ILLINOIS POLLUTION CONTROL BOARD April 28, 2005

IN THE MATTER OF:)	
)	
PETITION OF SCA TISSUE NORTH)	AS 05-04
AMERICA, L.L.C., FOR AN ADJUSTED)	(Adjusted Standard – Air)
STANDARD FROM: 35 Ill. Adm. Code)	,
218 301 and 218 302(c)	ĺ	

HEARING OFFICER ORDER

Attached is a list of questions with exhibits that the Illinois Pollution Control Board's technical personnel formulated regarding the above-captioned adjusted standard. The petitioner is directed to answer the attached questions and pre-file the written responses with the Board on or before May 12, 2005.

The parties or their legal representatives are directed to participate in a telephonic prehearing conference with the hearing officer on May 11, 2005, at 1:00 p.m. The telephonic prehearing conference must be initiated by the petitioner, but each party is nonetheless responsible for its own appearance. At the conference, the parties must be prepared to discust the status of the matter and their readiness for hearing.

IT IS SO ORDERED.

Bradley P. Halloran

Hearing Officer

Illinois Pollution Control Board

James R. Thompson Center, Suite 11-500

100 West Randolph

Chicago, Illinois 60601

312.814.8917

Questions for SCA Tissue North America, L.L.C. Pertaining to the Petition To be addressed in Prefiled Testimony or at Hearing on May 17, 2005

(Docket AS 2005-4)

35 IAC 104.406(d)

- 1. Is the address on the FESOP in Pet. Exh. D (13101 South Pulaski Rd., Alsip, IL) the address of the tissue mill?
- 2. Would you please identify the downwind area affected? Is it rural or urban?
- 3. Please indicate the number of employees at the tissue mill.
- 4. The petition on page 12 states, "SCA utilizes low-VOC photochemically reactive solvents..." Pet. Exh. B at 15 states that "The cleaning solvent has a VOC content of 50 percent." Please indicate what solvents are used to remove the stickies and provide Material Safety Data Sheets (MSDS) for each. Please provide an MSDS for the cleaning solvent to show the 50% by weight VOM content.
- 5. Pet. at 15 mentions USEPA proposed NESHAP at pulp and paper mills. Do the VOM emissions from SCA's cleaning operations include HAPs? If so, would you please identify what the HAPs are and what percentage they comprise of the VOMs?
- 6. Please describe how the solvents are stored when not in use. Are solvent storage containers vented? If so, could you please indicate the rate of emissions from the storage containers?
- 7. How is the solvent application equipment cleaned after use?
- 8. How is overspray from the cleaning process handled? Is overspray captured in a drip pan, or does it just evaporate? What percentage of solvent used is overspray and what percentage actually contacts the wire and/or stickies during the soaking stage?
- 9. Pet. Exh. H states that the wire solvent cleaning process "emitted fewer than 4 pounds per hour of volatile organic compounds on a rolling monthly average in 2002, ..." Please indicate the quantity (pounds) used during a single cleaning cycle, the duration of a cleaning cycle, and the frequency of cleaning cycles. Pet. Exh. B at 12 states that "wire cleaning is required once to twice per month but can be required more frequently...and felt cleaning is very infrequent." Exh. H "Solvent Trial Results" states that the removal of stickies emitted fewer that 4 lb/hr of VOCs on a rolling monthly average in 2002. Please indicate the rate of VOMs used on a strict hourly basis, during the actual cleaning operation. Please compare this result to the 8 lb/hr limit of 302.201.

35 IAC 104.406(e)

Pet. at 16 states, "SCA has also concluded that no cleaning alternatives are available that provide acceptable cleaning characteristics and can reduce VOM emissions below 8 pounds per hour or be nonphotochemically reactive." (Pet. at 16.) SCA states that it has implemented pollution prevention changes that have helped to reduce the number of solvent cleanings. Pet. at 22 states, "...stickies are a substantial barrier to producing the recycled tissue rolls and the solvent cleaning operations with low VOM materials and controls described herein are the only demonstrated technology for reducing and/or eliminating that problem."

- 10. Are you familiar with the use of low impact pulping to keep stickies large so that mechanical cleaning equipment (such as screens and dissolved air flotation) will operate more efficiently? Have you considered low impact pulping as part of a stickies control program?
- 11. Has SCA evaluated any chemical products to keep small stickies from agglomerating into larger more troublesome stickies?
- 12. Pet. at 12 mentions the use of a pulp detacifier and wire polymer. Would you please describe the role these have in stickies control? Has SCA evaluated the use of cationic wire and felt passivation to keep stickies from accumulating on the felts or wires?
- 13. Pet. Exh. 16 contains the results of the solvent trial tests. Would you please explain what is meant by "Stripped the wire, no effect on stickies."
- 14. Besides alternative cleaning solvents, did SCA consider other approaches for chemically controlling stickies? Please address approaches such as fixation of stickies to fiber in sheet formation, dispersing stickies using solvent and surfactant blends, polymeric stabilization, stabilized enzymes, or a combination of these? Besides the alternative solvent trial tests presented in Pet. Exh. H, have you evaluated any of these other approaches on a bench or pilot scale?
- 15. Is SCA familiar with a new enzyme process given the USEPA's Presidential Green Chemistry Challenge Award (2004 Alternative Solvents/Reaction Conditions Award) known as Optimyze® and manufactured by Buckman Laboratories?
- 16. Were any representatives for manufacturers of stickies control products contacted and invited to SCA's facility for guidance on a stickies control strategy and product selection or otherwise closely involved in the trial tests?
- 17. Please describe how is the felt cleaned. Are the same solvents used to clean the felt and wires? Would you please indicate how much solvent is used to clean the felt and how often?

35 IAC 104.406(f)

18. Would you please discuss the corresponding costs for the process and operational changes that SCA has implemented to achieve the 93% reduction in VOM emissions?

35 IAC 104.406(g)

- 18. How much did SCA spend to redesign and change equipment and cleaning operations to reduce VOM emissions from 182 tpy to 10 tpy?
- 19. Exh. B, App. E, Page 1 of each of the Control Costs Results Summaries, indicates that costs are based on maximum annual production of 90,000 ADTP per year. The FESOP in Pet. Exh. A on page 4 defines ADT as air-dried ton of finished paper. Please describe how ADTP relates to Machine Dried Tons (MDT) and if there is a conversion for ADTP to MDT.
- 20. Pet. at 3 indicates the current production rate is 200 tons per day of product. Would you please clarify if this air dried tons (ADT) or machine dried tons (MDT)?
- 21. The petition at 13 indicates that current production rates approximately doubled from the 1990 rate of 36,900 MDT/year which would be ~ 73,800 MDT/year. On page 14, the petition states that the VOM emission rate for the 1997-2000 time frame averaged 0.6 lb VOM/MDT for the solvent cleaning operations. Multiplying (36,900 MDT x 2) x 0.6 lb VOM/MDT yields 22 tons / year. However, Exh. B at 15 indicates the total maximum VOM emissions from solvent cleaning operations are 10 tpy, and the actual rate is closer to 7 tons per year. Would you please clarify how the emission rate of 0.6 lb VOM/MDT and the current production rate of 200 tons per day yield the VOM emissions of 7 to 10 tons per year.
- 22. Could you describe how other tissue paper mills using recycled stock handle stickies control?
- 23. Pet. at 20 states, "...there will be no adverse incremental impact on the environment as a result of the Adjusted Standard..." The IEPA's recommendation concurs, stating, "the proposed adjusted standard will not impair compliance with the applicable ozone standards..." (Rec. at 15.) In a previous similar adjusted standard from 218.301, AS 04-1 for Crownline Boats, Inc., the petitioner provided an Ambient Air Quality Impact Analysis to support its assertion that Crownline's impact on ambient air quality is insignificant. (AS 04-1, App. 16.) The instant petition does not provide an analysis to show no adverse incremental impact on ozone. Would you please provide an ozone impact analysis using an appropriate methodology such as the USEPA Method, "VOC/NOx Point Source Screening Tables" by Richard D. Scheffe, September 1988. (See attached.)

24. If SCA were to experience a growth in production, could you please comment on how such growth would affect the VOM emissions on an annual basis in comparison to the data provided for the 2000 production year? By estimating a larger figure to represent potential increased VOM emissions 5 to 10 years in the future, how would the ozone increment change?

VOC/NOX POINT SOURCE SCREENING TABLES

by Richard D. Scheffe

September, 1988

United States Environmental Protection Agency Office of Air Quality Planning and Standards Technical Support Division Source Receptor Analysis Branch

3.0 SCREENING TABLES

The interpretation or definition of a "rural" or "urban" area within the framework of this technique is intended to be rather broad and flexible. The rationale for having rural and urban tables stems from the need to account for the coupled effect of point source emissions and background chemistry on ozone formation. Background chemistry in the context of this procedure refers to a characterization of the ambient atmospheric chemistry into which a point source emits. The underlying model runs used to develop the rural table (Table 1) were performed with spatially invariant background chemistry representative of "clean" continental U.S. areas. Model runs used to develop the urban table (Table 2) were based on background chemistry incorporating daily temporal fluctuations of NOx and hydrocarbons associated with a typical urban atmosphere (refer to Appendix A for details regarding background chemistry). Background chemistry is an important factor in estimating ozone formation; however, characterization of background chemistry is perhaps the most difficult aspect of reactive plume modeling because of data scarcity and the level of resources required to measure or model (temporally and spatially) the components necessary to characterize the ambient atmospheric along the trajectory of a point source plume.

Recognizing the conflicting needs of using simple characterizations of background chemistries and applying this screening technique in situations where sources are located in or impact on areas which can not be simply categorized, the following steps should be used to choose an appropriate table:

- (1) If the source location and downwind impact area can be described as rural and where ozone exceedances have never been reported, choose the rural area table.
- (2) If the source location and downwind impact area are of urban character, choose the urban area table.
- (3) If an urban based source potentially can impact a downwind rural area, or a rural based source can potentially impact a downwind urban area, use the highest value obtained from applying both tables.

The VOC point source screening tables (Tables 1 and 2) provide ozone increments as a function of NMOC (nonmethane organic carbon) mass emissions rates and NMOC/NOx emissions ratios. To determine an ozone impact the user is required to apply best estimates of maximum daily NMOC emissions rate, and estimated annual mass emissions rates of NMOC and NOX which are used to determine NMOC/NOX ratio for ascribing the applicable column in Table 1 or 2. The reasons for basing application on daily maximum NMOC emissions rates are (1) to avoid

underestimates resulting from discontinuous operations and (2) the underlying modeling simulations are based on single day episodes. The NMOC emissions rates in Tables 1 and 2 are given on an annual basis; consequently the user must project daily maximum to annual emissions rates, as illustrated in the example application given below. One purpose of this technique is to provide a simple, non-resource intensive tool; therefore, annual NMOC/NOx emissions ratios are used because consideration of daily fluctuations would require a screening application applied to each day.

Parameters describing background chemistry, episodic meteorology, and source emissions speciation affect actual ozone impact produced by a point source. However, as a screening methodology the application should be simple, robust and yield conservative (high ozone) values. Thus, only NMOC and NOX emissions rates are required as input to Tables 1 and 2.

Rural Example Application

A manufacturing company intends to construct a facility in an isolated rural location where ozone exceedances have never been observed. The pollution control agency requires that the company submit an analysis showing that operation of the proposed facility will not result in an ozone increment greater than X ppm in order to permit operation. The estimated daily maximum NMOC emissions rate is 9000 lbs/day. The annual estimated emissions rates for NMOC and NOX are 1000 tons/yr and 80 tons/yr, respectively. The company's strategy is to provide a screening analysis using the rural area table to prove future compliance. If the screening result exceeds X ppm, the company will initiate a detailed modeling analysis requiring characterization of source emissions speciation, ambient chemistry, and episodic meteorology.

Screening Estimate:

- 1 Determine which column of Table (1) is applicable:
 - The NMOC/Nox ratio is based on <u>annual</u> estimates; thus, 1000/80 = 12.5 and middle column values are applied.
- 2 Calculate annual NMOC emissions rates in tons/yr from maximum daily rate:
 - (9000 lbs/day) (1 ton/2000 lbs) (365 days/yr) = 1643 tons/yr
- 3 Interpolate linearly between 1500 tons/yr and 2000 tons/yr to produce an interpolated column 2 ozone increment:

[(1643-1500)(3.84-3.05)/(2000-1500)] + 3.04 = 3.27 pphm 3.27pphm(1 ppm/100 pphm) = 0.0327 ppm

If 0.0327 ppm is below the criterion value (X ppm), no further modeling analysis is required and operation may be permitted. Otherwise, the company will procede with an additional case-specific modeling analysis.

Table 1. Rural based ozone increment (pphm) as a function of NMOC emissions and NMOC/NOx ratios.

NMOC/NOx

TONS NMOC/TONS NOX (PPMC/PPM)

NMOC EMISSIONS (TONS/YR)	> 20.7 (> 20)	5.2-20.7 (5-20)	< 5.2 (< 5)	
50 75 100 300	0.4 0.4 0.4 0.8	0.4 0.4 0.5	1.1 1.2 1.4	
500 750 1000 1500 2000 3000 5000 7500 10000	1.1 1.6 2.0 2.7 3.4 4.8 7.0 9.8 12.2	1.4 1.9 2.4 3.0 3.8 5.2 7.5 10.1 12.9	1.9 2.3 2.7 3.3 3.7 4.8 5.4	

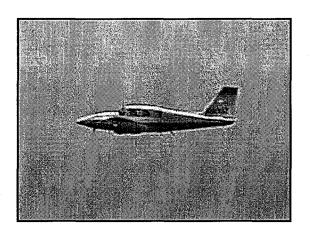
^{*} multiply pphm by 0.01 to obtain ppm

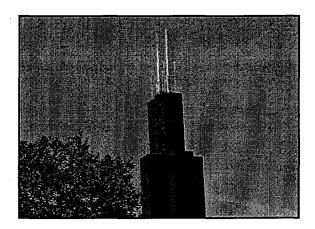
DRAFT



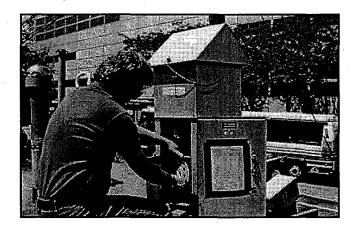
IEPA/BOA/02-015

2001





Illinois Annual Air Quality Report



Illinois Environmental Protection Agency
Bureau of Air

			Tabl	e B2							
		,	200	01							
		• (200 OZC)						
		NUMBER	R OF DAYS				HIGHEST	SAMPLI	ES		
	•		GREATER				(parts p	er millior	1)		
		VALID	THAN		1-H	IOUR			8-1	HOUR	
STATION	ADDRESS	APR-OCT	0.12 PPM	1ST	2ND	3RD	(4TH)	1ST	2ND	3RD	4TH
55 BURLINGTON	- KEOKUK INT	ERSTA	TE (IA-	IL)							
PEORIA COUNTY											
Peoria	Hurlburt & MacArthur	211	0	0.077	0.077	0.076	0.075	0.072	0.072	0.069	0.068
Peoria Peoria Heights	508 E. Glen	211	0	0.077 0.093	0.077 0.084	0.076 0.083	0.075 0.083	0.072	0.072 0.080	0.089	0.080
•			_	0.093	0.004	0.003	0.063	0.004	0.000	0.000	0.000
66 EAST CENTRA	AL ILLINOIS IN	TRAST	ATE								
CHAMPAIGN COUNTY											
Champaign	606 E. Grove	211	0	0.081	0.080	0.079	0.078	0.074	0.073	0.073	0.073
McLEAN COUNTY				٠.							
Normal ·	Main & Gregory	212	0 .	0.093	0.085	0.083	0.082	0.085	0.079	0.074	0.072
67 METROPOLIT	TAN CHICAGO	INTERS	STATE (IL - IN)						
COOK COUNTY											
lsip	4500 W. 123rd St.	212	0	0.091	0.089	0.088	0.088	0.081	0.079	0.078	0.077
Calumet City	1703 State St.	211	0	0.082	0.081	0.079	0.079	0.077	0.073	0.072	0.071
Chicago - Jardine	1000 E. Ohio	212	0	0.106	0.106	0.105	0.100	0.086	0.085	0.082	0.081
Chicago - SE Police	103rd & Luella	214	0	0.087	0.084	0.081	0.081	0.074	0.074	0.072	0.071
Chicago - SWFP	3300 E Cheltenham	214	0	0.107	0.104	0.102	0.100	0.098	0.091	0.089	0.087
Chicago - Taft	6545 W. Hurlbut	206	0	0.101	0.101	0.094	0.094	0.084	0.084	0.083	0.078
Chicago - Truman	1145 W. Wilson	212	0	0.105	0.097	0.094	0.090	0.083	0.080	0.080	0.079
Chicago - University	5720 S. Ellis	214	0	0.089	0.089	0.087	0.085	0.079	0.078	0.076	0.076
Cicero	1830 S. 51st Ave.	214	0	0.080	0.079	0.077	0.077	0.074	0.070	0.069	0.067
Des Plaines	1375 5th St.	214	0	0.099	0.086	0.086	0.085	0.079	0.076	0.075	0.075
vanston	531 Lincoln	206	0	0.122	0.108	0.103	0.100	0.103	0.090	0.086	0.086
emont	729 Houston	211	0	0.090	0.090	0.082	0.082	0.077	0.071	0.070	0.068
lorthbrook	750 Dundee Rd.	211	. 0	0.100	0.100	0.096	0.091	0.090	0.087	0.083	0.082
DuPAGE COUNTY											
isle	Morton Arboretum	211	0	0.099	0.095	0.089	0.089	0.078	0.071	0.071	0.071
KANE COUNTY	•										
Elgin	665 Dundee	214	. 0	0.101	0.087	0.086	0.086	0.086	0.082	0.081	0.080
LAKE COUNTY											
	1441 Laka St	210		0.400	0.007	0.005	0.000	0.007	0.000	0.070	0.078
ibertyville	1441 Lake St.	210	0	0.108	0.097	0.095	0.089	0.087	0.080	0.079 0.084	
Vaukegan ion	Golf & Jackson	213	0	0.105	0.105	0.101	0.099	0.095	0.091		0.082
ion	Camp Logan	214	. 0	0.103	0.099	0.097	0.096	0.088	0.087	0.084	0.083
McHENRY COUNTY	4-4-04-0-TE	044	^	0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.004
Cary	1st St. & Three Oaks	211	0	0.100	0.098	0.098	0.093	0.089	0.088	0.086	0.084
WILL COUNTY											
WILL COUNTY Sraidwood	36400 S. Essex Rd.	208	0	0.111	0.098	0.096	0.089	0.085	0.080	0.080	0.078



Illinois Environmental Protection Agency Bureau of Air 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 September 2003

IEPA/BOA/03-015

Illinois Annual Air Quality Report









2002

Governor Rod R. Blagojevich Director Renee Cipriano

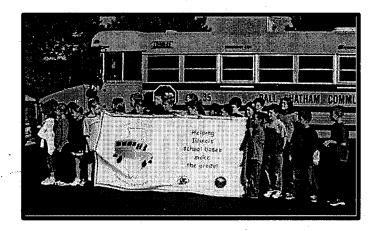
			Tabl	e B2							
			20								
		NUMBER	OZO	DNE)			HIGHEST S	SAMPLE	<u> </u>		
	*	GREATE						er millior	_		
		ONDAL	110-44		1- I -	ЮU R	(parts p			HOUR	
STATION	ADDRESS	0.12 PPM	0.08 PPM	1ST	2ND	3RD	(4TH)	1ST	2ND	3RD	4TH
65 BURLINGTON	I - KEOKUK INTI	ERSTAT	Е (IA - I	T.)							
PEORIA COUNTY			~ (_,							
Peoria	Hurlburt & MacArthur	0	0	0.094	0.093	0.092	0.089	0.083	0.082	0.082	0.081
Peoria Heights	508 E. Glen	0	5	0.104	0.102	0.100	0.095	0.093	0.092	0.091	0.084
66 EAST CENTR	AL ILLINOIS INT	RASTA	TE								
CHAMPAIGN COUNT	(
Champaign	606 E. Grove	0	1	0.092	0.091	0.088	0.087	0.090	0.083	0.083	0.082
McLEAN COUNTY											
Normal	Main & Gregory	0	8	0.095	0.092	0.091	0.090	0.088	0.086	0.085	0.085
67 METROPOLIT	TAN CHICAGO I	TERST	ате лі								
COOK COUNTY				,			A				
Alsip	4500 W. 123rd St.	0	8	0.115	0.108	0.106	(0.104)	0.097	0.096	0.094	0.094
Calumet City	1703 State St.	0	0	0.094	0.091	0.090	0.088	0.079	0.078	0.076	0.074
Chicago - Jardine	1000 E. Ohio	1	4	0.127	0.113	0.103	0.103	0.112	0.098	0.097	0.085
Chicago - SE Police	103rd & Luella	0	3	0.102	0.100	0.100	0.097	0.091	0.090	0.088	0.084
Chicago - SWFP	3300 E Cheltenham	0	13	0.121	0.118	0.109	0.108	0.106	0.103	0.100	0.096
Chicago - Taft	6545 W. Hurlbut	0	9	0.109	0.104	0.104	0.103	0.097	0.094	0.093	0.092
Chicago - University	5720 S. Ellis	0	4 .	0.101	0.096	0.095	0.094	0.093	0.090	0.087	0.085
Cicero	1830 S. 51st Ave.	0	3	0.104	0.100	0.097	0.096	0.087	0.086	0.086	0.084
Des Plaines	9511 W. Harrison	0	9	0.115	0.111	0.108	0.107	0.094	0.094	0.093	0.093
Evanston	531 Lincoln	0	. 8	0.122	0.114	0.111	0.100	0.105	0.095	0.092	0.091
Lemont	729 Houston	0	3	0.110	0.101	0.097	0.094	0.096	0.091	0.087	0.081
Northbrook	750 Dundee Rd.	0	5	0.111	0.103	0.099	0.098	0.096	0.090	0.088	0.087
DuPAGE COUNTY							•				
Lisle	Morton Arboretum	0	3	0.114	0.104	0.103	0.102	0.091	0.087	0.086	0.084
KANE COUNTY											
Elgin	665 Dundee	0	3	0.103	0.099	0.095	0.093	0.090	0.087	0.086	0.082
LAKE COUNTY								· .			
Libertyville	1441 Lake St.	0	5	0.112	0.104	0.101	0.101	0.091	0.091	0.090	0.087
Waukegan	Golf & Jackson	1	7	0.125	0.121	0.115	0.110	0.106	0.105	0.100	0.090
Zion	Camp Logan	3	9	0.136	0.126	0.125	0.117	0.116	0.113	0.112	0.100
McHENRY COUNTY	4.0.0	_						0.000	0.554		
Cary	1st St. & Three Oaks	0	6	0.110	0.102	0.099	0.098	0.093	0.091	0.091	0.090
WILL COUNTY	00400 0 7 7		_		0.55-			0.05=			
Braidwood	36400 S. Essex Rd.	. 0	6	0.105	0.099	0.094	0.094	0.095	0.088	0.087	0.087
South Lockport	2021 Lawrence	0	7	0.107	0.104	0.097	0.096	0.094	0.088	0.087	0.086



Bureau of Air 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276

IEPA/BOA/04-019

Illinois Annual Air Quality Report 2003









Governor Rod R. Blagojevich Director Renee Cipriano

			Tabl	C 152							
			20 OZC						1		
		NUMBER (OF DAYS				HIGHEST	SAMPLES	3		
		GREATE	r than				(parts p	er million	-		
						IOUR				HOUR	
STATION	ADDRESS	0.12 PPM	0.08 PPM	1ST	2ND	3RD	4TH) 1ST	2ND	3RD	4TH
65 BURLINGTON	- KEOKUK INTE	RSTAT	E (IA - I	IL)							
PEORIA COUNTY	•		·								
Peoria	Hurlburt & MacArthur	0	0	0.085	0.079	0.076	0.076	0.072	0.071	0.070	0.068
Peoria Heights	508 E. Glen	.0	Ö	0.091	0.090	0.090	0.083	0.079	0.078	0.078	0.076
66 EAST CENTRA		RASTA	TE.								
		IVADIA									
CHAMPAIGN COUNTY	606 E. Grove	0	. 0	0.084	0.081	0.081	0.080	0.078	0.077	0.075	0.075
Champaign	oto E. Giove	U	. 0	0.004	0.001	0.001	0.000	0.070	0.011	0.070	J.U/
McLEAN COUNTY			•								
Normal	Main & Gregory	0	0	0.085	0.082	0.082	0.082	0.078	0.075	0.075	0.074
67 METROPOLIT	'AN CHICAGO IN	TERST	TATE (II	ـ - IN)							
COOK COUNTY											
Alsip	4500 W. 123rd St.	0	1	0.097	0.090	0.088	0.084	0.090	0.080	0.078	0.07
Chicago - Jardine	1000 E. Ohio	0	1	0.098	0.087	0.085	0.085	0.086	0.078	0.075	0.07
Chicago - SE Police	103rd & Luella	0	0	0.080	0.079	0.078	0.076	0.073	0.073	0.072	0.06
Chicago - SWFP	3300 E Cheltenham	0	2	0.095	0.095	0.093	0.091	0.087	0.086	0.080	0.08
Chicago - Taft	6545 W. Hurlbut	0	0	0.093	0.090	0.088	0.087	0.084	0.078	0.077	0.07
Chicago - University	5720 S. Ellis	0	0.	0.083	0.082	0.079	0.075	0.072	0.069	0.069	0.06
Cicero	1830 S. 51st Ave.	0	0	0.086	0.081	0.081	0.080	0.075	0.072	0.071	0.07
Des Plaines	9511 W. Harrison	0	1	0.092	0.088	0.085	0.083	0.085	0.075	0.074	0.073
Evanston	531 Lincoln	0	2	0.117	0.096	0.091	0.090	0.091	0.089	0.082	0.082
Lemont	729 Houston	0	1	0.109	0.096	0.088	0.080	0.099	0.080	0.076	0.07
Northbrook	750 Dundee Rd.	0	0	0.095	0.091	0.090	0.089	0.084	0.083	0.081	0.08
DuPAGE COUNTY											
Lisle	Morton Arboretum	0	0	0.090	0.084	0.076	0.074	0.083	0.069	0.067	0.06
KANE COUNTY											
Elgin	665 Dundee	. 0	0	0.094	0.091	0.082	0.081	0.078	0.077	0.077	0.076
LAKE COUNTY											
<i>N</i> aukegan	Golf & Jackson	0	0	0.094	0.093	0.090	0.084	0.081	0.081	0.076	0.074
Zion	Camp Logan	0	0	0.094	0.094	0.093	0.091	0.084	0.082	0.079	0.078
McHENRY COUNTY											
Cary	1st St. & Three Oaks	0	0	0.093	0.087	0.085	0.084	0.084	0.080	0.080	0.079
Maria Collision											
WILL COUNTY	20400 0 5	•	4	0.005	0.000	0.007	0.005	0.005	0.070	0.075	0.07
Braidwood	36400 S. Essex Rd.	0	1 .	0.095	0.093	0.087	0.085	0.085 0.093	0.079	0.075 0.079	0.07
South Lockport	2021 Lawrence	0	1	0.104	0.101	0.087	0.083	0.093	0.080	0.079	U.U7
•							•				

Table A4

2003 SITE DIRECTORY

CITY NAME		OWNER/			
AIRS CODE	ADDRESS	OPERATOR	UTM C	COORD. (km)	EQUIPMENT
CE DIEDE INCOMON					
5 BURLINGTON	- KEOKUK INTERSTATE (IA - IL)			
PEORIA COUNTY				•	
Peoria	Fire Station #8	III. EPA	N.	4507.113	NAMS - SO ₂ , O ₃
(1430024)	MacArthur & Hurlburt		E.	279.709	SPMS - WS/WD
Peoria	Commercial Building	III. EPA		4508.534	SLAMS - CO
(1430036)	1005 N. University		E	279.194	
Peoria Peoria	City Office Building	III. EPA	N.	4508.197	NAMS - PM ₁₀
1430037)	613 N.E. Jefferson		E	281.675	SLAMS - Pb, PM _{2.5}
					SPMS - TSP
Pooria Haichta	Poorio Hoisebto H.C.	W ETSA	ă.i	AE40 470	NAME C
Peoria Heights 1431001)	Peoria Heights H.S. 508 E. Glen Ave.	III. EPA	N. E.	4513.476 281.660	NAMS - O ₃
	Soo E. Giori Ave.		Ļ	201.000	
TAZEWELL COUNTY					
Pekin	Fire Station #3	III. EPA	N.	4492.693	NAMS - SO ₂
1790004)	272 Derby		E	275.291	
		•			
66 EAST CENTRA	L ILLINOIS INTRASTATE				
CHAMPAIGN COUNTY					
	•				
3ondville	SWS Climate Station	III. EPA/SWS	N.	4434.201	SLAMS - PM _{2.5}
	SWS Climate Station Twp. Rd. 500 E.	III. EPA/SWS	N. E.	4434.201 382.959	SLAMS - PM _{2.5}
Bondville (0191001)	Twp. Rd. 500 E.		E	382.959	
0191001) Champaign	Twp. Rd. 500 E. Booker T. Washington Elem. Sch.	III. EPA/SWS	E.	382.959 4442.017	SLAMS - PM _{2.5} SLAMS - O ₃ , PM _{2.5}
0191001) Champaign	Twp. Rd. 500 E.		E	382.959	
0191001) Champaign 0190004) McLEAN COUNTY	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove		E. N. E.	382.959 4442.017 395.248	SLAMS - O ₃ , PM _{2.5}
0191001) Champaign 0190004) McLEAN COUNTY Jormal	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove University H.S.		E. N. E.	382.959 4442.017 395.248 4486.625	
0191001) Champaign 0190004) McLEAN COUNTY Normal	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove	III. EPA	E. N. E.	382.959 4442.017 395.248	SLAMS - O ₃ , PM _{2.5}
0191001) Champaign 0190004) McLEAN COUNTY Normal 1132003)	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove University H.S. Main & Gregory	III. EPA III. EPA	E. N. E. N. E.	382.959 4442.017 395.248 4486.625 330.925	SLAMS - O ₃ , PM _{2.5} SLAMS - PM _{2.5}
0191001) Champaign 0190004) McLEAN COUNTY Normal 1132003)	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove University H.S.	III. EPA	E. N. E. N. E.	382.959 4442.017 395.248 4486.625	SLAMS - O ₃ , PM _{2.5}
0191001) Champaign 0190004) McLEAN COUNTY Normal 1132003) Normal	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove University H.S. Main & Gregory ISU Physical Plant Main & Gregory	III. EPA III. EPA III. EPA	E. N. E. N. E.	382.959 4442.017 395.248 4486.625 330.925 4486.886	SLAMS - O ₃ , PM _{2.5} SLAMS - PM _{2.5}
0191001) Champaign 0190004) McLEAN COUNTY Normal 1132003) Normal 1132003)	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove University H.S. Main & Gregory ISU Physical Plant	III. EPA III. EPA III. EPA	E. N. E. N. E.	382.959 4442.017 395.248 4486.625 330.925 4486.886	SLAMS - O ₃ , PM _{2.5} SLAMS - PM _{2.5}
O191001) Champaign O190004) McLEAN COUNTY Normal 1132003) Normal 1132003) THETROPOLITA COOK COUNTY	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove University H.S. Main & Gregory ISU Physical Plant Main & Gregory AN CHICAGO INTERSTATE	III. EPA III. EPA III. EPA	E. N. E. N. E.	382.959 4442.017 395.248 4486.625 330.925 4486.886 330.771	SLAMS - O_3 , $PM_{2.5}$ SLAMS - $PM_{2.5}$ SLAMS - O_3
Champaign Champaign C190004) McLEAN COUNTY Iormal 1132003) Iormal 1132003) THETROPOLITA COOK COUNTY	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove University H.S. Main & Gregory ISU Physical Plant Main & Gregory AN CHICAGO INTERSTATE Village Garage	III. EPA III. EPA III. EPA	E. N. E. N. E. N.	382.959 4442.017 395.248 4486.625 330.925 4486.886 330.771	SLAMS - O ₃ , PM _{2.5} SLAMS - PM _{2.5} SLAMS - O ₃
0191001) Champaign 0190004) McLEAN COUNTY Normal 1132003) Normal 1132003)	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove University H.S. Main & Gregory ISU Physical Plant Main & Gregory AN CHICAGO INTERSTATE	III. EPA III. EPA III. EPA	E. N. E. N. E.	382.959 4442.017 395.248 4486.625 330.925 4486.886 330.771	SLAMS - O ₃ , PM _{2.5} SLAMS - PM _{2.5} SLAMS - O ₃
Champaign 0190004) McLEAN COUNTY Normal 1132003) Normal 1132003) THETROPOLITA COOK COUNTY Alsip 0310001)	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove University H.S. Main & Gregory ISU Physical Plant Main & Gregory AN CHICAGO INTERSTATE Village Garage 4500 W. 123rd St.	III. EPA III. EPA III. EPA C (IL - IN) Cook County DEC	E. N. E. N. E. N. E.	382.959 4442.017 395.248 4486.625 330.925 4486.886 330.771 4613.287 439.015	SLAMS - O ₃ , PM _{2.5} SLAMS - PM _{2.5} SLAMS - O ₃ SLAMS - O ₃ , Pb, PM ₁₀ SPMS - TSP,WSW/D,PM _{2.5} ⁿ
Champaign 0190004) McLEAN COUNTY Ilormal 1132003) Mormal 1132003) METROPOLITA COOK COUNTY Ilsip 0310001)	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove University H.S. Main & Gregory ISU Physical Plant Main & Gregory AN CHICAGO INTERSTATE Village Garage	III. EPA III. EPA III. EPA	E. N. E. N. E. N. E.	382.959 4442.017 395.248 4486.625 330.925 4486.886 330.771	SLAMS - O ₃ , PM _{2.5} SLAMS - PM _{2.5} SLAMS - O ₃
Champaign 0190004) McLEAN COUNTY Ilormal 1132003) Mormal 1132003) METROPOLITA COOK COUNTY Ilsip 0310001)	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove University H.S. Main & Gregory ISU Physical Plant Main & Gregory AN CHICAGO INTERSTATE Village Garage 4500 W. 123rd St. APC Laboratory	III. EPA III. EPA III. EPA C (IL - IN) Cook County DEC	E. N. E. N. E. N. E.	382.959 4442.017 395.248 4486.625 330.925 4486.886 330.771 4613.287 439.015 4624.760	SLAMS - O_3 , $PM_{2.5}$ SLAMS - $PM_{2.5}$ SLAMS - O_3 SLAMS - O_3 , Pb , PM_{10} SPMS - TSP , $WSWD$, $PM_{2.5}^n$ SLAMS - SO_2
O191001) Champaign O190004) McLEAN COUNTY Normal 1132003) Normal 1132003) THETROPOLITA COOK COUNTY	Twp. Rd. 500 E. Booker T. Washington Elem. Sch. 606 E. Grove University H.S. Main & Gregory ISU Physical Plant Main & Gregory AN CHICAGO INTERSTATE Village Garage 4500 W. 123rd St. APC Laboratory	III. EPA III. EPA III. EPA C (IL - IN) Cook County DEC	E. N. E. N. E. N. E. N. E.	382.959 4442.017 395.248 4486.625 330.925 4486.886 330.771 4613.287 439.015 4624.760	SLAMS - O_3 , $PM_{2.5}$ SLAMS - $PM_{2.5}$ SLAMS - O_3 SLAMS - O_3 , Pb , PM_{10} SPMS - TSP , $WSWD$, $PM_{2.5}^n$ SLAMS - SO_2