SECTION D



TOXIC MODELING WORKSHEET

REVISED 7/20/2001 FORSYTH COUNTY-APPLICATION FOR AIR PERMIT TO CONSTRUCT AND OPERATE

If the applicant desires, the FCEAD 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 for one or more pollutants, the applicant will be notified and will be required to perform the compliance demonstration using established modeling protocol and modeling analysis requirements as defined by the Forsyth County Air Quality Technical Code (FCAQTC) Rules 3D .1100 and 3Q .0700 and in the North Carolina Division of Air Quality document, *Guidelines for Evaluating Air Quality Impacts of Toxic Pollutants in North Carolina*.

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

Provide a brief description of the facility, new source, or source **1. INTRODUCTION** modification. Facility- wide emission, by source, of all toxic(Rule 3Q .0704 Rule 3Q .0705(b) or (c), or Rule 3Q .0712) or all toxic affected by the new source 2. EMISSIONS DATA of modification (Rule 3Q.0706 or Rule 3Q.0708) must be listed (as applicable). MAXIMUM TOXIC AIR POLLUTANT (TAP) EMISSIONS TOXIC AIR POLLUTANT (TAP) (after controls) lbs/year lbs/24 hours Pollutant Name CAS# Source Id. lbs/hour

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3. SOURCE DATA	Source data requirements are based on the appropriate source classification- each source emission is classified as a point, area, or volume source. NOTE: fugitive sources (individually or grouped) should be classified as a point, area or volume source.	Ł
Point Source	STACK DATA	
Source ID		
Stack Description		
Stack Height (m) - AGL		
Stack Temperature (Kelvin)		
Stack Exit Velocity (m/s)		
Stack Diameter (m)		
Stack Base Elevation (m) - MSL		
Stack UTM Coordinates (m) - E		
- N		
Rain Cap? (Y/N)		
Vertical Stack? (Y/N)		
Shortest Distance to Property Boundary (m)		
AREA SOURCE	AREA SOURCE DATA	_
Source ID		
Source Description		
Area Source Height (m)		
Area Source Length (m)		
Area Source Width (m)		
Source Base Elevation (m) - MSL		
Area Source UTM Coordinates (m) - E		
- N		
Shortest Distance to Property Boundary (m)		
	VOLUME SOURCE DATA	
Source ID		
Source Description		
Volume Source Height (m)		
Volume Source Length (m)		
Volume Source Building Height (m)		
Source base Elevation (m) - MSL		
Volume Source UTM Coordinates (m) - E		_
- N Shortest Distance to Property Boundary (m)		—
m - meters m/s - meters per sec	cond AGL - Above Ground Level	-
Kelvin(degrees) = $273 + ((F-32) \times 5/9)$	MSL - Mean Sea Level UTM - Universal Transverse Mercator	

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4. SITE DATA	A detailed site diagram (certified map or platt, from the County Register of Deeds Office) must be included and should include the information listed below.		
1. Property boundaries			
2. Locations of all emission sources (existin	ig and proposed) listed in section 2.		
All existing and proposed buildings or structures on site.			
4 All Public right-of-ways traversing the property) e.g., .roads, railroad tracks, rivers, etc.)			
5. Scale and true north indicator.			
6. Utm or latitude/longitude coordinates of at least one point (e.g., source or building corner).			
5. BUILDING DATA	Complex or tiered structures may be treated as separate or combined structures-indicate building ID and, where applicable, tier number(e.g.Bldg.1 - T1)		
Building ID			
Building Description			
Building Height (m)			
Building Length (m)			
Building Width(m)			
6. MISCELLANEOUS DATA	Where applicable, provide the information requested below.		
1. 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.		
2. Facility Point of Contact	Name:		