

# Attachment I: Prevention of Significant Deterioration of Air Quality (PSD) Program Form

Applicant Name: \_\_\_\_\_

<b>DEEP USE ONLY</b>
App. No.: _____

Complete this form in accordance with the [instructions](#) (DEEP-NSR-INST-216) to ensure the proper handling of your application. Print or type unless otherwise noted.

Complete a separate form for each unit that is part of this application package.

Questions? Visit the [Air Permitting](#) web page or contact the Air Permitting Engineer of the Day at 860-424-4152.

**Note:** This form is not required if Current Premises Potential Emissions and Proposed Allowable Emissions (from Part VII.B of *Attachment F: Premises Information Form - DEEP-NSR-APP-217*) from this project are each less than major source thresholds for each pollutant. (i.e. an existing minor premises adds a minor source which results in the premises becoming a new major source.)

## Part I: Applicability

### A. Project with Proposed Allowable Emissions Greater than Major Stationary Source Thresholds Located at an Existing Minor Stationary Source (Premises)

<p>Indicate the pollutants for which the project will be classified as a major stationary source as indicated in Part VII.B of Attachment F. (Check all that apply.)</p>	<table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> PM</td> <td><input type="checkbox"/> VOC</td> </tr> <tr> <td><input type="checkbox"/> PM<sub>10</sub></td> <td><input type="checkbox"/> CO</td> </tr> <tr> <td><input type="checkbox"/> PM<sub>2.5</sub></td> <td><input type="checkbox"/> Pb</td> </tr> <tr> <td><input type="checkbox"/> SO<sub>2</sub></td> <td><input type="checkbox"/> CO<sub>2</sub>e and GHG</td> </tr> <tr> <td><input type="checkbox"/> NO<sub>x</sub></td> <td></td> </tr> </table>	<input type="checkbox"/> PM	<input type="checkbox"/> VOC	<input type="checkbox"/> PM <sub>10</sub>	<input type="checkbox"/> CO	<input type="checkbox"/> PM <sub>2.5</sub>	<input type="checkbox"/> Pb	<input type="checkbox"/> SO <sub>2</sub>	<input type="checkbox"/> CO <sub>2</sub> e and GHG	<input type="checkbox"/> NO <sub>x</sub>	
<input type="checkbox"/> PM	<input type="checkbox"/> VOC										
<input type="checkbox"/> PM <sub>10</sub>	<input type="checkbox"/> CO										
<input type="checkbox"/> PM <sub>2.5</sub>	<input type="checkbox"/> Pb										
<input type="checkbox"/> SO <sub>2</sub>	<input type="checkbox"/> CO <sub>2</sub> e and GHG										
<input type="checkbox"/> NO <sub>x</sub>											

The project is subject to PSD review for each pollutant that is checked above. Complete Part II of this form for all other pollutants.

### B. Any Project Located at an Existing Major Stationary Source (Premises)

If the project is located at an existing major stationary source (prior to the subject equipment being permitted), complete *Attachment H: Major Modification Determination Form* (DEEP-NSR-APP-213) before completing this form.

<p>Indicate the pollutants for which the project will be considered a major modification as indicated in Part V of Attachment H. (Check all that apply.)</p>	<table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> PM</td> <td><input type="checkbox"/> VOC</td> </tr> <tr> <td><input type="checkbox"/> PM<sub>10</sub></td> <td><input type="checkbox"/> CO</td> </tr> <tr> <td><input type="checkbox"/> PM<sub>2.5</sub></td> <td><input type="checkbox"/> Pb</td> </tr> <tr> <td><input type="checkbox"/> SO<sub>2</sub></td> <td><input type="checkbox"/> CO<sub>2</sub>e and GHG</td> </tr> <tr> <td><input type="checkbox"/> NO<sub>x</sub></td> <td></td> </tr> </table>	<input type="checkbox"/> PM	<input type="checkbox"/> VOC	<input type="checkbox"/> PM <sub>10</sub>	<input type="checkbox"/> CO	<input type="checkbox"/> PM <sub>2.5</sub>	<input type="checkbox"/> Pb	<input type="checkbox"/> SO <sub>2</sub>	<input type="checkbox"/> CO <sub>2</sub> e and GHG	<input type="checkbox"/> NO <sub>x</sub>	
<input type="checkbox"/> PM	<input type="checkbox"/> VOC										
<input type="checkbox"/> PM <sub>10</sub>	<input type="checkbox"/> CO										
<input type="checkbox"/> PM <sub>2.5</sub>	<input type="checkbox"/> Pb										
<input type="checkbox"/> SO <sub>2</sub>	<input type="checkbox"/> CO <sub>2</sub> e and GHG										
<input type="checkbox"/> NO <sub>x</sub>											

The project is subject to PSD review for each pollutant that is checked above. Complete Part II of this form for all other pollutants.

## Part II: Additional Pollutant PSD Applicability

In addition to the pollutants previously indicated, PSD review must be completed for every other pollutant that has a total project emissions increase and a net emissions increase that are greater than the significant emission rate thresholds in [Table 3a\(k\)-1](#) of RCSEA section 22a-174-3a(k) even if the premises is not major for that pollutant.

Indicate in the following table the pollutants that the source emits (that were not checked in Part I of this form) and enter the total proposed project emissions increase.

### A. Total Project Emissions Increase

Pollutant	Project Emits Pollutant?	Total Project Proposed Potential Emissions (tpy)	Total Project 2-yr Actual Emissions, if modification (tpy)	Total Project Emissions Increase (tpy)	Significant Emission Rate Threshold (tpy)	Is TOTAL PROJECT EMISSIONS INCREASE greater than the SIGNIFICANT EMISSION RATE THRESHOLD?
PM	<input type="checkbox"/>				25	<input type="checkbox"/> Yes <input type="checkbox"/> No
PM <sub>10</sub>	<input type="checkbox"/>				15	<input type="checkbox"/> Yes <input type="checkbox"/> No
PM <sub>2.5</sub>	<input type="checkbox"/>				10	<input type="checkbox"/> Yes <input type="checkbox"/> No
SO <sub>2</sub> (as a PM <sub>2.5</sub> precursor)	<input type="checkbox"/>				40	<input type="checkbox"/> Yes <input type="checkbox"/> No
SO <sub>2</sub> (NAAQS)	<input type="checkbox"/>				40	<input type="checkbox"/> Yes <input type="checkbox"/> No
NO <sub>x</sub> (as an ozone precursor)	<input type="checkbox"/>				25	<input type="checkbox"/> Yes <input type="checkbox"/> No
NO <sub>x</sub> (as a PM <sub>2.5</sub> precursor)	<input type="checkbox"/>				40	<input type="checkbox"/> Yes <input type="checkbox"/> No
NO <sub>x</sub> (NAAQS)	<input type="checkbox"/>				40	<input type="checkbox"/> Yes <input type="checkbox"/> No
CO	<input type="checkbox"/>				100	<input type="checkbox"/> Yes <input type="checkbox"/> No
VOC	<input type="checkbox"/>				25	<input type="checkbox"/> Yes <input type="checkbox"/> No
Pb	<input type="checkbox"/>				0.6	<input type="checkbox"/> Yes <input type="checkbox"/> No
H <sub>2</sub> S	<input type="checkbox"/>				10	<input type="checkbox"/> Yes <input type="checkbox"/> No
Reduced Sulfur & Compounds	<input type="checkbox"/>				10	<input type="checkbox"/> Yes <input type="checkbox"/> No

**A. Total Project Emissions Increase, continued**

Pollutant	Project Emits Pollutant?	Total Project Proposed Potential Emissions (tpy)	Total Project 2-yr Actual Emissions, if modification (tpy)	Total Project Emissions Increase (tpy)	Significant Emission Rate Threshold (tpy)	Is TOTAL PROJECT EMISSIONS INCREASE greater than the SIGNIFICANT EMISSION RATE THRESHOLD?
Sulfuric Acid Mist	<input type="checkbox"/>				7	<input type="checkbox"/> Yes <input type="checkbox"/> No
Fluorides	<input type="checkbox"/>				3	<input type="checkbox"/> Yes <input type="checkbox"/> No
Mercury	<input type="checkbox"/>				0.1	<input type="checkbox"/> Yes <input type="checkbox"/> No
MWC Organics	<input type="checkbox"/>				3.5E-6	<input type="checkbox"/> Yes <input type="checkbox"/> No
MWC Metals	<input type="checkbox"/>				15	<input type="checkbox"/> Yes <input type="checkbox"/> No
MWC Acid Gases	<input type="checkbox"/>				40	<input type="checkbox"/> Yes <input type="checkbox"/> No
CO <sub>2</sub> e	<input type="checkbox"/>				75,000	<input type="checkbox"/> Yes <input type="checkbox"/> No

<p>The Total Project 2- yr Actual Emissions must be based on actual emissions for the two years immediately preceding the proposed modification. New units would enter a “0” since they did not previously exist. If the most recent two year period was not selected as the representative two year period for actual emissions above, check here and submit written justification for using a period other than the most recent two years of actual emission as Attachment 216-A.</p>	<input type="checkbox"/> Attachment 216-A
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**If “No”:**

This pollutant *is not* subject to PSD Review and the PSD Review determination is complete.

**If “Yes” and the project is located at an existing minor stationary source (i.e. completed Part I.A of this form):**

This pollutant *is* subject to PSD Review. Continue to Part III.

**If “Yes” and the project is located at an existing major stationary source (i.e. completed Part I.B of this form):**

Continue on to Parts II.B and C for the subject pollutant.

**B. Contemporaneous Creditable Emissions Increases and Decreases**

Provide the following information for all contemporaneous creditable emissions increases and decreases during the 5-year contemporaneous period determined in Part II of *Attachment H: Major Modification Determination Form*. Calculate the *Total Contemporaneous Increases/Decreases* for the subject pollutant and enter the results in Part I.C. Duplicate this page if necessary.

Change Type (NEW, MOD, REM, PBR, DB)	Equipment Description	License or Regulation No. (P)	Date of Change	Pollutants (tpy)										
				New ACT	2-yr ACT	New ACT	2-yr ACT	New ACT	2-yr ACT	New ACT	2-yr ACT	New ACT	2-yr ACT	
			/ /											
			/ /											
			/ /											
			/ /											
			/ /											
			/ /											
			/ /											
<b>Totals (tpy)</b>														
<b>TOTAL CONTEMPORANEOUS INCREASES/DECREASES (tpy) (New ACT – 2-yr ACT)</b>														

The 2-yr ACT emissions for each unit listed in Part II.B must be based on the average actual emissions for the two years immediately preceding the change. New units would enter a "0" since they did not previously exist. If the most recent two year period was not selected as the representative two year period for actual emissions for any changed unit, check here and submit written justification for using a period other than two years of actual emissions immediately preceding the change as Attachment 216-B.

Attachment 216-B

**C. Emissions Summation**

Add the *Total Project Emission Increase* values from Part II.A of this form to the *Total Contemporaneous Increases/Decreases* value from Part II.B of this form to calculate the *Net Emissions Increase* for the subject pollutant.

Pollutant	Total Project Emissions Increase (tpy)	Total Contemporaneous Increases/Decreases	Net Emissions Increase	Significant Emission Rate Threshold <a href="#">(RCSA §22a-174-3a(k), Table 3a(k)-1)</a>	Is NET EMISSIONS INCREASE equal to or greater than SIGNIFICANT EMISSION RATE THRESHOLD?
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes <input type="checkbox"/> No

**If “No”:**  
This pollutant *is not* subject to PSD Review and the PSD Review determination is complete.

**If “Yes”:**  
This pollutant *is* subject to PSD Review. Continue to Part III.

### Part III: Attachments

Complete this part for each pollutant subject to PSD review as indicated in Parts I and II of this form.

Please check the attachments being submitted as verification that all applicable attachments have been submitted with this application form. When submitting such documents, please label the documents as indicated in this Part (e.g., Attachment 216-A, etc.) and be sure to include the applicant's name. All Attachments are **REQUIRED**.

<p><b>Best Available Control Technology (BACT) Determination</b></p> <p>Submit a BACT analysis for each pollutant subject to PSD review. The owner or operator of any source subject to PSD shall install BACT as approved by the commissioner. Please complete <i>Attachment G: BACT Determination Form</i> (DEEP-NSR-APP-214) and attach it as Attachment 216-A.</p> <p>Include a detailed description as to what system of continuous emission reduction is planned for the subject source or modification, emission estimates, or any other information necessary to demonstrate that BACT will be applied.</p> <p>[RCSA sections 22a-174-3a(k)(4); -3a(k)(8)(A)(v)]</p>	<input type="checkbox"/> <b>Attachment 216-C</b>
<p><b>Air Quality Analysis</b></p>	
<p><b>Ambient Monitoring Analysis</b></p> <p>Submit an analysis of the effect on ambient air quality in the area of the subject source or modification for pollutants that have allowable emissions in excess of the amount listed in Table 3a(k)-1 of RCSA section 22a-174-3a(k)-1 <i>or</i> those listed in RCSA section 22a-174-24. The analysis shall meet the requirements of RCSA section 22a-174-3a(k)(5). [RCSA section 22a-174-3a(k)(5)]</p>	<input type="checkbox"/> <b>Attachment 216-D</b>
<p><b>Source Impact Analysis</b></p> <p>Submit a source impact analysis of the effects on ambient air quality in the area of the subject source or modification for pollutants that will have an impact on air quality equal or greater than any amount listed in Table 3a(i)-1 of RCSA section 22a-174-3a(i) or any applicable maximum allowable increase above baseline concentration established in Table 3a(k)-2 of RCSA section 22a-174-3a(k). The analysis shall meet the requirements of RCSA section 22a-174-3a(k)(6). [RCSA section 22a-174-3a(k)(6)]</p>	<input type="checkbox"/> <b>Attachment 216-E</b>
<p><b>Ambient Air Quality Analysis</b></p> <p>Submit an ambient air quality analysis in accordance with RCSA section 22a-174-3a(i), of the effect of the pollutants listed in Table 3a(k)-1 of RCSA section 22a-174-3a(k). [RCSA section 22a-174-3a(k)(7)]</p>	<input type="checkbox"/> <b>Attachment 216-F</b>
<p><b>Additional Source Information</b></p>	
<p><b>Visibility, Soils, Vegetation and Growth Analysis</b></p> <p>Submit an analysis of the impairment to visibility, soils, and vegetation that would result from construction and operation of the subject source or modification, and an analysis of the general commercial, residential, industrial and other associated growth. The applicant does not need to provide an analysis of the impact on vegetation having no significant commercial or residential value. [RCSA section 22a-174-3a(k)(8)(A)(i)]</p>	<input type="checkbox"/> <b>Attachment 216-G</b>

### Part III: Attachments (continued)

<p><b>Growth and Ambient Air Impact Analysis</b></p> <p>Submit an analysis of the ambient air quality impact projected for the area as a result of the general commercial, residential, industrial, and other growth associated with the subject source or modification. [RCSA section 22a-174-3a(k)(8)(A)(ii)]</p>	<p><input type="checkbox"/> <b>Attachment 216-H</b></p>
<p><b>Project Description and Operating Schedule</b></p> <p>Submit a description of the nature, location, design capacity and typical operating schedule of the subject source or modification, including specifications and drawings showing its design and plant layout. [RCSA section 22a-174-3a(k)(8)(A)(iii)]</p>	<p><input type="checkbox"/> <b>Attachment 216-I</b></p>
<p><b>Construction Schedule</b></p> <p>Submit a schedule for construction of the subject source or modification. [RCSA section 22a-174-3a(k)(8)(A)(iv)]</p>	<p><input type="checkbox"/> <b>Attachment 216-J</b></p>