Attachment L: Ambient Impact Analysis Form

Applicant Name: _____

Complete this form in accordance with the instructions (DEEP-NSR-INST-218) to ensure the proper handling of your application. Print or type unless otherwise noted.

Questions? Visit the Air Permitting web page or contact the Air Permitting Engineer of the Day at DEEP.BAM.AirPermits@ct.gov or 860-424-4152.

Part I. Applicability

For each pollutant, enter the proposed allowable emissions from *Attachment E212: Unit Emissions Supplemental Application Form* (DEEP-NSR-APP-212) and indicate which review is required for each pollutant. For modifications, indicate if the proposed allowable emissions are greater than current allowable emissions.

Pollutant	Proposed Allowable Emissions (TPY)	Ambient Air Quality Review Level						For Modifications Only
		Stack Height Review		Screening		Refined Modeling		Are Proposed Allowable Emissions Greater than Current Allowable Emissions?
PM_{10}		☐	<3 tpy	☐	≥3 tpy & <15 tpy	☐	≥15 tpy	☐ Yes ☐ No
$PM_{2.5}$ Total (filterable + condensable)		☐	<1 tpy	☐	≥1 tpy & <10 tpy	☐	≥10 tpy	☐ Yes ☐ No
SO_2		☐	<3 tpy	☐	≥3 tpy & <15 tpy	☐	≥15 tpy	☐ Yes ☐ No
NOx		☐	<5 tpy	☐	≥5 tpy & <40 tpy	☐	≥40 tpy	☐ Yes ☐ No
CO		☐	<5 tpy	☐	≥5 tpy & <100 tpy	☐	≥100 tpy	☐ Yes ☐ No
Pb		☐	<0.6 tpy	--		☐	≥0.6 tpy	☐ Yes ☐ No
Total Dioxins		--		--		☐	≥0.6×10^{-7} tpy	☐ Yes ☐ No

For Modifications: If the proposed allowable emissions are greater than the current allowable emissions for any pollutant, or any stack parameter has changed (stack height, flowrate, etc.), the associated Ambient Air Quality Reviews must be completed or revisited.

Part II. Stack Height Review

Complete this Part if a Stack Height Review is required in Part I for any pollutant. This Part is not required for sources performing a Screening Modeling Analysis or a Refined Modeling Analysis. Instead, complete Part III and/or IV of this form as appropriate.

A unit passes the stack height review if the associated stack is greater than or equal to the greater of (1) 10 meters (32.8 ft) or (2) the lesser of 1.3 times the building height or 1.3 times the building width. The referenced building is the building the unit is located in; or if the unit is outdoors, the closest building or structure.

If a unit does not pass the Stack Height Review, a Screening Modeling or Refined Modeling Analysis may be performed to demonstrate compliance with the Ambient Air Quality Standards.

Stack No.	Stack Height (SH) (feet)	Building or Structure No. (Building)	Building Height (BH) (feet)	Building Width (BW) (ft)	Multiply the lesser of BH or BW by 1.3 (BL) (ft)	Minimum Stack Height Required… Which is greater, 32.8 ft or BL? (MSH)	Is SH Greater Than or Equal to MSH? If yes, review is complete.
						☐ 32.8 ft. ☐ BL	☐ Yes ☐ No
						☐ 32.8 ft. ☐ BL	☐ Yes ☐ No
						☐ 32.8 ft. ☐ BL	☐ Yes ☐ No
						☐ 32.8 ft. ☐ BL	☐ Yes ☐ No
						☐ 32.8 ft. ☐ BL	☐ Yes ☐ No
						☐ 32.8 ft. ☐ BL	☐ Yes ☐ No
						☐ 32.8 ft. ☐ BL	☐ Yes ☐ No
						☐ 32.8 ft. ☐ BL	☐ Yes ☐ No

☐ Check here if additional sheets are necessary, and label and attach them to this sheet.

Part III. Screening

Complete this Part if Screening is required for any pollutant in Part I above.

Complete this Part to provide the stack parameter and all required building or structure information in order for a screening ambient air quality analysis to be completed. See instructions for an example and use the same stack and unit numbering from *Attachment E211: Stack Parameters Supplemental Application Form* (DEEP-NSR-APP-211).

The screening analysis will be performed by DEEP, however, the applicant may also perform this review and submit it for review and approval. If applicable, please submit a completed analysis as Attachment 218-B.

Unit/ Building No.	Description	Height H (feet)	Length L (feet)	Width W (feet)	Distance to…					
					Stack No. (feet)	Stack No. (feet)	Stack No. (feet)	Stack No. (feet)	Stack No. (feet)	Nearest Property Boundary (feet)
A. Equipment (number and description)										
B. Building or Structure (number and name)										

☐ Check here if additional sheets are necessary, and label and attach them to this sheet.

Part IV. Refined Modeling

If Refined Modeling is required for any pollutant as indicated in Part I above, the applicant shall submit both a paper copy and an electronic copy of the refined modeling analysis as Attachment 218-C. Such analysis shall be performed in accordance with the DEEP Ambient Impact Analysis Guideline (AIAG).

It is recommended that applicants request a pre-application meeting to specifically discuss refined modeling issues prior to submitting their application. Requests for a modeling pre-application meeting can be sent to Mark.DeRosa@ct.gov.

Part V. Attachments

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 218-A, etc.) and be sure to include the applicant's name.

☐ Attachment 218-A:	*Plot Plan* – Submit a detailed plot plan of the facility with all structures, stack locations, and property lines clearly delineated with the unit, stack and building numbers used throughout this application. In addition, you may submit sketches, aerial photos, or other site plans to aid in the identification of buildings or structures listed in Part III.B and their locations with respect to the stacks listed in Part III.A. You may use the site plan submitted as Attachment C of this application as long as all buildings or structures listed in Part III.B and their locations with respect to the stacks listed in Part III.A are properly identified. **IF APPLICABLE**
☐ Attachment 218-B:	*Screening Analysis* – If the applicant opted to perform the screening analysis, submit both a paper copy and an electronic copy of such completed screening analysis for DEEP review and approval. **IF APPLICABLE**
☐ Attachment 218-C:	*Refined Modeling Analysis* – Submit both a paper copy and an electronic copy of the completed refined modeling analysis for DEEP review and approval. **IF APPLICABLE**