAP from new emissions units and the increase in emissions from all modified emissions units.

☐ If the uncontrolled ambient concentration is less than or equal to the acceptable ambient concentration increment listed in Section 585 and 586 no further procedures for demonstrating preconstruction compliance will be required for that toxic air pollutant as part of the application process. Submit a table comparing uncontrolled ambient concentrations to the applicable acceptable ambient concentration.

C. TAP Compliance Using Controlled Ambient Concentrations (Section 210.08)

☐ Determine the controlled emissions from new emissions units and the controlled emission increase from modified emissions units. Show all calculations and state all assumptions, including the control methods.

☐ Model the controlled emissions of each TAP from new emissions units and the increase in controlled emissions from all modified emissions units.

☐ If the controlled ambient concentration from emission increases from new emissions units and modified emissions units is less than the applicable acceptable ambient concentration no further procedures for demonstrating preconstruction compliance are required.

☐ The Department shall include an emission limit for the toxic air pollutant in the permit to construct that is equal to or, if requested by the applicant, less than the emission rate that was used in the modeling (Section 210.08.c).

In some instances the Department may consider a throughput limit or other inherently-limiting operational restriction in a permit as an effective emission limit for the TAP, rather than a TAP-specific emissions limit. Note that the applicant may model uncontrolled emissions as described in compliance Method B in an attempt to avoid TAPs emissions limitations.

D. TAPs Compliance for NSPS and NESHAP Sources (Section 210.20)

☐ If the owner or operator demonstrates that the toxic air pollutant from the source or modification is regulated by the Department or EPA at the time of the permit issuance under 40 CFR Part 60, 40 CFR Part 61 or 40 CFR Part 63, no further procedures for demonstrating preconstruction compliance will be required for that toxic air pollutant.

☐ Provide a demonstration that the toxic air pollutant is regulated under 40 CFR Part 60, 40 CFR Part 61 or 40 CFR Part 63. This demonstration must be specific for each TAP emitted.

E. TAP Compliance Using Net Emissions (Section 210.09)

An applicant may use TAP net emissions to show preconstruction compliance; however this analysis may require more work than some of the others procedures available to demonstrate preconstruction compliance. When netting, emissions increases and decreases of the TAP that have occurred within five years must be included in the analysis as described below.

☐ Determine the net emission increase for a TAP. A net emissions increase shall be an emission increase from a particular modification plus any other increase and decreases in actual emissions at the facility that are creditable and contemporaneous with particular modification (Section 210.09). Show all calculations and state all assumptions.

☐ A creditable increase or decrease in actual emissions is contemporaneous with a particular modification if it occurs within five (5) years of the commencement of the construction or modification (Section 210.09.a).

Actual emissions are (Section 006.03):

☐ In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two year period which precedes the particular date and which is representative of normal source operation. The Department shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, productions rates, and types of materials processed, stored, or combusted during the selected time period.

☐ The Department may presume that the source-specific allowable emissions for the unit are equivalent to actual emissions of the unit.

☐ For any emission unit (except electric utility steam generating units) that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

☐ Do not include emissions increases from emission units that have an uncontrolled emission rate that is 10% or less than the applicable screening emission level (EL) in Section 585 and 586 (Section 007.09.c.ii) and do not include emission increases from environmental remediation sources (Section 007.09.c.iii). Show all calculations and state all assumptions.

☐ If the net emission increase is less than or equal to the applicable screening emissions level (EL) listed in Section 585 and 586, no further procedures for demonstrating preconstruction compliance will be required (Section 210.09.c).

☐ The Department shall include emission limits and other permit terms for the toxic air pollutant in the permit to construct that will assure that the facility will be operated in the manner described in the preconstruction compliance demonstration (Section 210.09.d).

In some instances the Department may consider a throughput limit or other inherently-limiting operational restriction in a permit as an effective emission limit for the TAP, rather than a TAP-specific emissions limit.

F. TAP Compliance Using Net Ambient Concentration (Section 210.10)

☐ Determine the emission increase from the new source or modification, and all other creditable emission increases and decrease using the methods described above in compliance Method E.

☐ Model the emissions increases and decreases for each TAP. Modeling TAP decreases is accomplished by using negative valued emissions rates in the model input.

☐ If the net ambient concentration is less than or equal to the applicable ambient concentration increment listed in Section 585 and 586, no further procedures for demonstrating preconstruction compliance are required.

☐ The Department shall include emission limits and other permit terms for the toxic air pollutant in the permit to construct that will assure that the facility will be operated in the manner described in the preconstruction compliance demonstration (Section 210.10.d).

In some instances the Department may consider a throughput limit or other inherently-limiting operational restriction in a permit as an effective emission limit for the TAP, rather than a TAP-specific emissions limit.

G. TAP Compliance Using T-RACT Ambient Concentration for Carcinogens (Section 210.12)

The applicant may use T-RACT to demonstrate preconstruction compliance for toxic air pollutants listed in Section 586 only.

T-RACT is an emissions standard based on the lowest emission of toxic air pollutants that a particular source is capable of meeting by application of control technology that is reasonably available, as determined by the Department, considering technological and economic feasibility. If control technology is not feasible, the emission standard may be based on the application of a design, equipment, work practice or operational requirement, or combination thereof (Section 007.16).

T-RACT Submittal Requirements

☐ The applicant shall submit the following information to the Department identifying and documenting which control technologies or other requirements the applicant believes to be T-RACT (Section 210.14).

The technical feasibility of a control technology or other requirements for a particular source shall be determined considering several factors including but not limited to:

- ☐ Process and operating procedures, raw materials and physical plant layout.
- ☐ The environmental impacts caused by the control technology that can not be mitigated, including but not limited to, water pollution and the production of solid wastes.
- ☐ The energy requirements of the control technology.

The economic feasibility of a control technology or other requirement, including the costs of necessary mitigation measures, for a particular source shall be determined considering several factors including, but not limited to:

- ☐ Capital costs.
- ☐ Cost effectiveness, which is the annualized cost of the control technology divided by the amount of emission reduction.
- ☐ The difference in costs between the particular source and other similar sources, if any, that have implemented emissions reductions.

☐ Compare the source's or modification's approved T-RACT ambient concentration to the applicable acceptable ambient concentration increment listed in Section 586 multiplied by a factor of 10. If the sources approved T-RACT concentration is less than or equal to 10 times the applicable acceptable ambient concentration increment listed in Section 586, no further procedures for demonstrating preconstruction compliance will be required.

☐ If an application is submitted to the Department without T-RACT and determined complete, and T-RACT is later determined to be applicable the completeness determination of the application will be revoked until a supplemental application is submitted and determined complete. When the supplemental application is determined complete, the timeline for agency action shall be reinitiated (Section 210.13.b).

☐ If the Department determines that the source has proposed T-RACT, the Department shall develop emission standards to be incorporated into a permit to construct.

In some instances, the Department may consider a throughput limit or other inherently limiting operational restriction in a permit as an effective emission limit for the TAP, rather than a TAP-specific emissions limit.

H. TAP Compliance Using the Short Term Source Factor (Section 210.15)

☐ For short term sources, the applicant may utilize a short term adjustment factor of ten (10) only for a carcinogenic pollutant listed in Section 586. For a carcinogen listed in Section 586 multiply either the applicable acceptable ambient concentration increment or the screening emission rate (EL), but not both, by ten (10) to demonstrate preconstruction compliance (Section 210.15).

☐ A short term source is any new stationary source or modification to an existing source, with an operational life no greater than five (5) years from the inception of any operations to cessation of actual operations (Section 210.15).

I. TAP Compliance for Environmental Remediation Sources (Section 210.16)

☐ For remediation sources subject to or regulated by the Resource Conservation and Recovery Act and the Idaho Rules and Standard for Hazardous Waste, or the comprehensive Environmental Response, Compensation and Liability Act or a consent order, if the estimated ambient concentration is greater than the acceptable ambient impact increment listed in Section 585 and 586, Best Available Control Technology shall be applied and operated until the estimated uncontrolled emission from the remediation source are below the applicable acceptable ambient concentration increment (Section 210.16).

J. TAP Compliance Using Offset Ambient Concentration (Section 210.11)

☐ Contact the Department prior to proposing to utilize Offset Ambient Concentrations to demonstrate preconstruction compliance.

☐ Emission offsets must satisfy the requirements for emission reduction credits (Section 460).

- The proposed level of allowable emissions must be less than the actual emissions of the emissions units providing the offsets (Section 460.01).
- An air quality permit must be issued that restricts the potential to emit of the emission unit providing the offset.
- Emission reduction imposed by local, state or federal regulations or permits shall not be allowed.

☐ Compare the source's or modifications approved emission offset ambient concentration to the applicable acceptable ambient concentration listed in Section 585 and 586. If the source's or modifications approved offset concentration is less than the acceptable ambient concentration listed in Section 585 and 586, no further procedures for demonstrating preconstruction compliance will be required.

☐ The Department shall include emission limits and other permit terms for the toxic air pollutant in the permit to construct that will assure that the facility will be operated in the manner described in the preconstruction compliance demonstration (Section 210.10.d).

MINOR SOURCE PERMIT TO CONSTRUCT APPLICATION COMPLETENESS CHECKLIST

Department of Environmental Quality - Air Quality Division
Minor Source Permit to Construct Application Completeness Checklist

This checklist is designed to aid the applicant in submitting a complete permit to construct application.

I. Actions Recommended Before Submitting Application

☒ Refer to the Rule. Read the Permit to Construct requirements contained in IDAPA 58.01.01.200-228, Rules for the Control of Air Pollution in Idaho. The Rules are available on DEQ's website (go to http://adm.idaho.gov/adminrules/rules/idapa58/0101.pdf).

☒ Refer to DEQ's Permit to Construct Guidance Document. DEQ has developed a guidance document to aid applicants in submitting a complete permit to construction application. The guidance document is located on DEQ's website (go to http://www.deq.idaho.gov/air/permits_forms/permitting/ptc_prepermit_guidance.pdf).

☒ Consult with DEQ Representatives. It is recommended that the applicant consult with DEQ to discuss application requirements before submitting the permit to construct application. The consultation can be in person or on the phone. Contact DEQ's Air Quality Hotline at **877-5PERMIT** to schedule the consultation. ***Meeting with DEQ was held 1/31/07.***

☒ Submit Ambient Air Quality Modeling Protocol. It is required that an ambient air quality modeling protocol be submitted to DEQ at least two (2) weeks before the permit to construct application is submitted. Contact DEQ's Air Quality Hotline at **877-5PERMIT** for information about the protocol. ***Note: Protocol is not required, per 2/16/07 discussion with Mr. Kevin Schilling, Modeling and Analysis Section.***

II. Application Content

Application content should be prepared using the checklist below. The checklist is based on the requirements contained in IDAPA 58.01.01.202.

☒ Apply for a Permit to Construct. Submit a Permit to Construct application using forms available on DEQ's website at http://www.deq.idaho.gov/air/permits_forms/forms/ptc_general_application.pdf. ***See attached forms***

☒ Permit to Construct Application Fee. The permit to construct application fee must be submitted at the time the original pre-permit construction approval application is submitted. Refer to IDAPA 58.01.01.224. ***Fee enclosed with application.***

☒ Process Description(s). The process or processes for which construction is requested must be described in sufficient detail and clarity such that a member of the general public not familiar with air quality can clearly understand the proposed project. A process flow diagram is required for each process for which pre-permit construction approval is requested. ***See Attachment 1.***

☒ Equipment List. All equipment that will be used for which construction is requested must be described in detail. Such description includes, but is not limited to, manufacturer, model number or other descriptor, serial number, maximum process rate, proposed process rate, maximum heat input capacity, stack height, stack diameter, stack gas flowrate, stack gas temperature, etc. All equipment that will be used for which construction is requested must be clearly labeled on the process flow diagram. ***See application forms and Attachment 1, Process Description.***

☒ Potential to Emit. Submit the uncontrolled potential to emit (pre-control equipment emissions estimates) and the controlled potential to emit (post-control equipment emissions estimates) for all equipment for which construction is requested. Any limit on the equipment for which is construction is requested may become a limit on that equipment in the permit to construct. ***See Attachment 2, Emission Calculations.***

☒ Potential to Emit and Modeled Ambient Concentration for All Regulated Air Pollutants. All proposed emission limits and modeled ambient concentrations for all regulated air pollutants must demonstrate compliance with all applicable air quality rules and regulations. Regulated air pollutants include criteria air pollutants, toxic air pollutants listed pursuant to IDAPA 58.01.01.585 and 586, and hazardous air pollutants listed pursuant to Section 112 of the 1990 Clean Air Act Amendments (go to http://www.epa.gov/ttn/atw/188polls.html). Describe in detail how the proposed emissions limits and modeled ambient concentrations demonstrate compliance with each applicable air quality rule and regulation. It is requested that emissions calculations, assumptions, and documentation be submitted with sufficient detail so DEQ can verify the validity of the emissions estimates. ***See Attachment 3, Screening Modeling Report for Toxic Air Pollutants (Tetrachloroethylene)***

☒ Scaled Plot Plan. It is required a scaled plot plan be included in the permit to construct application and must clearly label the location of each proposed process and the equipment that will be used in the process. ***See Form PP and attachment.***

☒ List all Applicable Requirements. All applicable requirements must be cited by the rule or regulation section/subpart that applies for each emissions unit. ***See Form FRA and Attachment 4, Applicability of Idaho Regulations.***

☒ Certification of Permit to Construct Application. The permit to construct application must be signed by the Responsible Official and must contain a certification signed by the Responsible Official. The certification must state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Refer to IDAPA 58.01.01.123. ***See Form GI.***

☒ Submit the Permit to Construct Application. Submit the permit to construct application and processing fee to the following address:

Air Quality Program Office – Application Processing
Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706-1255

Per 1/31/07 discussion with DEQ, application was submitted to Mr. William Rogers, Regional Permit Program Coordinator.