

# FORM D3

## MODELING REQUEST FORMS (3 pages)

REVISED: 06/11/09

NCDENR/Division of Air Quality - Application for Air Permit to Construct/Operate

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If the applicant desires, the NCDAQ/AQAB will perform the initial modeling compliance demonstration using EPA approved screening and, if applicable and where possible, refined models. If the model results indicate the facility will be unable to demonstrate compliance with applicable Acceptable Ambient Level(s) the applicant will be notified and will be required to perform the compliance demonstration using established modeling protocol and modeling analysis requirements as defined in the North Carolina Administrative Code 15A NCAC 2D .1100 and 2Q .0700 and in the Guidelines for Evaluating the Impacts of Toxic Pollutants in North Carolina.

To perform the dispersion modeling compliance demonstration, the AQAB will require the following data:

**1. INTRODUCTION**

Provide a brief description of the modification and/or addition necessitating the toxic modeling request:

  
  
  
  
  
  
  
  
  
  
  
  
  
  

**2. EMISSIONS DATA - Facility-wide emissions, by source, of all modeled toxics.**

CRITERIA OR TOXIC AIR POLLUTANT (TAP)	MAXIMUM TOXIC AIR POLLUTANT (TAP) EMISSIONS (After Controls)			
	Emission Point ID	lbs/year	lbs/day	lbs/hr

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<b>3. SOURCE DATA</b>	Source data requirements are based on the appropriate source classification. Each emission source is classified as a point, area, or volume source. Note: For fugitive area or volume source data, contact DAQ/AQAB.
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POINT SOURCE	STACK DATA					
Emission Point ID						
Stack Description						
Stack Height (ft or m) - AGL						
Stack Temperature (°F or °K)						
Stack Exit Velocity (ft/s or m/s)						
Stack Diameter (ft or m)						
Stack Base Elevation (ft) - MSL						
Stack UTM Coordinates (m)	E					
NAD version 27 / 83 (circle one)	N					
	Zone					
Latitude	° N					
Longitude	° W					
Rain Cap? (Y/N)						
Vertical Stack? (Y/N)						

AREA SOURCE (contact DAQ for clarification of input data requirements)	AREA SOURCE DATA (for each area source, submit a separate detailed description of the area source, to include dimensions of the area and elevations. Also include source on site map.)					
Emission Point ID						
Source Description						
Area Source Height (ft or m) - AGL						
Area Source Length (ft or m)						
Area Source Width (ft or m)						
Source Base Elevation (ft) - MSL						
Area Source UTM Coordinates (m)	E					
NAD version 27 / 83 (circle one)	N					
	Zone					
Latitude	° N					
Longitude	° W					

VOLUME SOURCE (contact DAQ for clarification of input data requirements)	VOLUME SOURCE DATA (for each volume source, submit a separate detailed description of the volume source, to include dimensions of the volume source where emissions begin to disperse.)					
Emission Point ID						
Source Description						
Volume Source Height (ft or m) - AGL						
Volume Source Length (ft or m)						
Volume Source Bldg Height (ft or m)						
Source base Elevation (ft) - MSL						
Volume Source UTM Coordinates (m)	E					
NAD version 27 / 83 (circle one)	N					
	Zone					
Latitude	° N					
Longitude	° W					

ft- feet	AGL- Above Ground level	m/s- meters per second	Kelvin (degrees)=273+(°F-32) x 5/9)
m- meters	UTM- Universal Transverse Mercator	MSL- Mean Sea Level	

**Attach Additional Sheets As Necessary**

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**4. SITE DATA**

A detailed site diagram must be submitted and should include all of the information listed below:

- Property boundaries
- Scale and true north indicator
- All existing and proposed buildings or structures on site
- Locations of all emission sources (existing and proposed) listed in Section 2, Page 1 of Form D3
- All public rights-of-way traversing the property ( e.g. roads, railroad tracks, rivers, etc.)
- UTM coordinates or latitude/longitude of at least one point (e.g. source or building corner)

A USGS Contour Map must also be submitted with the location of your facility clearly designated.

A certified plat map from County Register of Deeds or a signed survey map.

<b>5. BUILDING DATA</b>	List each building. List tiers of different heights on a single building as separate buildings.
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Building ID						
Building Description						
Building Height (ft or m)						
Building Length (ft or m)						
Building Width (ft or m)						

**6. MISCELLANEOUS DATA**

Facility Operating Limits  
(Operating hours, fuel limits,  
or other enforceable limits) \_\_\_\_\_  
\_\_\_\_\_

If an operating schedule is not given, continuous operations will be assumed (i.e. 24 hours/day, 8760 hours/year).

Note: if compliance is demonstrated using the above facility operating limits, these limits will be imposed as a permit restriction.

**7. FACILITY IDENTIFICATON**

Facility Name: \_\_\_\_\_

Facility ID: \_\_\_\_\_

Facility Address      Street: \_\_\_\_\_  
                                 City: \_\_\_\_\_  
                                 County: \_\_\_\_\_

Point of Contact      Name: \_\_\_\_\_  
                                 Title: \_\_\_\_\_  
                                 Phone: \_\_\_\_\_  
                                 Email: \_\_\_\_\_