

FYI:

The following public participation documents
are from the June 5, 2009

Final Lake and Porter Counties 8-Hour Ozone Redesignation Request and Maintenance Plan.
The public hearing held for that document also covered several other documents including this one.

Appendix D

Public Participation Documentation

- **Legal Notice of Public Hearing**
- **Publisher's Claims**
 - **Chesterton Tribune**
 - **Northwest Indiana Newspapers**
 - **Post-Tribune**
- **Public Hearing Attendance Record**
- **Public Hearing Transcript**
- **Written Comments**
 - **Charlotte Read, Save the Dunes Council**
 - **Pages from Redesignation Request with Handwritten Comments from Mark Strimbu, NISOURCE**
- **Summary/Response to Comments Received at Public Hearing**

Legal Notice of Public Hearing

Notice is hereby given that the Board of Directors of the City of [City Name] will hold a public hearing on [Date] at [Time] in the [Location] to consider the proposed [Project Name] and to receive public input on the project. The hearing will be held in accordance with the provisions of the [Relevant Law/Ordinance].

The public hearing is open to all interested parties. Any person wishing to present comments or objections to the proposed project should appear at the hearing and present their views to the Board of Directors. The Board of Directors may take any action deemed appropriate based on the information presented at the hearing.

LEGAL NOTICE OF PUBLIC HEARING

**State Implementation Plan Revisions
Concerning the 8-Hour Ozone Standard,
for Lake and Porter counties.**

Notice is hereby given under 40 CFR 51.102 that the Indiana Department of Environmental Management (IDEM) will hold a public hearing on Thursday, January 8, 2009. The purpose of this hearing is to receive public comment concerning the following State Implementation Plan documents specific to Lake and Porter counties in association with the 8 hour ozone standard:

- Draft Redesignation Petition and Maintenance Plan.
- Attainment Demonstration
- Demonstration of compliance with requirements pertaining to Reasonably Available Control Measures for volatile organic compounds
- Request for waiver for Reasonably Available Control Measure requirements for oxides of nitrogen.
- Demonstration of Rate of Further Progress

The meeting will convene at 6:00 p.m. (local time) at the Northwest Indiana Regional Planning Commission's offices, located at 6100 Southport Road, Portage, Indiana. All interested persons are invited and will be given opportunity to express their views concerning the draft documents.

These State Implementation Plan documents are being drafted and submitted consistent with United States Environmental Protection Agency (USEPA) guidance.

Copies of the draft documents will be available on or before December 5, 2008 to any person upon request and at the following locations:

- Indiana Department of Environmental Management, Office of Air Quality, Indiana Government Center North, 100 North Senate, Room N1003, Indianapolis, Indiana.
- Indiana Department of Environmental Management, Northwest Regional Office, 8380 Louisiana Street, Merrillville, Indiana
- Crown Point Community Library, 214 South Court Street, Crown Point, Indiana.
- Valparaiso Public Library, 103 Jefferson Street, Valparaiso, Indiana.
- Gary Public Library, 220 West 5th Avenue, Gary, Indiana.
- Hammond Public Library, 564 State Street, Hammond, Indiana.
- Whiting Public Library, 1735 Oliver Street, Whiting, Indiana.

Electronic versions of the documents are also available for public inspection at the following website: <http://www.in.gov/idem/4658.htm>

Oral statements will be heard, but for the accuracy of the record, statements should be submitted in writing. Written statements may be submitted to the attendant designated to receive written comments at the public hearing.

IDEM will also accept written comments through January 12, 2009. Mailed comments should be addressed to:

Northwest Indiana State Implementation Plan for Ozone
Scott Deloney, Chief
Air Programs Branch, Office of Air Quality – Mail Code 61-50
100 North Senate Avenue
Indiana Department of Environmental Management
Indianapolis, IN 46206-2251

A transcript of the hearing and all written submissions provided at the public hearing shall be open to public inspection at IDEM and copies may be made available to any person upon payment of reproduction costs. Any person heard or represented at the hearing or requesting notice shall be given written notice of actions resulting from the hearing.

For additional information contact Christine Pedersen, at the Indiana Department of Environmental Management, Office of Air Quality, Room 1001, Indiana Government Center North, 100 North Senate Avenue, Indianapolis or call (317) 233-5684 or (800) 451-6027 ext. 3-5684 (in Indiana).

Scott Deloney, Chief
Air Programs Branch
Office of Air Quality

Individuals requiring reasonable accommodations for participation in this hearing should contact the IDEM Americans with Disabilities Act (ADA) coordinator at:

Attn: ADA Coordinator
Indiana Department of Environmental Management – Mail Code 50-10
100 North Senate Avenue
Indianapolis, IN 46204-2251

Or call (317) 233-1785 (voice) or (317) 232-6565 (TDD). Please provide a minimum of 72 hours notification.

Publisher's Claims

Claim No. _____ Warrant No. _____
 IN FAVOR OF
 THE CHESTERTON TRIBUNE INC
 P O BOX 919
 CHESTERTON IN 46304

\$ 48.39

ON ACCOUNT OF APPROPRIATION FOR

Allowed _____

In the sum of \$ _____

35-0996671

I have examined the within claim and hereby certify as follows:

That it is in proper form

That it is duly authenticated as required by law.

That it is based upon statutory authority.

That it is apparently incorrect

I certify that the within claim is true and correct; that the charges therein itemized and for which charge is made were ordered and were necessary to the public interest.

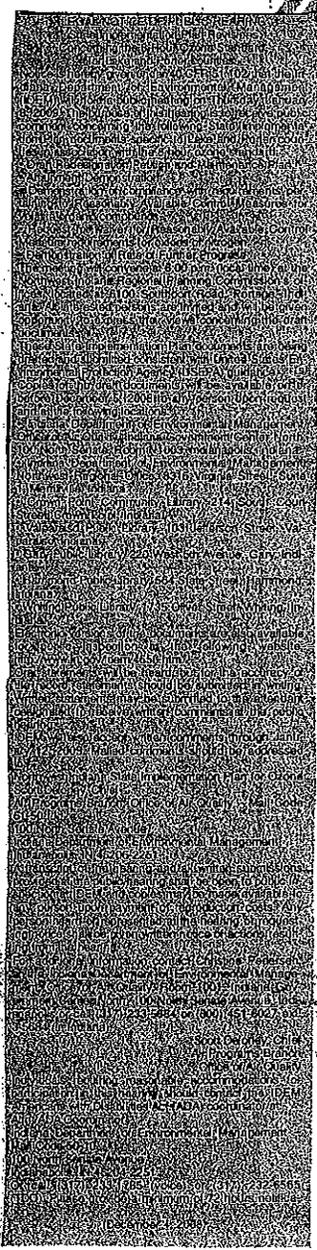
12.2 Em Column

Type size 1 2 3 4

Type size	Number of insertions
5.5	0.574 0.838 1.146 1.432
6	0.526 0.787 1.050 1.313
6.5	0.486 0.726 0.969 1.212
7	0.451 0.674 0.900 1.125
7.5	0.421 0.629 0.840 1.050
8	0.395 0.590 0.738 0.985
9	0.351 0.524 0.700 0.875
10	0.316 0.472 0.630 0.788
12	0.263 0.393 0.525 0.656

Rate/Square 5.39 8.06 10.76 13.45

YANG RUI



Form Prescribed by State Board of Accounts

148685

General Form No. 99F (Revised 1995)

IDEM

(Governmental Unit)

To: Northwest Indiana Newspapers

Lake County, Indiana

601-46th Avenue, Munster, IN 46321

PUBLISHER'S CLAIM

LINE COUNT

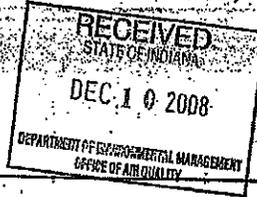
Display Matter (Must not exceed two actual lines, neither of which shall total more than four solid lines of type in which the body of the advertisement is set) - number of equivalent lines

Head - number of lines

Body - number of lines

Tail - number of lines

Total number of lines in notice



COMPUTATION OF CHARGES

151 lines 1 columns wide equals 151 equivalent lines at 29.8 cents per line

\$ 45.00

Additional charge for notices containing rule or tabular work

on line

(80 percent of above amount)

10.00

Charge for extra proofs of publication (\$1.00 for each proof in excess of two)

TOTAL AMOUNT OF CLAIM

\$ 55.00

20158957

DATA FOR COMPUTING COST

Width of single column 6.4 cms

Number of insertions 1

Size of type 8.8 point

YOUR COPY PAID

Pursuant to the provisions and penalties of Chapter 105, Acts 1985,

I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

Date: December 5, 2008

Title: Legal Clerk

IDEM FISCAL ACCOUNTING

PUBLISHER'S AFFIDAVIT

State of Indiana)

) ss:

Lake County)

Personally appeared before me, a notary public in and for said county and state, the undersigned H. Stephens who, being duly sworn, says that he is Legal Clerk of the TIMES newspaper of general circulation printed and published in the English language in the (city) (town) of Munster in the state and county aforesaid, and that the printed matter attached hereto is a true copy, which was duly published in said paper for 1 time, the dates of publication being as follows:

December 5, 2008

Subscribed and sworn to before me this 5 day of December 2008

Beginning (over)

My commission expires:

Notary Public 6-13-2015

Form No. _____ Warrant No. _____

IN FAVOR OF _____

\$ _____

ON ACCOUNT OF APPROPRIATION FOR _____

Allowed _____ 20 _____

In the sum of \$ _____

I have examined the within claim and hereby certify as follows:

That it is in proper form.

That it is duly authenticated as required by law.

That it is based upon statutory authority.

That it is apparently correct incorrect.

I certify that the within claim is true and correct; that the services therein itemized and for which charge is made were ordered by me and were necessary to the public business.

20 _____

LEGAL ADVERTISING
TABLE SHOWING PRICE PER LINE AND PER INSERTION

Type & Size	6.48 in. Column	No. of Insertions	Price per Line	Price per Insertion
6.5	288	2	4.47	8.94

Date of Svc: 12/5/08 (Date & Dscrp = 30 Char. Max.)
 Other Dscrp: Public Hearing 0 Zone Standard
 Amt: \$5500 Fund: 3240 Acct: 520700 Src. Type: 00000
 Print: 14060 Dept: 197049 Bdgt. Ref: 2009 PCBU: 00495
 Grant: 495409051050000 Actv. ID: 0000900
 Only) Prog. Int: AD Date: 12/18/08 Acct. Int: SA Date: 12/21/08

149422

12/9
1/13

ACCOUNT #8091350

INDIANA DEPT OF ENVIRON MGT
(Government Unit)

PT4936

IDEM FISCAL/ACCOUNTING

POST-TRIBUNE

Dr.

LAKE

County, Indiana

1433 E. 83RD AVE., MERRILLVILLE, IN 46410-6307

PUBLISHER'S CLAIM

LINE COUNT

Display Matter (Must not exceed two actual lines, neither of which shall total more than four solid lines of the type in which the body of the advertisement is set) number of equivalent lines.

Head - number of lines.

Body - number of lines.

Tail - number of lines.

Total number of lines in notice

YOUR COPY PAID

COMPUTATION OF CHARGES

81.00 lines, 2 columns wide equals 162.00 equivalent
lines at .3200 cents per line

Additional charge for notices containing rule or tabular work (50 percent of above amount)

\$ 51.84

Charge for extra proofs of publication (\$1.00 for each proof in excess of two)

\$ 51.84

DATA FOR... Pursu... no p... Date...
Pursu... 155, Acts 1953,
no p... just and correct, that the amount claimed is legally due, after allowing all just credits, and that
Date... 08
Title... CREDIT MANAGER

PUBLISHER'S AFFIDAVIT

State of Indiana)
Lake County) SS

Personally appeared before me a notary public in and for said county and state, the undersigned MARIBEL DELEREY who, being duly sworn, says that he/she is LEGAL CLERK of the POST-TRIBUNE a DAILY newspaper of general circulation printed and published in the English language in the city of MERRILLVILLE in State and county aforesaid, and that the printed matter attached hereto is a true copy, which was duly published in said paper for 1 time 8 HR OZONE STANDARD the dates of publication being as follows.

12/2
Subscribed and sworn to before me this 2nd day of Dec, 2008
Notary Public

January 16, 2016
My commission expires

Public Hearing Attendance Record

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PUBLIC HEARING ATTENDANCE RECORD

Title of Public Hearing: 8-hour ozone redesignation for Lake + Porter counties **Location:** NIRPC (Portage, IN) **Date:** 1/8/2009

Please print all the information:

NAME	ORGANIZATION/ COMPANY	PHONE NUMBER	ADDRESS
OMB writer	P-T		
Mark Strimber	NISource	219-647-5209	501 E. 86th Ave, Merrillville, IN
John Ross	M Source	219 647 5240	" " " " " 46410
Kay Nelson	NWI Forum	219-763-303	knelson@nwiforum.org 6100 Southport Portage
Jim Alexander	U.S. Steel	219-888-3387	JMAlexander@USS.com
Kathy Luther	NIRPC	219-763-6060	kluther@nirpc.org; 6100 Southport, Portage 46383
DAVE BETHRENS	U.S. STEEL	219-888-2938	DCBETHRENS@USS.com
Charlotte Reed	Have the Science	219-926-2724	20 1453 N. Trement @ Porter IN 46304
Tim Thompson	BP	219 473-2110	2815 Indianapolis Blvd, Whiting IN 46394

Public Hearing Transcript

PROCEEDINGS

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (IDEM)
State Implementation Plan Revisions Concerning the 8-Hour Ozone
Standard, for Lake and Porter Counties

January 8, 2009

6:00 p.m. (local time)

Northwest Indiana Regional Planning Commission
6100 Southport Road, Portage, Indiana

Josephine Ross, Notary Public

1
2 MR. DELONEY: This is a public hearing concerning the
3 following State Implementation Plan revisions. The revisions
4 action includes: Draft Redesignation Petition and Maintenance
5 Plans association with the 1997, 8-hour ozone standard, for the
6 Indiana portion of the Chicago-Gary-Lake County IL-IN
7 Nonattainment Area. A Draft Attainment Demonstration for
8 the Indiana portion of the Chicago-Gary-Lake County IL-IN
9 Nonattainment Area. A Rate of Further Progress Demonstration
10 for the Indiana portion of the Chicago-Gary-Lake County IL-IN
11 Nonattainment Area. A request for waiver for Reasonably
12 Available Control Technology Requirements specifically
13 applicable for oxide of nitrogen or NOx. Reasonably Available
14 Control Technology applicability analysis for volatile organic
15 compounds or VOC. This hearing is being held to conform to the
16 provision in 40CFR Part 51 regarding public hearings for State
17 Implementation Plans.

18 My name is Scott Deloney. I am Chief of the Air Programs
19 Branch for the Indiana Department of Environmental Management's
20 Office of Air Quality. I have been appointed to act as hearing
21 officer for this public hearing. Also here from the Department
22 of Environmental Management are Chris Pederson to my right and
23 then to my left Brian Wolff, Ken Ritter, and Eric Bailey.

24 All of us have been involved in preparing these
25 documents. Notice of the time and place of the hearing was

1 given as provided by law by publication in the following
2 newspapers: The Times, located in Munster, Indiana; the
3 Post-Tribune, located in Merrillville, Indiana; and the
4 Chesterton Tribune, located in Chesterton, Indiana.

5 The purpose of this public hearing is to provide
6 interested persons an opportunity to offer comments to the
7 State regarding the draft State Implementation Plan revisions
8 for the Indiana portion of the Chicago-Gary-Lake County IL-IN
9 Nonattainment Area.

10 Appearance blanks have been distributed in the hearing
11 room for all those desiring to be shown appearing on record in
12 this cause. If you've not already filled out the form, please
13 do so and indicate if you are appearing for yourself or on
14 behalf of a group or organization and identify such group or
15 organization. Also, note the capacity in which you appear,
16 such as, attorney, officer, or authorized spokesperson.

17 Any person who is heard or represented at this hearing or
18 who requests notice may be given written notice of the final
19 action taken on this State Implementation Plan submittal.
20 Please indicate on the appearance card if you wish to receive
21 such notification. When appearance cards have been completed,
22 they should be handed to me and I will include them with the
23 official record of this proceeding. Again, the cards that I am
24 referring to are on the back table next to the sign in sheet.

25 Oral statements will be heard, but written statements may

1 be handed to me or mailed to the Office of Air Quality on or
2 before close of business on Monday, January 12, 2008. A
3 written transcript of the hearing is being made. The
4 transcript will be made for public inspection and a copy of the
5 transcript will be made available to any person upon payment
6 of the copying cost.

7 After the conclusion of this public hearing, I will
8 prepare a written report summarizing the comments received at
9 the hearing and recommending such changes which maybe necessary
10 to these documents.

11 I would like to introduce the following documents into
12 record: First, a notice of public hearing. A Draft
13 Redesignation Petition and Maintenance Plan in association with
14 the 8-hour ozone standard. A Draft Attainment Demonstration
15 for the Indiana portion of the Nonattainment Area. A Rate of
16 Further Progress Demonstration for the Indiana portion of the
17 Nonattainment Area. Also contained within a request of waiver
18 for Reasonably Available Control Technology Requirements
19 for oxides of nitrogen including enclosure. And finally a
20 Reasonably Available Control Technology applicability analysis
21 for Volatile Organic Compounds.

22 Finally, I would like to briefly go over the contents of
23 the draft document.

24 In 1997, the United States Environmental Protection Agency
25 established a new more stringent standard for ozone, referred

1 to as the 8-hour ozone standard. The standard itself was
2 established at 0.08 parts per million measured over an 8-hour
3 period. With the Guidelines on Data Handling Conventions
4 for the 8 hour ozone National Ambient Air Quality Standard
5 (NAAQS), published by the U.S. EPA in December of 1998,
6 the U.S. EPA established parts per million in three significant
7 figures as the basis for computation of 8-hour ozone
8 concentrations. In accordance with this guidance, three
9 significant digits are used to determine the area's design
10 value and for conducting attainment tests, specifically,
11 because the third decimal digit is rounded 0.084 parts per
12 million is the largest concentration that is less than or equal
13 to the standard of 0.08 parts per million. Therefore, an ozone
14 concentration equal to or greater than 0.085 parts per million
15 is considered to be above or in violation of the standard.
16 Legal challenges to the new standard for ozone resulted in
17 delayed implementation of the standard until February of 2001
18 when the Supreme Court ruled that the U.S. EPA could proceed
19 with implementation of the new standard providing that the U.S.
20 EPA's implementation is consistent with clean air act. The
21 U.S. EPA's first action in implementing the new standard
22 for ozone was to designate areas throughout the country as
23 attainment, nonattainment, or unclassifiable. The
24 Chicago-Gary-Lake County IL-IN area, specifically, Lake and
25 Porter Counties, Indiana were designated nonattainment under

1 the 8-hour standard on April 15, 2004. This designation was
2 based on the monitored design value of 0.090 parts per million.
3 This design value derived from an average of the fourth highest
4 ozone values over the previous three years, those being 2001
5 through 2003. At the conclusion of the 2005 ozone season all
6 monitors within the Indiana portion of the Chicago-Gary-Lake
7 County IL-IN Nonattainment Area measured air quality that met
8 the ambient air quality standards for ozone. In July 2006,
9 IDEM held a public hearing and submitted a final redesignation
10 request and maintenance plan for the Indiana portion of the
11 Nonattainment Area to U.S. EPA. In September 2006, the Whiting
12 monitor in Lake County reviolated the standard.
13 September 2006, being the close of the 2006, excuse me, 2007,
14 the close of the 2007 ozone season. The most recent design
15 value for the area is 0.077 parts per million. Which is based
16 on an average of the the annual fourth highest ozone values for
17 the years 2006 through 2008. The design value represents ozone
18 concentrations that are well below the 1997 national ambient
19 air quality standard; thus, the area and eligibility is to be
20 redesignated to attainment under the 1997, 8-hour ozone
21 standard and classified as maintenance. The Indiana Department
22 of Environmental Management has also prepared the following
23 documents: A Draft Attainment Demonstration for the Indiana
24 portion of the Nonattainment Area which demonstrates that the
25 area will; in fact, obtain the standard by the statutory

1 deadline of 2010. A Rate of Further Progress Demonstration for
2 the Indiana portion of the nonattainment area which
3 demonstrates that area has achieved the required emission
4 reductions to achieve attainment of the standard. As well as,
5 two additional documents which include a request for a waiver
6 for Reasonably Available Control Technology requirements
7 applicable for oxides of nitrogen supported by the fact that
8 no additional reductions are necessary to obtain the standard.
9 And finally a Reasonably Available Control Technology
10 applicability analysis for volatile organic compounds which
11 demonstrates that all required controls are; in fact, already
12 in place. The Indiana Department of Environmental Management
13 has prepared these documents for the Indiana portion of the
14 Nonattainment Area in accordance with U.S. EPA guidance and in
15 coordination with the State of Illinois. The draft documents
16 demonstrate that the area's attain this 1997, 8-hour ozone
17 standard based on monitored concentrations and that
18 the reductions of monitored concentrations are; in fact,
19 attributable to permit and enforceable reductions in precursor
20 emissions. Specifically reductions of both volatile organic
21 compounds and oxides of nitrogen.

22 Furthermore, the draft documents outline the following:
23 Precursor emissions of volatile organic compounds and oxides of
24 nitrogen will continue to decline in the future. Due to
25 existing and future emission controls the area's air quality is

1 not projected to worsen and should improve further over time.

2 A commitment for all existing emission controls
3 to; in fact, remain in place. A commitment to revise the plan
4 within eight years of redesignation. A commitment to adopt and
5 expeditiously implement necessary corrective actions if a
6 warning or action level response is triggered. A mobile source
7 emissions budget for transportation conformity purposes. This
8 concludes my comments regarding the State Implementation Plans
9 for the Chicago-Gary-Lake County IL-IN Nonattainment Area.

10 This public hearing is now open for public comment.

11 Are there any public -- I know that we have two speakers
12 that have comments tonight and I will be calling upon them. If
13 anyone else, based on comments provided by others decide that
14 they would like to speak this evening that would be fine.
15 I just ask that you introduce yourself so that the court
16 reporter can; in fact, get that into record.

17 Oh, I'm sorry. I should probably clarify, if I mention
18 2008 as the Monday January 12, deadline for submitting public
19 comments, that's Monday January 12, 2009. Thanks, Chris.

20 Did you get that? Good.

21 All right. I've got two speakers' cards here. First up
22 would be Mark Strimbu who is representing NiSource.

23 MR. STRIMBU: I'm Mark Strimbu. I'm with NiSource
24 the Environmental Health and Safety Department. I'm speaking
25 on behalf of NiSource. First of all, I'd like to thank IDEM.

1 I support them for continuing this process that was begun
2 several years ago and recognizes the improvements of air
3 quality in this area and would finally give us acknowledgement
4 of those achievements.

5 I have a few comments and you can probably see here I have
6 notes in the margins of the documents that were presented as
7 just kind of typos or places where clarifications are being
8 requested. And to summarize them basically, we are looking for
9 the clarifications on tables where the emissions area, and or,
10 the time period that the emissions are being referenced. We
11 stand a little bit of improvement by clarifications. I'm
12 making these suggestions in specific places. Also there's a
13 few places where there's yellow highlights in the documents and
14 there's really no place where I could see -- where I was
15 supposed to intend -- so I was just asking for some
16 clarification of those points. In general, there's a few pages
17 where there's comments made about the care program and as you
18 mentioned earlier in your presentation today up here at the
19 meeting that there was a court action cited on the 23rd of
20 December just recommending that any kind of update that would
21 be relevant to these documents in that regard be added to this
22 document, as well as for clarification. Hopefully of all of
23 these comments will help address any concerns that EPA may have
24 as far as technical correctness of the document, as well as
25 anybody that comes and picks this up in the future, and is

1 trying to reference to see exactly what was going on. With
2 that, I'd like to thank IDEM for their continued efforts, and
3 I'll give these to you.

4 MR. DELONEY: I can take them, Mark. Thank you.

5 And then next I have Kay Nelson who is representing the
6 Northwest Forum.

7 MRS. NELSON: My name is Kay Nelson. I'm the
8 Director of Enviromental Affairs for the Northwest Indiana
9 Forum. The forum is a regional economic development
10 organization whose membership is about 120 members of the
11 business community here in Northwest Indiana representing not
12 only our large industries but health care industries, financial
13 instutions, and universities. We are appreciative of the
14 opportunity to speak to you here this evening and support your
15 inititive in this. The forum recognizes the significant
16 efforts that have been made historically by the business and
17 general community in Northwest Indiana that resulted in the
18 improvements of our air quality. This air quality improvement
19 represents the serious commitment by businesses in their
20 compliance efforts and personal lifestyle modifications that
21 our general public have made during ozone season. In
22 recognition of the importance of air quality improvements for
23 our quality of life. This accomplishment is a milestone. The
24 fact that you're able to make this application, and we are very
25 excited to see this and hope that our residents recognize this

1 important milestone that we've accomplished today. Thank you.

2 MR. DELONEY: Thank you.

3 I do not have any comment cards. Does anybody else wish
4 to go on record with statements this evening?

5 MRS. READ: I just have a couple of questions. I'm
6 Charlotte Read. For the first time I've run into something
7 called relative response -- reduction factor.

8 MR. DELONEY: Relative reduction factor or relative
9 response factor?

10 MRS. READ: Well, it was relatively new to me. It
11 was supposed to be one of the modeling elements that you used
12 to model attainment and when I looked and it doesn't seem to
13 be. I looked at the bigger package at the library and it
14 talked about the -- how much the relative response factors --
15 they didn't have a high performance number, or the accuracy or
16 the usability there was a little question in terms of how to
17 predict. I can't find it in this.

18 MR. DELONEY: Okay. That's something that Ken Ritter
19 is here for, actually. He's our technical support.

20 MRS. READ: How come they have a large, a high margin
21 of error?

22 MR. RITTER: Okay. First of all, what they are is
23 it's kind of a new technique the EPAs developed for analyzing.
24 The reason to begin with is that we're not basing our judgement
25 of whether or not the area's gonna achieve attainment in the

1 future based on the absolute value that the model spits out.
2 What they are recommending instead is, you go ahead and you
3 input all of your emissions and so on from the so-called base
4 year, which in one case was 2005, and you run the model and you
5 compare the data that you model to the actual monitor values
6 and that has to be within a certain range of error so that it's
7 correct and acceptable for use and then what you do, you put in
8 your inputs for the future year, in this case 2009, to show
9 attainment for before 2010. And you predict a number out there
10 into the future and so say that your base year was -- we'll,
11 say for ease of math -- it's a hundred and say that your
12 predicted value is 80. So your relative reduction factor --
13 the 80 over 100 -- so it's roughly about 80 percent, 0.80.
14 What you do then is you go back and take your actually monitor
15 value during the base year of 2005 and multiply that by 80
16 percent and that's what the projection is out in 2009.

17 Does that make sense?

18 MRS. READ: It makes sense as a prediction.

19 MR. RITTER: So you do that for every monitor in the
20 area. So that way, like I say, you have this factor and the
21 factor will be different for each monitor. Each monitor will
22 react different because of location of the emissions and where
23 there might be a shoreline or inland or whatever so each
24 reduction factor will be slightly different. So we do it
25 individually or each monitor.

1 MRS. READ: What did you do to make these projections
2 before you had relative response factor -- relative reduction
3 factor, previously? So this is new. What was used for before?

4 MR. RITTER: Well, we used an absolute value. We
5 would have said that, in this case again, maybe our value was
6 gonna be 80 parts per million. That was gonna be the absolute
7 number, okay? In this way, you're actually relating it to
8 actual monitored values.

9 MRS. READ: The design values were not related to
10 monitor values?

11 MR. RITTER: Yeah. You take the monitor design value
12 and -- Okay. First of all, you've established that your
13 baseline modeling matches closely your actual monitor design
14 values, okay. Then you put in new inputs for reflecting
15 emissions in your future year and so forth, and you have to
16 project it and you get that projected number. And so we're
17 assuming that reduction that applies in the model since it
18 jibes up closely with the actual monitor design values to begin
19 with that that reduction factor will be accurate. So you take
20 the actual individual design values that you've monitored over
21 the years and multiply it by the reduction factor for that
22 specific site.

23 MRS. READ: My concern is that looking at these
24 numbers, Ogden Dunes and Hammond still seem to be very close
25 to, in some cases the RRF factor number still comes above the

1 standard. Still we're saying that you model in respect to be
2 in attainment now and some of the numbers in here and close to
3 those two sites generally.

4 MR. RITTER: Are those taken using the 1996 baseline
5 values? Some of the modeling we used was earlier data and in
6 those cases, the modeling at that time may have shown that the
7 site would still be over, but when you look at the actual data
8 that we've collected in 2005, 2006, 2007 the design values are
9 substantially lower than they were in '96.

10 MRS. READ: Those two still seem to be the sites in
11 Northwest Indiana, Lake and Porter still seem to be closest to
12 the standard and I would say most likely to not meet it in the
13 future. That's my concern. I don't know and I don't think you
14 know either.

15 MR. RITTER: Could you cite which table that you're
16 looking at?

17 MRS. READ: There's a couple. While I'm looking, the
18 other question I had, I think it said that this hearing
19 was also supposed to be on the emissions inventory and when
20 I looked at the emissions inventory package at the Valpraiso
21 Library it was just summaries. Vehicles and so forth and so on
22 as opposed to a list of what sources make up the emissions
23 inventory. So I was surprised that you wouldn't have, say, a
24 comment period tonight would also include comments on the
25 emissions inventory, but without specific numbers -- I couldn't

1 find them. I probably could find from like 2005 and look in
2 what's in my huge file.

3 MR. RITTER: Yeah. Our emissions inventory for Lake
4 and Porter Counties was prepared in 2004 and it was public
5 noticed in 2005 and formally submitted to EPA in 2006. This
6 particular series of documents did not include the baseline
7 inventory for the area. That was a submittal that we actually
8 do in September of 2006.

9 MRS. READ: The public notice document was the big
10 package. It said that the hearing would also be on the
11 emissions inventory.

12 MR. DELONEY: The emissions data contained? Or do
13 you mean in relationship to the NOx waiver?

14 MRS. READ: The public hearing on the emissions
15 inventory. When I looked at that particular -- a lot of those
16 were consolidated. I can go back and find it.

17 MR. DELONEY: Yeah. I do have it in front of me,
18 Charlotte. I'm not sure what you might be referring to. Maybe
19 after the meeting if you wouldn't mind I'd be happy to chat
20 with you about it.

21 MRS. READ: I have it with me and I wrote it down and
22 that's why.

23 MR. DELONEY: Okay. Yeah. I have the notice too, as
24 it was published, and what we were referencing were the
25 redesignation petition, the attainment demonstration, the

1 available, excuse me, the request for waiver for NOx,
2 demonstration of rate of further progress, as well as the
3 trends analysis for additional VSECTGs.

4 MRS. READ: In the pending scene, which I don't see
5 here, the emissions inventory, as I say, was composites.
6 Doesn't really tell anything.

7 MR. DELONEY: Are there specific portions of
8 the emissions inventory that you want to look at?

9 MRS. READ: Until I see it, I don't know.

10 MR. DELONEY: Okay. They're all posted online at the
11 same location that all of these documents are posted on our
12 website. They're all listed right under Lake and Porter
13 Counties and all of that information.

14 MRS. READ: That would have been useful. If you want
15 all the gritty details.

16 MR. DELONEY: To put that link in there? We can do
17 that for the final submittal before it's made.

18 Does anybody else wish to make any formal statements for
19 the record concerning this cause? If not, before I close the
20 public hearing, I'd like to make everybody aware that all five
21 of us will be here following the hearing if you have any
22 additional questions or anything concerning this matter or
23 anything else associated with air quality. With that said, in
24 the absence of any further comments, these proceedings are
25 hereby concluded. Thank you.

1 STATE OF INDIANA

2 COUNTY OF PORTER

3 CERTIFICATE OF COURT REPORTER

4 I, Josephine Ross, notary public, reporter of the,
5 County of Porter, State of Indiana, do hereby certify that I am
6 the court reporter of said court, duly appointed and sworn to
7 report the evidence of causes tried therein.

8 That upon the hearing in this cause, beginning on the
9 8th of January, 2009, I took down, by machine shorthand, all of
10 the statements of counsel, the evidence given during the
11 hearing of this cause, objections of counsel thereto, and the
12 rulings of the Court upon such objections, the introduction of
13 exhibits, the objections thereto, and the Court's rulings
14 thereon.

15 I further certify that the foregoing transcript, as
16 prepared, is full, true, correct, and complete.

17 WITNESS MY HAND and seal, this 20th day of
18 January, 2009.

19

20

21

Josephine Ross

Josephine Ross, Notary Public

22

23

NOTARY SEAL

24

25

**Written Comments Received at Public
Hearing on January 8, 2009**



132 S. CALUMET RD. • CHESTERTON, IN 46304

VOICE: (219) 926-7777

FAX: (219) 926-6662

317-233-5967

TO: SCOTT DE LONEY

AIR PROGRAMS BRANCH

FROM: Charlotti Read

MESSAGE: Saw the Dennis Comments
on O₃ Redesignation ~~Petition~~ Request

This transmission is 5 pages including this cover.

1453 North Tremont Road
Chesterton, IN 46304
January 12, 2009

Northwest Indiana State Implementation Plan for Ozone
Scott Deloney, Chief
Air Programs Branch, Office of Air Quality – Mail Code 61-50
100 North Senate Avenue
Indiana Department of Environmental Management
Indianapolis, IN 46206-2251

Dear Mr. Deloney:

This comments supplement comments made on behalf of Save the Dunes Council June 29, 2008, presented at the Lake County Public Library, June 29, 2006. A copy of those comments is attached.

The documents reviewed for these comments include the 8-hour Ozone Attainment Demonstration and Technical Support Document for the Indiana portion of the Chicago-Gary-Lake County, IL-IN "Moderate" Ozone Nonattainment Area Lake and Porter Counties, Indiana; and Request for Redesignation and Maintenance Plan for Ozone Attainment in the 8-Hour Ozone Nonattainment Area, Lake and Porter Counties, Indiana.

Uncertainties remain that the attainment plan petition now out for public review will accomplish meeting the 0.085 standard by June, 2009. For example, emissions data for the Illinois portion of the nonattainment area is draft and subject to change, as of November 2008. This may require revisions to Section 4.0 of the Emission Inventory submitted by Indiana. Trends in tons of VOCs per summer day in Lake and Porter County show estimated increases in both area and point sources by 2020. Attainment status will allow new to prepare an Air Quality Analysis of the impact of the new request. As pointed out in our June statement, this is significantly less protective than offsetting increased emissions as is now the cases.

In the Conclusions Section of the Request document, it indicates that regional air quality planning efforts sponsored by LADCO is to establish a regional control strategy that provides for attainment of the ozone and fine particle standards throughout Illinois, Indiana, Ohio and Michigan. It states further that Indiana is developing local and statewide emission control measures where photochemical modeling and culpability analyses demonstrate a clear need, and cost effectiveness analyses justify the implementation of such measures. This would indicate that attainment of the 8-hour standard in Lake and Porter Counties is not a sure thing.

In addition, the Conclusions Section of the Attainment Demonstration Document note: "Although the 2008 photochemical modeling results were slightly above 0.085 ppm, the 2008 results were very close to demonstrating attainment, and the 2009 photochemical

modeling results do demonstrate attainment." This would also indicate that actual attainment may not be a sure thing at least in 2009.

Much weight is given in the mobile source budget section to Tier II vehicle standards, nonroad standards, low sulfur diesel, etc., yet status of compliance with these federal standards in Lake and Porter counties is not discussed nor any quantification of reductions from them provided. Yet, we are told that despite increases in VOC emissions in the out year of 2020, reductions in mobile sources will compensate for those projected increases.

The Mobile Source Emissions Budget (p. 53, Attainment Demonstration). uses a 5% cushion (increase?) for the 2009 budget, but notes that IDEM and partners will be conducting additional air quality modeling to adjust on-road mobile emissions as well as any changes due to constant review and evaluation of model inputs.

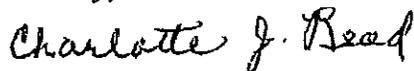
Temperature information comes generally from O'Hare Airport. It should be supplemented or perhaps replaced for Lake and Porter Counties with temperature data coming from local monitors.

US EPA recommends that modeled attainment demonstration test [5.1.10] should be used in a "relative" sense rather than an "absolute" sense. "Future years design values are calculated using the RRF [relative response factor (something new)] and gives a relative estimate of modeled concentrations, based on growth and control factors."

The potential impact of emissions from Indiana and the Chicago area on Holland, Michigan is being modeled.

While recognizing the improvements that Indiana and federal air pollution control programs for ozone have had on air quality improvements in Lake and Porter County, we believe that redesignation to attainment at this time is premature.

Sincerely,



Charlotte J. Read
First Vice President
Save the Dunes Council

PS: At the January 8 public hearing, I asked about the public comment provisions for the final 2005 emissions inventory used in the full attainment demonstration contained at Section 3.3, entitled Emission Inventories. I got an unsatisfactory response. I am still puzzled as to what "will be subject to public comment along with the full attainment demonstration" and when.

Comments Presented by Susan MiHalo, President, Save the Dunes
June 29, 2006
Lake County Public Library

Save the Dunes Council appreciates the opportunity to address air quality issues in Northwest Indiana. We have worked with you for years to reduce pollution and improve air quality. We are encouraged by the air quality improvements to date and future reductions which will happen because of the Clean Air Interstate Rule (CAIR).

However, we have serious concerns about re-designating Lake and Porter Counties as attainment for ozone for the following reasons:

1. There is uncertainty over a major source of NOx and SO2 in Lake County. The Dean Mitchell power plant, located in Gary along the Lake Michigan lakefront was closed in 2002. Now, a recent settlement before the IURC is revisiting the issue to determine whether to re-open the plant. Mitchell is currently in the SIP inventory, but has not operated for almost 5 years. Should the plant re-open, these emissions could negatively impact air quality.
2. Should the petition be granted, Northwest Indiana will lose the current offset provision which requires new sources to offset increased emissions. We understand this would not be required as an "attainment area".
3. All monitors should be considered. We have a concern that information from existing air monitors has not been considered for this decision. For example, it is our understanding that an ambient air monitor exists just south of U.S. 12 on the Mittal Steel property. We urge the state to include that information in any submission to EPA, or, to at least recognize that those monitors exist or to state why they are not being included.
4. It is our belief that the threshold for the trigger for the maintenance plan is too high. At 89 ppb, this is over the current standard.
5. Unusual weather occurrences should be considered, regardless of the fact that you are using three-year averages. We have had relatively cool summers the past two years, especially in 2004. Even considering those cool years, the 4th highest readings for Gary was 0.089, for Hammond was 0.087, and for Ogden Dunes was 0.090. To protect public health there needs to be a margin of safety should the climate continue to get warmer, as indicated by recent news reports about global warming.

And making unsubstantiated statements in the petition, such as "Ozone formation in the future will be influenced less by meteorological conditions," on page 43 is misleading. Instead, you should have stated that the longer averaging time and the averaging of three years' data reduce the influence of unusual meteorological conditions in any given year. But this still does not take into account unusual weather conditions that may occur over a period of years. How often do you hear about a 1-year drought? Weather just does not work that way.

6. There are many new sources proposed for Northwest Indiana including large intermodal surface transportation facilities, increased airport development, and a new power plant now under study. The impact from these developments must be considered as part of any redesignation effort.

In addition, this petition ignores new sources that may develop in the Chicago Metropolitan area that may adversely affect our ambient air standard. Lake and Porter Counties do not exist in an island unto themselves. Cook County has received an "F" on Ozone in the American Lung Association's 2006 State of the Air 2006 Report. Incidentally, Lake County and Porter Counties also received an "F's" in this report.

Breaking these counties from the Chicago Metropolitan area also would create incentives for additional sprawl development in Lake County, and more particularly, Porter County, according to a report provided to the U.S. Congress by the Congressional Research Service of the Library of Congress in 2004. That is one of the reasons why Metropolitan Statistical Areas were created for attainment, according to this report.

7. This petition flies in the face of regional and interstate cooperation to improve air quality. It sends a message to the rest of the region that all the work we have done together over the years toward achieving attainment is meaningless. If we were in attainment, I'm not sure we would have had the impetus to implement idle air technology at our truck stops, technology that will remove 20 million pounds of diesel emissions and save 1 million gallons of diesel fuel annually, according to a recent news report in The Times of Northwest Indiana.

8. We also feel compelled to remind everyone that the Indiana Dunes National Lakeshore lies in these counties. According to the EPA, ground-level ozone interferes with the ability of plants to produce and store food, so that growth, reproduction and overall plant health are compromised. By weakening sensitive vegetation, ozone makes plants more susceptible to disease. These effects can significantly decrease the natural beauty of an area, such as the Indiana Dunes National Lakeshore.

Therefore, based on these reasons, we urge Indiana to withdraw the Petition for Redesignation to EPA that is the subject of today's hearing. We will also be submitting written comments prior to the July 7 deadline.

Pages from Redesignation Request with Handwritten Comments from Mark Strimbu, NISOURCE

1. The first page of the redesignation request contains the following information:

- The name of the organization: NISOURCE
- The address: 1000 15th St, NW, Washington, DC 20004
- The phone number: (202) 462-1000
- The fax number: (202) 462-1001
- The website: www.nisource.org

2. The second page of the redesignation request contains the following information:

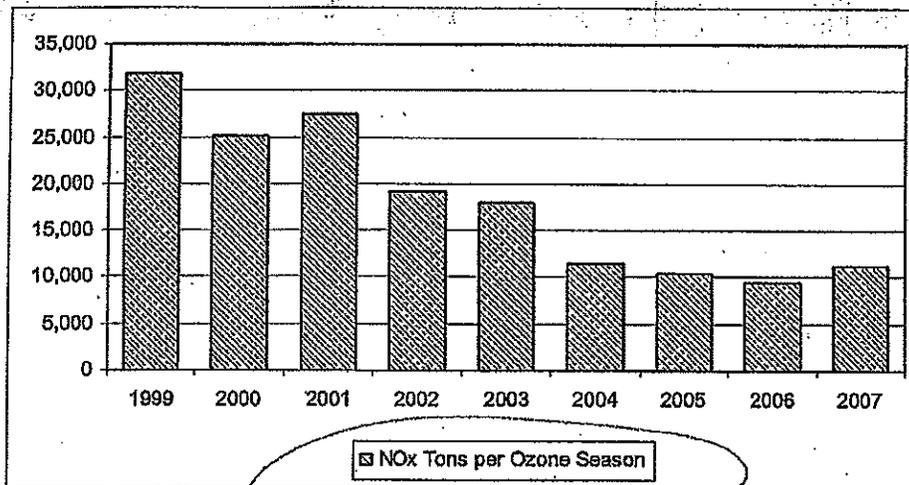
- The name of the organization: NISOURCE
- The address: 1000 15th St, NW, Washington, DC 20004
- The phone number: (202) 462-1000
- The fax number: (202) 462-1001
- The website: www.nisource.org

decreasing substantially in response to national programs affecting all EGUs; such as the Acid Rain program and the NO_x SIP Call. Other sectors of the inventory also impact ozone formation, but large regional sources such as EGUs have a substantial impact on the formation of ozone.

These data were taken from U.S. EPA's Clean Air Markets database². Data are available sooner for these units than other point sources in the inventory because of the NO_x SIP Call budget and trading requirements. Information from 2003 is significant because some EGUs started operation of their NO_x SIP Call controls in order to generate Early Reduction Credits for their future year NO_x budgets. The first season of the NO_x SIP Call budget period began May 31, 2004.

As part of the NO_x SIP Call, the states were required to adopt into their rules a budget for all large EGUs. Indiana's budget is found in 326 IAC 10-4. The budget represents a statewide cap on NO_x emissions. Although each unit is allocated emissions based upon historic heat input, utilities can meet this budget by over-controlling certain units or purchasing credits from the market to account for overages at other units. To summarize, NO_x emissions have dramatically decreased over the years as represented on these graphs. These emissions, capped by the state rule, should remain at least this low through the maintenance period covered by this request.

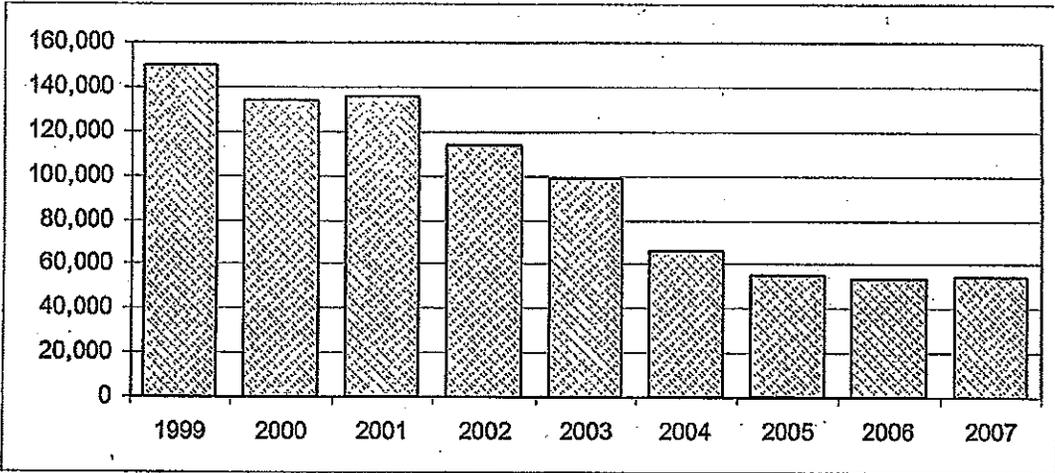
**Graph 4.3 NO_x Emissions from Northwest Indiana Electric Generating Units
1999-2007**



² <http://www.epa.gov/airmarkets/>

Caption - Annual or O₃ season tons? see Graph 4.3 caption

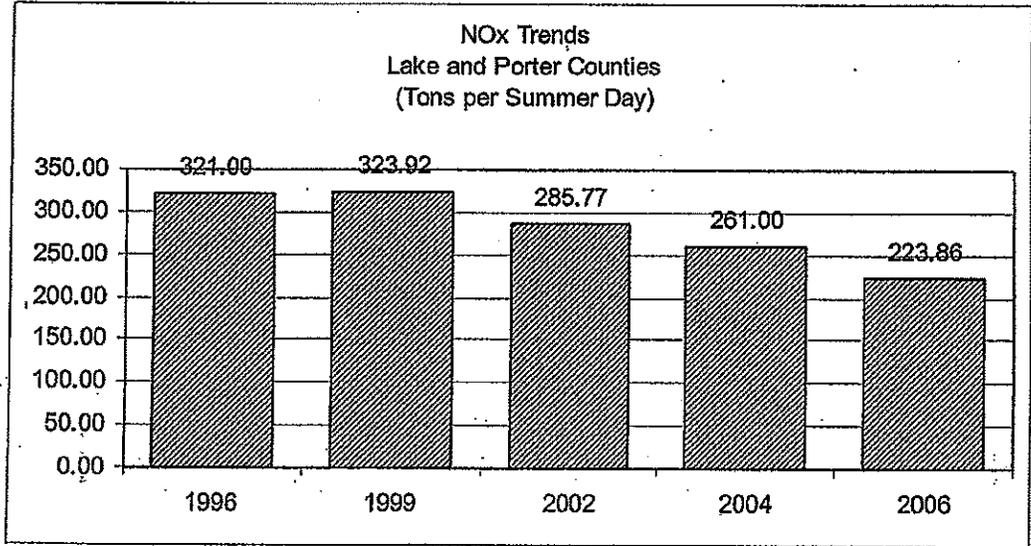
Graph 4.4 Statewide NO_x Emissions from Electric Generating Units 1999-2007



All Anthropogenic Sources

Periodic inventories, which include emissions from all sectors (mobile, area³, non-road, and point sources) were prepared for 1996, 1999, 2002, 2004, and 2006. Graphs 4.5, 4.6, 4.7, and 4.8 show the trends for the total emissions for all anthropogenic source categories (within Lake and Porter counties, and the entire nonattainment area), which also roughly follow the years of monitored air quality trends discussed in Section 3.0. Graphs and data tables of emissions from each source category are available in Appendix B.

Graph 4.5 NO_x Emissions Trends, 1996 - 2006, All Sources in Lake and Porter Counties



³Area Source estimates for 2006 use the 2005 inventory.

- Mobile source emissions were calculated from MOBILE6.2 produced emission factors and data extracted from the region's travel-demand model. Several adjustments were made to the travel demand model and calculation methodology since 1996. As a result, since the 1996, 1999, and 2002 emission inventories were prepared with slightly different methodology, they do not provide for a true comparison with the 2004 through 2020 estimates. The fluctuations referenced in the data, particularly 1996 through 2002 NO_x emissions, are due to changes in the calculation methodology, not necessarily actual mobile source emissions.
- Point source information was compiled from IDEM's 2006 annual emissions statement database and the 2007 U.S. EPA Air Markets acid rain database⁴.
- Biogenic emissions are not included in these summaries.
- Nonroad emissions for 2006 were grown from the 2005 National Emissions Inventory (NEI). To address concerns about the accuracy of some of the categories in U.S. EPA's nonroad emissions model, the Lake Michigan Air Directors' Consortium (LADCO), contracted with two (2) companies to review the base data and make recommendations. One of the contractors also estimated emissions for two (2) categories not included in U.S. EPA's nonroad model and reviewed model inputs for another. Emissions were estimated for commercial marine vessels and railroads. Recreational motorboat population and spatial surrogates (used to assign emissions to each county) were significantly updated. The populations for the construction equipment category were reviewed and updated based upon surveys completed in the Midwest and the temporal allocation for agricultural sources was also updated by the other contractor. A new nonroad estimation model was provided by U.S. EPA for the 2002 analysis. The 1996 and 1999 nonroad emission estimates were generated by a previous U.S. EPA model, and thus, cannot provide for a true comparison. The fluctuations referenced in the data could be due to changes in the model and methodology, and not necessarily reflect changes in emissions.

The emissions data referenced for Illinois' portion of the nonattainment area (entire nonattainment area) were provided by the State of Illinois via LADCO. This inventory was prepared using similar methodologies. However, it should be noted that the emissions data referenced for Illinois' portion of the nonattainment area is draft and subject to change. Indiana recognizes that revisions to Section 4.0 of this document may be necessary once Illinois prepares a redesignation request and maintenance plan for its portion of the nonattainment area.

Appendix B contains data tables and graphs of all these emissions.

⁴ <http://camddataandmaps.epa.gov/gdm/>

4.3 Emission Projections

In consultation with the U.S. EPA and other stakeholders, IDEM selected the year 2020 as the maintenance year for this redesignation request. This document contains projected emissions inventories for 2010⁵ and 2020⁶.

Emission projections were prepared for Lake and Porter counties, as well as for the entire nonattainment area. IDEM, with assistance from LADCO, prepared emission projections for 2010 and 2020 for the Indiana portion of the nonattainment area. IDEM received 2010 and 2020 emission projections from LADCO for the Illinois portion of the nonattainment area.

How
will these
updates
impact
the
EPA
approval
process?

The detailed inventory information for Lake and Porter counties for 2010 and 2020 is in Appendix B. Emission trends are an important gauge for continued compliance with the ozone standard. Therefore, IDEM performed an initial comparison of the inventories for the base year (2006), interim year (2010), and maintenance year (2020) for Lake and Porter counties and the entire nonattainment area. Graphs 4.11 and 4.13 visually compare the 2006 (base year) estimated emissions with the 2010 and 2020 projected emissions for Lake and Porter counties. Graphs 4.12 and 4.14 visually compare the 2006 (base year) estimated emissions with the 2010 and 2020 projected emission for the entire nonattainment area. Mobile source emission inventories are described in Section 5.0. In addition to LADCO's estimates, point source emissions were projected based upon the statewide EGU NO_x budgets from the Indiana NO_x rule.

⁵ In Section 4.3 all emissions projections for area, non-road, and point/EGU emission projections for the year 2010 are based on 2009 emission estimates.

⁶ In Section 4.3 all emission projections for area, non-road, and point/EGU emission projections for the year 2020 are based on 2018 emission estimates.

year inventories to assess emission trends, as necessary, to assure continued compliance with the ozone standard.

4.5 Permanent and Enforceable Emissions Reductions

Permanent and enforceable reductions of VOCs and NO_x have resulted in attainment of the 8-hour ozone standard. Some of these reductions were due to the application of Reasonably Available Control Technology (RACT) rules and some were due to the application of tighter federal standards on new vehicles. Also, Title IV of the Clean Air Act and the NO_x SIP Call required the reduction of NO_x from utility sources. Section 6.0 identifies the emission control measures specific to Lake and Porter counties, as well as the implementation status of each measure.

4.6 Provisions for Future Updates

As required by Section 175A(b) of the CAAA, Indiana commits to submit to the Administrator, eight (8) years after redesignation, an additional revision of this SIP. The revision will contain Indiana's plan for maintaining the national primary ozone air quality standard for ten (10) years beyond the first ten (10) year period after redesignation.

5.0 TRANSPORTATION CONFORMITY BUDGETS

5.1 On-Road Emission Estimations

Northwest Indiana Regional Planning Commission (NIRPC) is the Metropolitan Planning Organization (MPO) for the area that includes Lake, Porter, and LaPorte counties. This organization maintains a travel demand forecast model that is used to simulate the traffic in the area and is used to predict what that traffic will be like in future years given growth expectations. The model is used mostly to identify where travel capacity will be needed and to determine the infrastructure requirements necessary to meet that need. It is also used to support the calculation of mobile source emissions. The travel demand forecast model is used to predict the total daily Vehicle Miles Traveled (VMT) and a U.S. EPA software program called MOBILE6.2 is used to calculate the emissions per mile. The product of these two outputs, once combined, is the total amount of pollution emitted by on-road vehicles for the particular analyzed area.

*check
for consistency
with reference
to MOBILE
model in
TSD.
make change
as needed.*

5.2 Overview

Broadly described, MOBILE6.2 is used to determine "emission factors," which are the average emissions per mile (grams/mile) for the ozone precursors: NO_x and VOC. There are numerous variables that can affect the emission factors. The vehicle fleet (vehicles on the road) age and the vehicle types have a major effect on the emission factors. The facility type the vehicles are traveling on (MOBILE6.2 facility types are Freeway, Arterial, Local and Ramp) and the vehicle speeds also affect the emission factor values. Meteorological factors such as air temperature and humidity, and the area's Vehicle Inspection/Maintenance program affect the emission factors as well. Once emission

5. Volatile Organic Liquid Storage RACT

Regulatory Basis: 326 IAC 8-9

Implementation Status: Control remains in place.

6. Cold Cleaners

Regulatory Basis: 326 IAC 8-3-8

Implementation Status: Control remains in place.

6.3 Nitrogen Oxides (NO_x) Rule

The U.S. EPA NO_x SIP Call required twenty-two states to adopt rules that would result in significant emission reductions from large EGUs, industrial boilers, and cement kilns in the eastern United States. Indiana adopted this rule in 2001. Beginning in 2004, this rule accounts for a reduction of approximately thirty-one percent (31%) of all NO_x emissions statewide compared to the previous uncontrolled years.

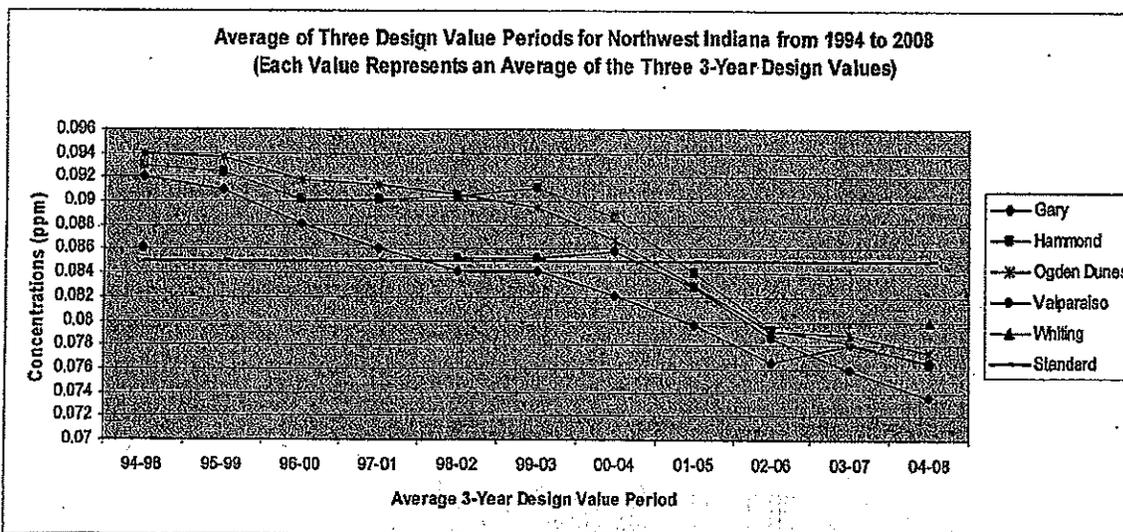
Twenty-one other states have also adopted these rules. The result is that significant reductions have occurred regionally and upwind within the nonattainment area because of the number affected units within the region. Graphs 4.3 and 4.4 show that emissions covered by this program have been trending downward since 1999. Table 6.1, compiled from data taken from the U.S. EPA Clean Air Markets website, quantifies the gradual NO_x reductions that have occurred in Indiana as a result of Title IV (Acid Rain) of the CAAA and the NO_x SIP Call Rule. This cap will stay in place through 2008, at which time The Clean Air Interstate Rule (CAIR) was to supersede. On July 11, 2008, the D.C. Circuit Court of Appeals vacated CAIR. While NO_x emission reductions associated with CAIR were projected to lower ozone concentrations in Northwest Indiana, modeling results in Section 7.0 show that the 8-hour NAAQS can still be met with the vacatur of CAIR.

update
CAIR status?

Further, U.S. EPA more recently published Phase II of the NO_x SIP Call that established a budget for large (greater than 1 ton per day emissions) stationary internal combustion engines. This rule decreases emissions statewide from natural gas compressor stations by 4,263 tons during the ozone season. The Indiana Phase II NO_x SIP Call rule became effective February 26, 2006 and implementation began in 2007.

Graph 7.1

Comparison of Design Values from 1994 through 2007



It should be noted that this modeling was conducted in the year 2000 and used 1996 emission inventories. More recent modeling uses updated emissions inventories from 2005 with revised growth factors and control strategies for emission reductions for future year modeling purposes as well as photochemical modeling updates that better characterize ozone formation and transport. These factors also account for the differences between the older modeling results and current modeling for the NO_x SIP Call and CAIR.

7.4 U.S. EPA Modeling for Clean Air Interstate Rule (CAIR), 2005

On March 10, 2005, the U.S. EPA finalized CAIR. NO_x emissions from power plants were projected to be cut by 1.7 million tons by 2009 and emissions were to be reduced by 1.3 million tons in 2015 in 28 eastern states and the District of Columbia. Compared to a 2003 baseline, Indiana would have reduced NO_x emissions by 113,000 tons by 2009 and 149,000 tons by 2015. To support this rulemaking, U.S. EPA first conducted a base case future year modeling run to show future year concentrations resulting from existing emissions controls, and then conducted future year modeling with emission reductions attributed to CAIR. Results in Table 7.3 show what the base case modeled results without CAIR's emission reductions included. The modeling was based on 1999 – 2003 (1999-2001, 2000-2002, and 2001-2003) design values. Future year modeling was conducted, including for Lake and Porter counties, and the future year design values for 2010 and 2015 were evaluated for attainment of the 8-hour ozone NAAQS. Results of the base case future year modeling without CAIR show that both Indiana counties will attain the 8-hour ozone NAAQS in 2010 with modeled concentrations below .085 ppm and modeled concentrations decreasing further by 2015.

↑
0.085

Table 7.3
Modeling Results from U.S. EPA for the Clean Air Interstate Rule

County	MSA/CMSA	Design Value	Future Design Value	Future Design Value
		(ppm)	(ppm)	(ppm)
		1999-2003	2010 without CAIR	2015 without CAIR
Lake	Hammond	0.091	0.0832	0.0816
Porter	Ogden Dunes	0.089	0.0814	0.0793

update
CAIR
status ?

On July 11, 2008, the D.C. Circuit Court of Appeals vacated U.S. EPA's Clean Air Interstate Rule. While NO_x emission reductions associated with CAIR were projected to lower ozone concentrations in the Northwest Indiana by 0.001 parts per million or less, CAIR was created primarily as a control strategy for PM_{2.5}. Therefore, air quality benefits for reducing ozone concentrations as a result of CAIR are not as great and the vacatur of CAIR does not significantly impact future year 8-hour ozone design values for the Northwest Indiana area.

7.5 LADCO Round 5 Modeling for 8-Hour Ozone Standard

LADCO recently performed updated Comprehensive Air Quality Model (CAMx) modeling for ozone, referred to as "Round 5", which uses the most recent emissions inventories and model updates. This modeling was performed to support attainment demonstrations for the five-state LADCO region. The photochemical model used by LADCO and Indiana for the 8-hour ozone standard analysis is CAMx version 4.5, developed by Environ. This model has been accepted by U.S. EPA as an approved air quality model for regulatory analysis and attainment demonstrations. Requirements of 40 CFR 51.112 as well as the "Guidance on the Use of Models and Other Analyses in Attainment Demonstrations for the 8-hour Ozone NAAQS" (EPA-454/R-05-002, Oct. 2005) are satisfied with the use of CAMx for attainment demonstrations. Meteorology from 2005, as well as 2005 baseyear emissions are used to conduct Round 5 modeling. The ozone modeling metrics for bias, error, fractional bias, and fractional error met U.S. EPA modeling guidance performance criteria. The base-year design value for attainment purposes was calculated from the periods 2003 - 2005, 2004 - 2006, and 2005 - 2007.

Round 5 modeling included several scenarios for attaining the ozone NAAQS. One scenario included the implementation of "on-the-books" controls for future years such as U.S. EPA motor vehicle and fuel standards without the inclusion of CAIR. The future years modeled were 2009, 2012 and 2018. Modeling results, in Table 7.4 below, show ozone concentrations in Northwest Indiana will be below the 8-hour ozone standard of 0.08 ppm.

7.6 Summary of Existing Modeling Results

U.S. EPA and LADCO modeling shows that existing national emission control measures have brought Lake and Porter counties into attainment of the 8-hour ozone NAAQS. Rulemakings to be implemented in the next several years will provide even greater assurance that air quality will continue to meet the standard into the future. Modeling support for the NO_x SIP Call, Heavy Duty Engine and Highway Diesel Fuel, and Tier II/Low Sulfur Fuel show future year design values for Lake and Porter counties will attain the ozone standard with modeled future year design values below 0.08 ppm. CAIR was vacated in July 11, 2008 and LADCO conducted modeling without the emissions reductions associated with CAIR. LADCO's results continue to show future year design values below 0.08 ppm. U.S. EPA modeled base case future years with existing emission controls only and showed that Lake and Porter counties will attain the 8-hour ozone NAAQS without proposed additional national emission control strategies. The application of the most current relative response factors from LADCO's Round 5 modeling demonstrates that the area will continue to attain the standard into the future. Future national and local emission control strategies will ensure that each county's attainment will be maintained with an increasing margin of safety over time.

CAIR
status
update ?

7.7 Temperature Analysis for Lake and Porter Counties

Meteorological conditions are one of the most important factors that influence ozone development and transport. A temperature analysis was conducted to determine how the temperatures during the ozone conducive months of April, May, June, July, August, September, and October compare to normal temperatures for the Northwest Indiana area for the years 1971 through 2000. Temperature information was taken from the National Weather Service Station at O'Hare International Airport in Chicago, Illinois and meteorological stations at Lowell, Lake County, and Porter County Municipal Airports. Available normal maximum temperatures by summer months from 1971-2000 for the Northwest Indiana/ Chicago, Illinois area are as follows:

May - 69.9° F

June - 79.2° F

July - 83.5° F

August - 81.2° F

September - 73.9° F

May - September - 77.5° F

Monthly maximum temperatures for the previous 10 years (1999 - 2008) during the summer months are compared to normal summer month temperatures in Table 7.5. Overall, the temperatures during the 1999, 2002, 2005 and 2007 summer months of May, June, July, August, and September were 1% to 4% above normal while temperatures during the 2000, 2001 2003, 2004, 2006 and 2008 summer months were at normal to 3%

**Local Monitoring (Design Value) Data for Illinois Counties
2003-2008**

County	Site	2003	2004	2005	2006	2007	2008	03-05 avg	04-06 avg	05-07 avg	06-08 avg
Cook	Alsip	0.077	0.065	0.084	0.078	0.085	0.066	0.075	0.075	0.082	0.076
Cook	Chicago-Cheltenham	0.080	0.067	0.076	0.075	0.082	0.066	0.074	0.073	0.078	0.074
Cook	Chicago-Adams	0.078	0.069	0.080	0.073	0.084	0.058	0.076	0.074	0.080	0.071
Cook	Chicago-Luella	0.069						0.069			
Cook	Chicago-Ellis Ave	0.067	0.054	0.084	0.070	0.079	0.063	0.068	0.069	0.076	0.070
Cook	Chicago-Ohio St	0.075	0.060	0.081	0.065	0.075	0.063	0.072	0.068	0.073	0.067
Cook	Chicago-Lawndale	N/A	0.068	0.084	0.075	0.080	0.066	0.076	0.075	0.080	0.074
Cook	Chicago-Huribut St	0.077	0.067	0.083	0.077	0.079	0.063	0.076	0.075	0.080	0.073
Cook	Lemont	0.075	0.067	0.086	0.070	0.085	0.071	0.076	0.074	0.080	0.075
Cook	Cicero	0.070	0.059	0.075	0.060	0.068	0.060	0.068	0.064	0.066	0.062
Cook	Des Plaines	0.073	0.064	0.079				0.072	0.072		
Cook	Northbrook	0.080	0.068	0.081	0.068	0.076	0.063	0.076	0.072	0.076	0.069
Cook	Evanston	0.082	0.075	0.082	0.072	0.080	0.058	0.080	0.076	0.076	0.070
DuPage	Lisle	0.066	0.065	0.078	0.062	0.072	0.057	0.070	0.068	0.070	0.063
Kane	Elgin	0.076	0.069	0.087	0.062	0.075	0.061	0.077	0.072	0.075	0.066
Lake	Waukegan	0.074	0.068	0.087	0.071	0.081	0.061	0.076	0.075	0.080	0.071
Lake	IL Beach St Pk	0.078	0.071	0.090	0.068	0.080	0.067	0.080	0.076	0.079	0.071
McHenry	Cary	0.079	0.068	0.087	0.057	0.074	0.063	0.078	0.071	0.073	0.064
Will	Sout	0.077	0.064					0.071	0.070		
Will	Essex Rd	0.073	0.068	0.077	0.068	0.071	0.057	0.073	0.071	0.072	0.065

*significance of
yellow highlights these columns?*

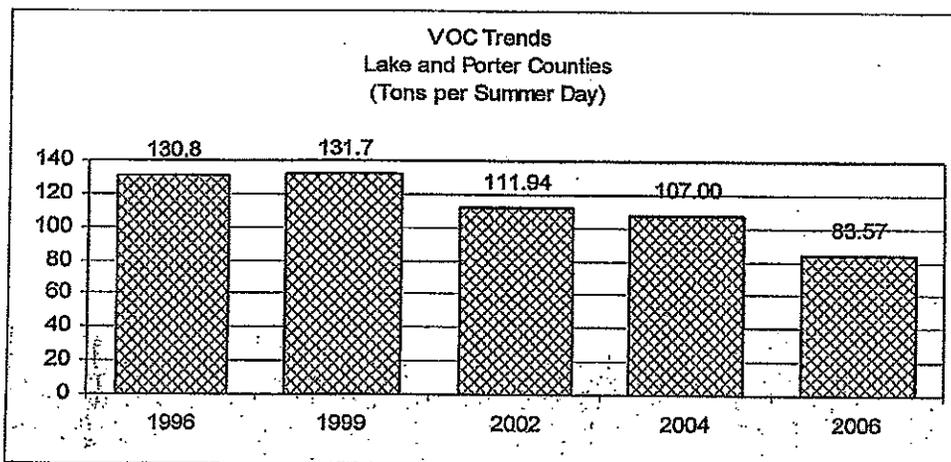
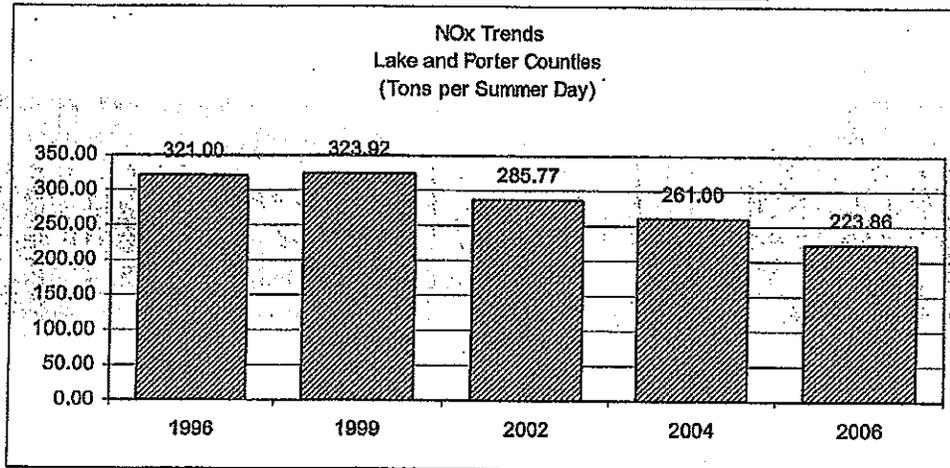
Appendix B

Emission Inventories

NO_x and VOC Emissions Trends, 1996 - 2006, All Sources in Lake and Porter Counties

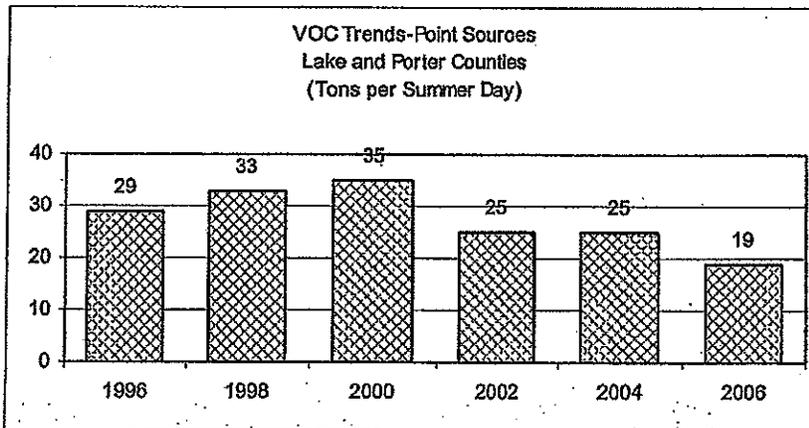
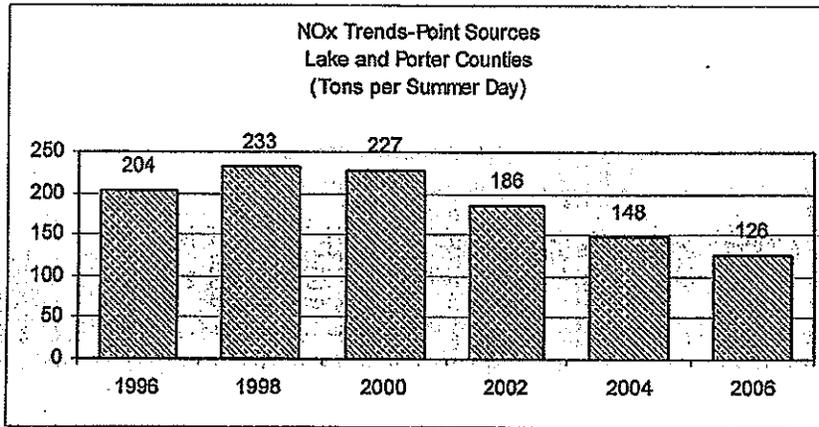
Total - Lake and Porter Counties		
Year	NO _x	VOC
1996	321.00	130.80
1999	323.92	131.70
2002	285.77	111.94
2004	261.00	107.00
2006	223.86	83.57

*tons clarity
annual?
ozone season?
summer day*



clarify →
 tons annual?
 " Ozone season?
 " summer day?

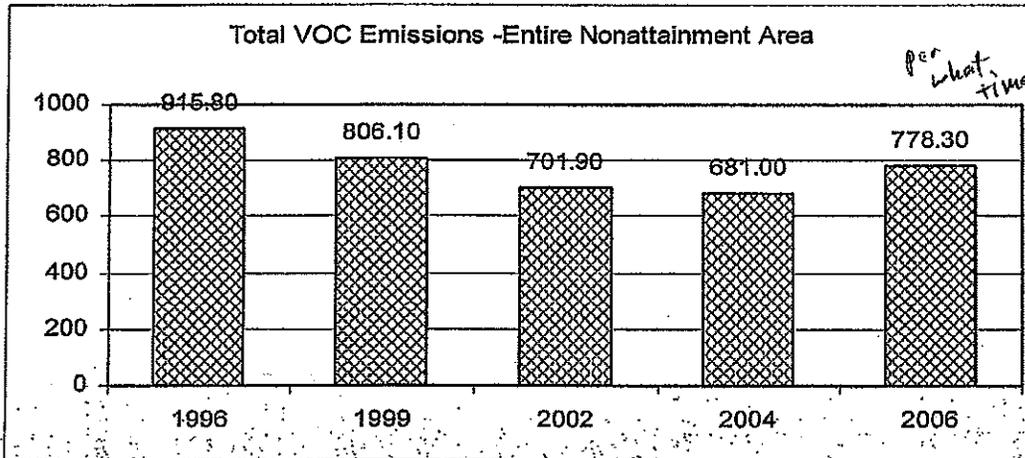
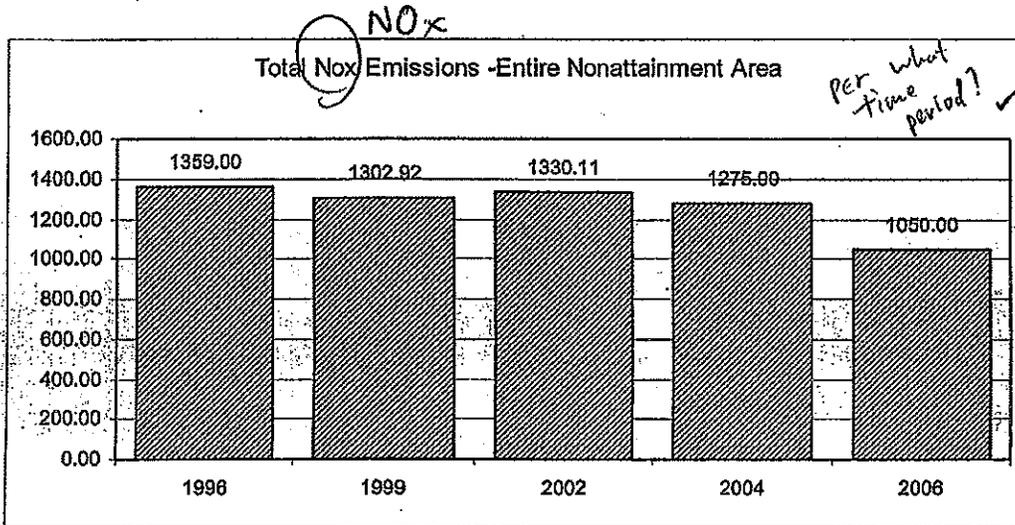
Point - Lake and Porter Counties		
Year	NOx	VOC
1996	204	29
1998	233	33
1999	227	35
2002	186	25
2004	148	25
2006	126	19



NOx and VOC Emissions Trends, 1996 - 2006, All Sources in the Entire Nonattainment Area Counties

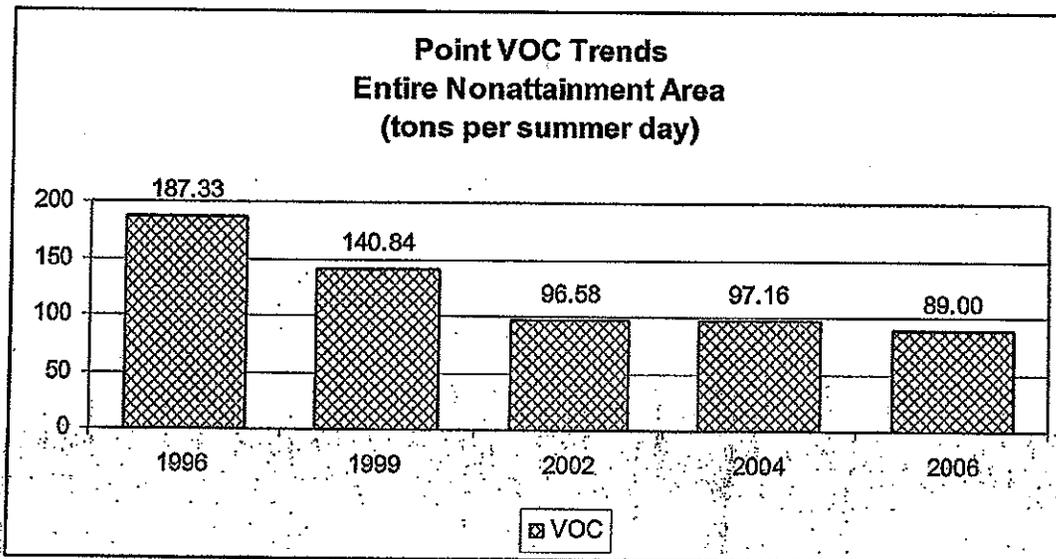
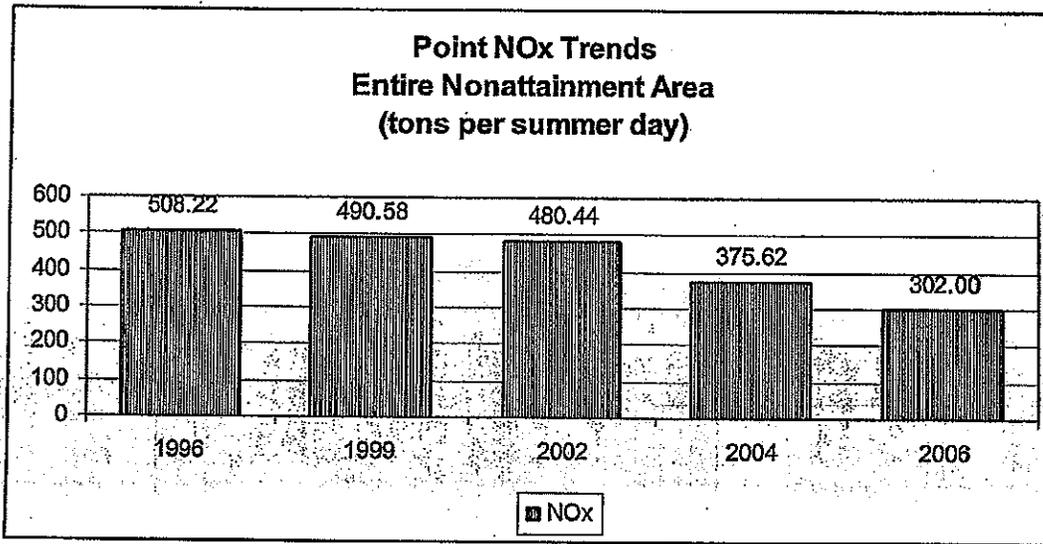
Total - Entire Nonattainment Area -		
Year	NOx	VOC
1996	1359.00	915.80
1999	1302.92	806.10
2002	1330.11	701.90
2004	1275.00	681.00
2006	1050.00	778.30

*clarify time period
 tons annual
 ozone season
 summer
 day ✓*



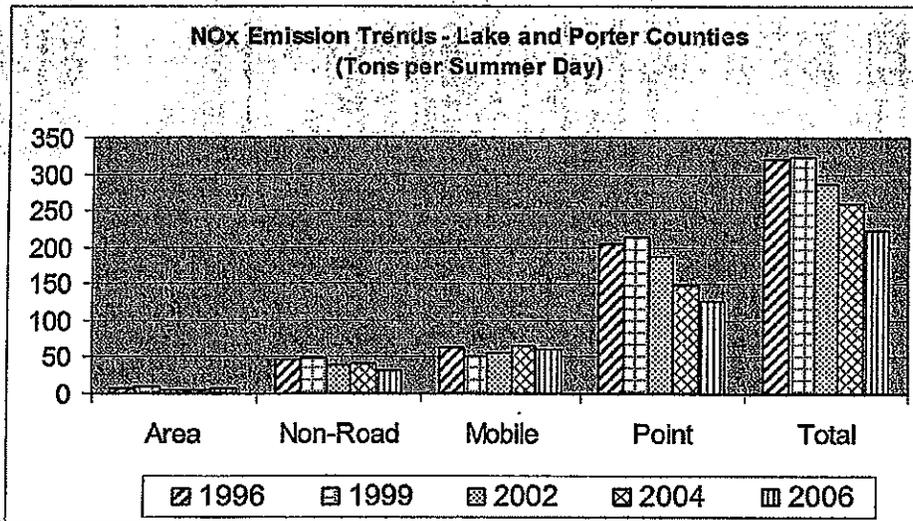
clarify tons and time period (e.g.) *per year*
per ozone season
per summer day

Point Trends - Entire Nonattainment Area -		
Year	NOx	VOC
1996	508.22	187.33
1999	490.58	140.84
2002	480.44	96.58
2004	375.62	97.16
2006	302.00	89.00

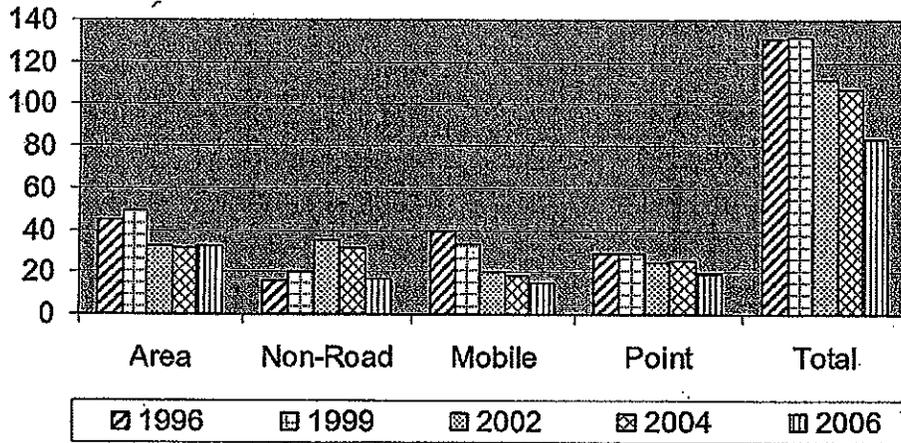


clarify tons ✓
 per year?
 ~ ozone season
 ~ summer day

Lake and Porter Counties					
Sector	NO _x 1996	NO _x 1999	NO _x 2002	NO _x 2004	NO _x 2006
Area	8.02	10.36	5.72	5.76	6.45
Non-road	45.7	49.07	38.61	40.64	31.17
Mobile	63.14	49.92	55.00	65.95	60.09
Point	204.22	214.58	186.44	148.22	126.15
Total	321.08	323.93	285.77	260.57	223.86
Sector	VOC 1996	VOC 1999	VOC 2002	VOC 2004	VOC 2006
Area	45.19	49.59	32.37	31.34	32.47
Non-road	16.23	19.98	35.09	31.63	17.14
Mobile	40.05	33.29	20.00	18.90	14.92
Point	29.33	28.84	24.58	25.43	19.04
Total	130.80	131.70	111.94	107.30	83.57

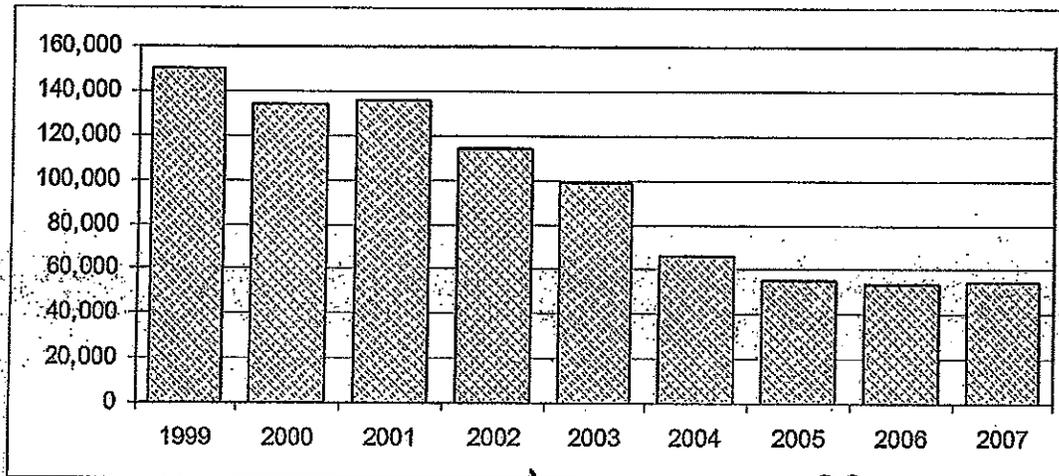


VOC Emission Trends - Lake and Porter Counties
(Tons per Summer Day)



Statewide EGU NO_x Trends

Year	NO _x Emissions - tons/ozone season
1997	152,834
1998	159,931
1999	149,827
2000	133,881
2001	136,052
2002	113,996
2003	99,283
2004	66,568
2005	55,486
2006	53,768
2007	54,816



clarify ↑

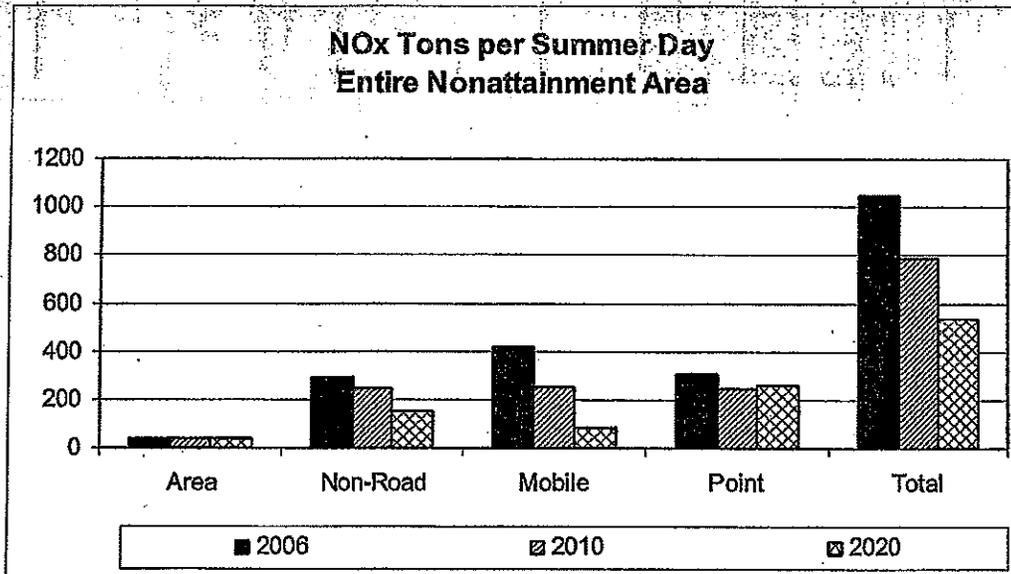
EGU
statewide NO_x Trend

tons/ozone season?

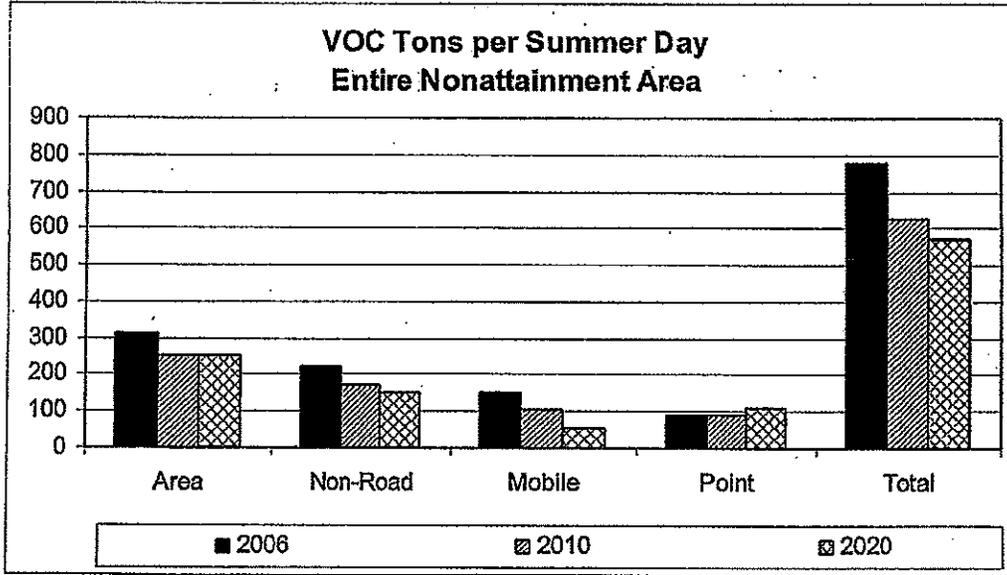
2010 and 2020 Projected Emissions Inventory

Entire Nonattainment Area

Sector	NO _x 2006	NO _x 2010	NO _x 2020
Area	38.50	41.00	41.00
Non-road	290.00	243.00	150.00
Mobile	419.00	254.00	84.86
Point	302.00	247.00	262.00
Total	1049.5	785.00	537.80
Sector	VOC 2006	VOC 2010	VOC 2020
Area	313.40	254.00	254.00
Non-road	222.00	174.09	150.00
Mobile	153.92	104.00	55.00
Point	89.00	93.00	113.00
Total	778.30	625.00	572.00



copy Header from p^{ce} C-3?



↑
↑
projected? projected?

**Summary/Response to Comments Received at Public
Hearing on January 8, 2009**

Lake and Porter Counties Indiana Redesignation Request and Maintenance Plan in Association with the 8-hour Ozone Standard

Summary/Response to Comments Received at Public Hearing

IDEM requested public comment on the draft Redesignation Request and Maintenance Plan, Attainment Demonstration, Demonstration of compliance with requirements pertaining to Reasonably Available Control Measures for volatile organic compounds, Request for waiver for Reasonably Available Control Measure requirements for oxides of nitrogen and Demonstration of Rate of Further Progress for Lake and Porter counties from December 5, 2008 to January 12, 2009. A public hearing was also held on January 8, 2009. IDEM received comments from the following parties:

Mark Strimbu, NiSource
Charlotte Read, Save the Dunes Council

Strimbu
Read

Following is a summary of the comments received and IDEM's responses thereto:

Note: Additional edits were made to the final documents to ensure consistency, though no critical information pertaining to substantive content was altered.

General

Comment: Captions on several graphs and tables need to be clarified for tons and the time period. (Strimbu)

Response: IDEM has clarified all the captions for the graphs and tables in question

Comment: Several paragraphs need the CAIR status updated based on the remand. (Strimbu)

Response: IDEM has updated the CAIR status for all paragraphs in question including updating Table 7.3 with modeling results from U.S. EPA for CAIR.

Comment: Check for consistency with reference to the MOBILE model in the Technical Support Document (TSD) and make changes as needed. (Strimbu)

Response: IDEM has updated the text to reflect what is referenced in the TSD for the MOBILE model.

Comment: How will the updates to the Redesignation Request impact the U.S. EPA approval process? (Strimbu)

Response: IDEM has updated the Redesignation Request to match information from Illinois. Using the same base year, modeling and emissions information will make for a smoother approval process for U.S. EPA

Comment: What is the significance of the yellow highlights in the two columns in Appendix A of the Redesignation Request and Section 182(f) of the NO_x Exemption Request? (Strimbu)

Response: IDEM has clarified in the documents that the highlighted values represent the most recent monitoring data available.

Comment: Uncertainties remain that the Attainment Plan petition now out for public review will accomplish meeting the 0.085 standard by June, 2009. For example, emissions data for the Illinois portion of the nonattainment area is draft and subject to change as of November 2008. This may require revisions to Section 4.0 of the Emission Inventory submitted by Indiana. Trends in tons of VOCs per summer day in Lake and Porter counties show estimated increases in both area and point sources by 2020. As pointed out in our June statement, this is significantly less protective than offsetting increased emissions as is now the case. (Read)

Comment: In the Conclusions Section of the Request document, it indicates that regional air quality planning efforts sponsored by LADCO is to establish a regional control strategy that provides for attainment of the ozone and fine particle standards throughout Illinois, Indiana, Ohio and Michigan. It states further that Indiana is developing local and statewide emission control measures where photochemical modeling and culpability analyses demonstrate a clear need, and cost effectiveness analyses justify the implementation of such measures. This would indicate that attainment of the 8-hour standard in Lake and Porter Counties is not a sure thing. (Read)

Comment: In addition, the Conclusions Section of the Attainment Demonstration Document note: "Although the 2008 photochemical modeling results were slightly above 0.085 ppm, the 2008 results were very close to demonstrating attainment, and the 2009 photochemical modeling results do demonstrate attainment." This would also indicate that actual attainment may not be a sure thing at least in 2009. (Read)

Response: Three years of quality assured monitoring information shows that Lake and Porter counties met the ozone standard at the end of the 2008 ozone season. Emission reductions from the NOx SIP Call Program, CAIR and other national and local emission control strategies to be phased-in or implemented in 2008 and 2009 will ensure that the area's air quality will continue to meet the ozone standard, and provide for an ample margin of safety. IDEM has updated the redesignation petition to match information from Illinois. Using the same base year, modeling and emissions information will make for a smoother approval process for U.S. EPA. Although the trends in tons of VOCs per summer day in Lake and Porter counties show estimated increases, Lake Michigan Air Directors Consortium (LADCO) ozone modeling results show that the future mix of sources and emissions rates will **not** cause a violation of the ozone standard.

Comment: Much weight is given in the mobile source budget section to the Tier II vehicle standard, nonroad standards, low sulfur diesel, etc., yet status of compliance with these federal standards in Lake and Porter counties is not discussed nor any quantification of reductions from them provided. Yet, we are told that despite increases in VOC emissions in the out year of 2020, reductions in mobile sources will compensate for those projected increases. The Mobile Source Emissions Budget (p.53, Attainment Demonstration), uses a 5% cushion (increases?) for the 2009 budget, but notes that IDEM and partners will be conducting additional air quality modeling to adjust on-road mobile emissions as well as any changes due to constant review and evaluation of model inputs. (Read)

Response: Implementation of federal standards such as the Tier II Vehicle Standards, Heavy-Duty Gasoline and Diesel Highway Vehicle Standards and Large Non-Road Diesel Engine Standards in Indiana has already begun. Lower sulfur gasoline is currently being sold throughout Indiana including Lake and Porter counties. As the fleet in Northwestern Indiana turns over (i.e. older vehicles on the road replaced by newer vehicles) emission reductions from these federal standards will help Lake and Porter counties to continue to comply with the ozone standard.

Comment: Temperature information comes generally from O'Hare Airport. It should be supplemented or perhaps replaced for Lake and Porter counties with temperature data coming from local monitors. (Read)

Response: The only meteorological data available in the Indiana portion of the nonattainment area is at the Hammond and Gary IITRI monitors. Both monitors are located in Lake County. However the O'Hare Airport meteorological data has been used in the past for this area since it provides more complete information and is more reflective of the entire nonattainment area, not just Indiana's portion.

Comment: U.S. EPA recommends that the modeled attainment demonstration test [5.1.10] should be used in a "relative" sense rather than an "absolute" sense. Future year design values are calculated using the RRF (relative response factor) and gives a relative estimate of modeled concentrations, based on growth and control factors. (Read)

Response: The relative response factor terminology replaces what U.S. EPA referred to as the relative reduction factor. The way in which the modeling is conducted has not changed (only the terminology) and IDEM follows the U.S. EPA guidance for an attainment test.

Comment: At the January 8 public hearing, I asked about the public comment provisions for the final 2005 emissions inventory used in the full attainment demonstration contained at Section 3.3 entitled Emission Inventories. I got an unsatisfactory response. I am still puzzled as to what "will be subject to public comment along with the full attainment demonstration" and when. (Read)

Response: The agency apologizes for potential confusion concerning the emissions data. This is a complex submittal that includes a great deal of emissions data for past, current, and future years. For the purposes of the Attainment Demonstration, 2002 is the base year per the implementation rule for the 1997 8-hour ozone standard. The comprehensive 2002 emission inventory for Indiana is included as Appendix C-1 of the Attainment Demonstration. Detailed 2005 point source emissions data for Lake and Porter counties is included as Appendix C-2 of the Attainment Demonstration. The LADCO Technical Support Document is included as Appendix C-3 of the Attainment Demonstration as well. This document summarizes how the 2005 and 2009 modeling inventories were prepared. Additional detailed information concerning the 2005 and 2009 modeling inventories by source sector are available at www.LADCO.org. Additionally, Appendix B of the Redesignation Request and Maintenance Plan includes detailed emissions data by source sector for the years 2002, 2005, 2010, and 2020. All of these documents have been made available for public review and comment.