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October 9, 2019

Ms. Cathy Stepp
Regional Administrator
U.S. Environmental Protection Agency - Region 5 (R-19J)
77 West Jackson Boulevard
Chicago, IL 60604-3507

Subject: Redesignation Request and Maintenance Plan for the Inland Sheboygan County, Wisconsin 1997 and 2008 8-Hour Ozone National Ambient Air Quality Standards (NAAQS) Nonattainment Area

Dear Regional Administrator Stepp:

The Wisconsin Department of Natural Resources (WDNR) requests approval of the enclosed Redesignation Request and Maintenance Plan for the Inland Sheboygan County, Wisconsin 1997 and 2008 8-Hour Ozone Nonattainment Area. Per Section 107(d)(3)(D) of the Clean Air Act, states may request that nonattainment areas be redesignated to attainment provided that certain criteria are met. The WDNR is requesting that EPA redesignate the Inland Sheboygan County, Wisconsin 1997 and 2008 8-Hour Ozone Nonattainment Area to attainment and approve the maintenance plan for the 1997 and 2008 ozone NAAQS based on the attainment-level ozone concentrations measured at the Sheboygan Haven monitoring site for the years 2016 through 2018.

The WDNR provided opportunity for public comment on this SIP submittal and conducted a public hearing in Plymouth, Wisconsin on June 7, 2019. A copy of the public hearing notice is enclosed. A summary of the public comments the department received, and the department's responses, can be found in Section 8 and Appendix 12 of this submittal.

By this letter, the WDNR is also withdrawing the redesignation request and maintenance plan for the entirety of the Sheboygan County, Wisconsin 2008 ozone NAAQS nonattainment area that was submitted to EPA on February 20, 2018. This withdrawal does not change the fact that WDNR has demonstrated to EPA that Sheboygan County is unable to influence the ozone levels measured within its borders due to the overwhelming influence of out-of-state emissions, and that EPA needs to take stronger, more sustained action to address the impact of ozone transport on the Wisconsin lakeshore. The WDNR looks forward to working closely with EPA on this issue.

This SIP is being submitted using SPeCS. If you have any questions regarding this submittal, please contact Cami Peterson at 608-267-7546 or Cami.Peterson@wisconsin.gov.

Sincerely,

Gail E. Good

Gail E. Good
Director
Air Management

cc: Doug Aburano – U.S. EPA Region 5
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REDESIGNATION REQUEST AND MAINTENANCE PLAN

FOR THE

INLAND SHEBOYGAN COUNTY, WISCONSIN 1997 AND 2008 8-HOUR OZONE NONATTAINMENT AREAS

Wisconsin Department of Natural Resources

October 2019

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List of Acronyms

AQS	EPA's Air Quality System database
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CSAPR	Cross-State Air Pollution Rule
CTG	Control Techniques Guideline
EGU	Electric Generating Unit
EPA	U.S. Environmental Protection Agency
I/M	Inspection and Maintenance
iSIP	Infrastructure SIP
LADCO	Lake Michigan Air Directors Consortium
MOVES	EPA's MOtor Vehicle Emission Simulator model
MVEB	Motor Vehicle Emissions Budget
NAAQS	National Ambient Air Quality Standard
NEI	National Emissions Inventory
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOx	Nitrogen Oxides (NO and NO_2)
NSR	New Source Review
$PM_{2.5}$	fine particulates
PM_{10}	coarse particulates
ppm	parts per million
PSD	Prevention of Significant Deterioration
RACM	Reasonably Available Control Measures
RACT	Reasonably Available Control Technology
RFP	Reasonable Further Progress
ROP	Rate of Progress
SIP	State Implementation Plan
tpsd	tons per summer day
VOC	Volatile Organic Compounds
WDNR	Wisconsin Department of Natural Resources

1. INTRODUCTION

Wisconsin requests that the U.S. Environmental Protection Agency (EPA) redesignate the Inland Sheboygan County, WI, nonattainment area to attainment for the 2008 8-hour ozone National Ambient Air Quality Standard (NAAQS). The Sheboygan Haven monitor in the Inland Sheboygan County nonattainment area has recorded five years of complete, quality-assured ambient air quality monitoring data for the years 2014 through 2018 that demonstrate attainment of the 2008 ozone NAAQS.

Wisconsin also requests that EPA redesignate the Inland Sheboygan County nonattainment area to attainment for the 1997 8-hour ozone NAAQS. This document describes how this area has met the requirements for redesignation for the 2008 ozone NAAQS, because in attaining this more stringent standard, the area has necessarily also attained the less stringent 1997 ozone NAAQS.[1]

1.1. Background

The federal Clean Air Act (CAA) requires an area not meeting a NAAQS for a specified criteria pollutant to develop or revise its State Implementation Plan (SIP) to expeditiously attain and maintain the NAAQS in that area. When attainment of a NAAQS in a nonattainment area has been achieved, Section 107(d)(3)(D) of the CAA allows states to request the nonattainment area to be redesignated to attainment provided that certain criteria are met.

Historically, exceedances of the federal ozone standards have been monitored along the lakeshore of Lake Michigan, including Sheboygan County. Sheboygan County was designated nonattainment for both the 1979 and 1997 ozone NAAQS and was subsequently redesignated to attainment for the 1979 ozone NAAQS. Sheboygan County monitors have been attaining the 1997 ozone NAAQS since the 2012-2014 design value year (and had previously monitored attainment for the 2006-2008 through 2009-2011 design value years). This area was not redesignated to attainment before the 1997 ozone NAAQS was revoked, however. The history of nonattainment in Sheboygan County is shown below in Table 1.1.

In March 2008, EPA finalized a revision to the 8-hour ozone NAAQS (73 FR 16436). The 2008 ozone NAAQS (0.075 parts per million, ppm) was more restrictive than the previous 1997 ozone NAAQS (0.08 ppm). In May 2012, EPA published a final rulemaking that designated Sheboygan County as marginal nonattainment for the 2008 ozone NAAQS (77 FR 30088). This rulemaking was based on EPA's review of ozone monitoring data collected during the years 2008 to 2010. On December 19, 2016, EPA reclassified the Sheboygan County nonattainment area from marginal to moderate nonattainment status, effective that same day (81 FR 91841). This reclassification was based on 2013-2015 monitoring data.[2]

[1] Wisconsin has previously demonstrated that Sheboygan County had fulfilled all CAA requirements for the 1997 ozone NAAQS in its submission of a redesignation request and maintenance plan for this area, submitted to EPA in September 2009. The EPA had proposed to approve the redesignation of the Sheboygan County nonattainment area to attainment in February 2012 (77 FR 6727).

[2] On August 7, 2019, EPA finalized an attainment date extension for the Inland and Shoreline Sheboygan County 2008 ozone nonattainment areas to July 20, 2019, so the areas remain designated as moderate nonattainment.

Table 1.1. Sheboygan County nonattainment history for ozone NAAQS.

Year Promulgated	1979	1997		2008		2015
Level	0.12 ppm	0.08 ppm		0.075 ppm		0.070 ppm
Averaging Time	1 hour	8 hours		8 hours		8 hours
Area of Sheboygan County	Entire county	Inland Sheboygan County[b]	Shoreline Sheboygan County[b]	Inland Sheboygan County[b]	Shoreline Sheboygan County[b]	Shoreline Sheboygan County[e]
Classification	Serious/ moderate[a]	Moderate	Moderate	Marginal/ moderate[d]	Marginal/ moderate[d]	Marginal
Redesignation to Attainment	8/26/1996 61 FR 43668	TBD[c]	TBD[c]	TBD	TBD	TBD

[a] The Sheboygan nonattainment area was originally classified as "serious" for the 1979 ozone NAAQS, but was reclassified from "serious" to "moderate" in 1992 (57 FR 56762).

[b] In its "Revision of Sheboygan County, Wisconsin Nonattainment Designation for the 1997 and 2008 Ozone Standards and Clean Data Determination for the 2008 Standards" effective on July 15, 2019, EPA revised the 1997 and 2008 ozone NAAQS Sheboygan County nonattainment area designation to create two distinct nonattainment areas: the Inland Sheboygan County and Shoreline Sheboygan County nonattainment areas (84 FR 33699). The two distinct partial county nonattainment areas retain the moderate classification for the 1997 and 2008 ozone standards that the original whole county nonattainment area held prior to the split.

[c] EPA finalized a clean data determination for the 1997 ozone NAAQS for the Sheboygan nonattainment area in 2011 (76 FR 11080). However, the area's design value exceeded the 1997 ozone NAAQS for the 2010-2012 and 2011-2013 design value years. The area has attained the 1997 ozone NAAQS since the 2012-2014 design value year but was not redesignated before the 1997 ozone NAAQS was revoked in 2015. In this action, WDNR is requesting that EPA redesignate the Inland Sheboygan County nonattainment area to attainment for the 1997 ozone standard.

[d] The Sheboygan nonattainment area was originally classified as "marginal" for the 2008 ozone NAAQS, but was reclassified from "marginal" to "moderate" in 2016 (81 FR 91841).

[e] The EPA designated a partial area in Sheboygan County as nonattainment for the 2015 ozone NAAQS in April 2018 (83 FR 25776); this geographic area is identical to the 1997 and 2008 ozone NAAQS Shoreline Sheboygan County nonattainment area.

In October 2015, EPA finalized a new, more stringent primary 8-hour ozone NAAQS of 0.070 ppm (80 FR 65291). In April 2018, EPA published a final rulemaking designating part of Sheboygan County as nonattainment of the 2015 NAAQS based on 2014-2016 monitoring data (83 FR 25776). The EPA designated the remainder of Sheboygan County as attainment for the 2015 NAAQS.

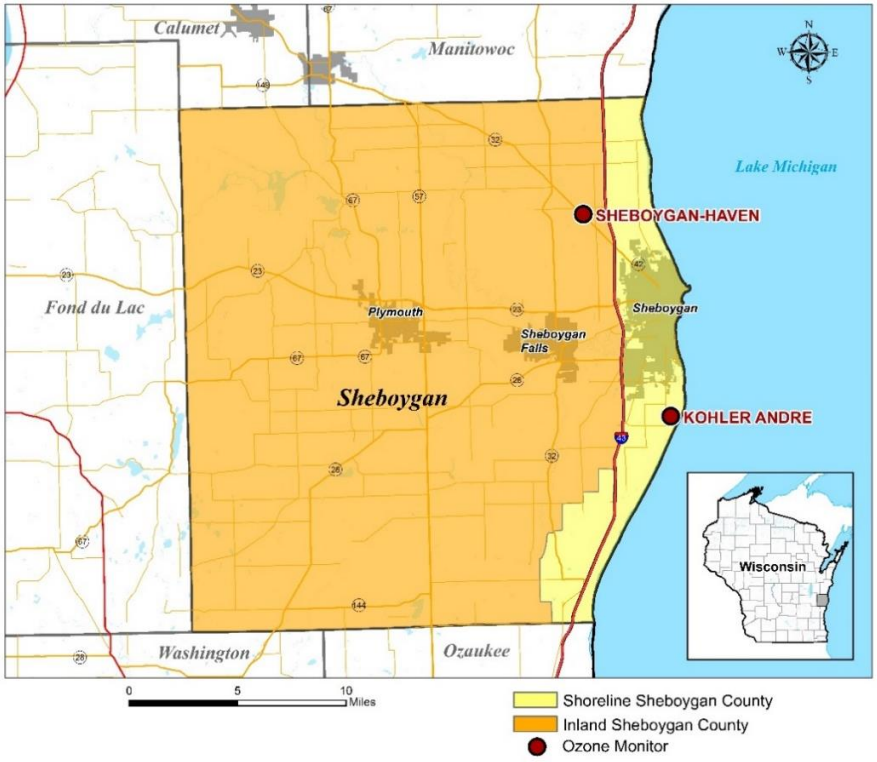
On July 15, 2019, EPA revised the Sheboygan County nonattainment area designation for the 1997 and the 2008 ozone NAAQS to create two distinct nonattainment areas: the Inland Sheboygan County and Shoreline Sheboygan County nonattainment areas (Figure 1.1) (84 FR 33699).The Inland and Shoreline Sheboygan County nonattainment areas together constitute the identical geographic area as the original Sheboygan County nonattainment area, and both areas

retained their moderate nonattainment designation for the 1997 and 2008 ozone NAAQS. In the same action, EPA also finalized a clean data determination for the Inland Sheboygan County nonattainment area for the 2008 ozone NAAQS based on monitoring data from 2015-2017 from the Sheboygan Haven ozone monitor.

1.2. Geographical Description

Sheboygan County is located in eastern Wisconsin along the western shoreline of Lake Michigan (Figure 1.1). A set of roadways defines the boundary that splits the county into the Shoreline Sheboygan County and Inland Sheboygan County nonattainment areas.[3] The Shoreline Sheboygan County nonattainment area is comprised of a narrow strip of land within approximately two to three miles of the Lake Michigan shoreline, and includes the roadways that define the split boundary. The Inland Sheboygan County area is located west of the Shoreline Sheboygan County area and constitutes 88% the county's total land area.

Figure 1.1. Map of the Inland Sheboygan County and Shoreline Sheboygan County 1997 and 2008 ozone nonattainment areas, with monitoring locations shown.[3]



[3] The split boundary between Inland and Shoreline Sheboygan County areas is formed by the following roadways (from the northern county boundary to the southern county boundary): Highway 43, Wilson Lima Road, Minderhaud Road, County Road KK/Town Line Road, N 10th Street, County Road A S/Center Avenue, Gibbons Road, Hoftiezer Road, Highway 32, Palmer Road/Smies Road/Palmer Road, Amsterdam Road/County Road RR, Termaat Road. The roadways that define the split boundary are included in the Shoreline Sheboygan County area but are excluded from the Inland Sheboygan County area.

Sheboygan County's population was 115,510 in 2010 and was projected to decrease by 0.1% between 2010 and 2017.[4] Almost half of the residents (49,313) live in the largest city, Sheboygan, which is located within the Shoreline Sheboygan County area. Sheboygan County is mostly rural, with a population density of 226 persons/square mile in 2010.[4] This county is located approximately 50 miles north of the Milwaukee-Waukesha-West Allis Metropolitan Statistical Area.

The Sheboygan County shoreline receives high concentrations of ozone transported from emissions sources in upwind regions located to the south, as described in greater detail in Section 4. As EPA stated in its December 19, 2016 reclassification notice, Sheboygan's Kohler Andrae monitor "…was not placed to monitor the maximum downwind impacts from the urbanized portion of the Sheboygan area, but to capture maximum downwind impacts from several urban areas along Lake Michigan, including Milwaukee, Wisconsin; Chicago, Illinois; and Gary, Indiana" (81 FR 91842). Ozone transported from out of state is the dominant source of ozone in Sheboygan County, accounting for approximately 87% of the measured ozone concentrations even a few miles inland at the Sheboygan Haven monitor (Figure 4.1).

1.3. Status of Ozone Air Quality

Quality-assured ozone monitoring data from the Sheboygan Haven monitor for the most recent five years, 2014 through 2018, demonstrate that air quality in the Inland Sheboygan County nonattainment area meets the 2008 ozone NAAQS, as discussed in more detail in Section 3.[5]

In addition, total summer emissions of ozone precursors—nitrogen oxides (NOx) and volatile organic compounds (VOC)— are projected to continue declining. As a result, the Wisconsin Department of Natural Resources (WDNR) expects maintenance of the standard, as discussed in Sections 4 and 7, justifying a redesignation to attainment for the Inland Sheboygan County nonattainment area based on Section 107(d)(3)(E) of the CAA.

1.4. Requirements for Redesignation and Overview of this Redesignation Request

Sections 107(d)(3)(E)(i) through (v) of the CAA establish the following criteria to be met in order for an area to be considered for redesignation of a NAAQS:

(i) A determination by EPA that the area has attained the NAAQS;

(ii) A fully approved SIP for the area under Section 110(k) of the CAA;

(iii) A determination by EPA that the improvement in air quality is due to permanent and enforceable reductions in emissions;

(iv) A fully approved maintenance plan, including a contingency plan, for the area under Section 175(A) of the CAA; and

[4] https://www.census.gov/quickfacts/fact/table/sheboygancountywisconsin,wi,US/PST120217

[5] Sheboygan Haven is designated as a special purpose monitor and began operating in 2014. Measurements from this monitor can be compared to the ozone NAAQS.

(v) A determination that all applicable requirements for the area under Section 110 and Part D of the CAA have been met.

Section 110 and Part D of the CAA list a number of criteria that must be met prior to consideration for redesignation of nonattainment areas to attainment. In addition, EPA has published detailed guidance in a document entitled "Procedures for Processing Requests to Redesignate Areas to Attainment," issued September 4, 1992 as a memo sent to EPA Regional Air Directors. This document is hereafter referred to as "Redesignation Guidance." This redesignation request and maintenance plan is based on the Redesignation Guidance, supplemented by additional guidance received from staff at EPA Region 5.

This redesignation request and maintenance plan shows that the Inland Sheboygan County nonattainment area has met these CAA criteria as demonstrated by all of the following:

- Ozone monitoring data demonstrate that the Sheboygan Haven monitor has attained the 2008 ozone NAAQS (criterion (i), addressed in Section 3).

- Emissions inventories for the nonattainment base year (2011) and attainment year (2014), in combination with a discussion of the control measures in place, indicate that air quality improvements are consistent with observed reductions in NOx and VOC inventories and resulted due to permanent and enforceable emissions reductions (criterion (iii), addressed in Sections 4 and 6).

- Transportation conformity budgets and a description of how the state has met other Section 110 and Part D CAA requirements fulfill the state's remaining requirements for a redesignation request (criteria (ii) and (v), addressed in Sections 2 and 5).

- Projected emissions inventories for the maintenance years (2020 and 2030) and a contingency plan serve as a complete maintenance plan (criterion (iv), addressed in Sections 4 and 7).

2. CAA SECTION 110(a) AND PART D REQUIREMENTS

As a precondition to redesignation of a nonattainment area to attainment, the CAA requires EPA to determine that the state has met all applicable requirements under section 110 and part D of Title I of the CAA (per CAA Section 107(d)(3)(E)(v)) and that the state has a fully approved SIP under Section 110(k) for the area (per CAA Section 107(d)(3)(E)(ii)).

2.1. Satisfying CAA Section 110(a) General SIP Requirements

Section 110(a) of the CAA contains the general requirements for a SIP. Section 110(a)(2) provides that the implementation plan submitted by a state must have been adopted by the state after reasonable public notice and hearing, and, among other things, must:

- Include enforceable emission limitations and other control measures, means or techniques necessary to meet the requirements of the CAA;
- Provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor ambient air quality;
- Provide for implementation of a source permit program to regulate the modification and construction of any stationary source within the areas covered by the plan;
- Include provisions for the implementation of part C, Prevention of Significant Deterioration (PSD), and part D, New Source Review (NSR) permit programs;
- Include criteria for stationary source emission control measures, monitoring, and reporting; and
- Include provisions for air quality modeling; and provide for public and local agency participation in planning and emission control rule development.

Wisconsin submitted an infrastructure SIP (iSIP) to satisfy the Section 110(a) requirements, exclusive of the interstate transport component, for the 2008 ozone NAAQS (and the 2010 NO_2 and SO_2 NAAQS) to EPA on June 20, 2013. The state submitted an additional clarification on January 28, 2015. EPA approved most elements of Wisconsin's iSIP in a September 11, 2015 rule (80 FR 54725). EPA subsequently approved the three remaining iSIP components, as follows:

- Most elements relating to Wisconsin's PSD program were approved October 6, 2014 (79 FR 60064). EPA approved the remaining components on February 7, 2017 (82 FR 9515).
- Transport provisions are addressed by EPA's Cross-State Air Pollution Rule (CSAPR) Update for the 2008 ozone NAAQS, finalized October 26, 2016 (81 FR 74504).[6]
- EPA approved Wisconsin's state board requirements under section 128 of the CAA on January 21, 2016 (81 FR 3334).

[6] On December 6, 2018, EPA finalized a determination that the CSAPR Update fully addresses states' transport obligations for the 2008 ozone NAAQS.

Appendix 1 includes Wisconsin's two iSIP submittals, EPA's partial approval of the iSIP, and submittal documents and approvals for the additional components. These submissions by Wisconsin and EPA's approvals demonstrate compliance with the CAA Section 110 requirements.

2.2. Satisfying CAA Part D Requirements

CAA Title I, Part D, Subpart 1 sets forth the basic nonattainment requirements applicable to all nonattainment areas. Subpart 2 of Part D, which includes Section 182 of the CAA, establishes additional required provisions for ozone nonattainment areas based on their level of nonattainment classification.

On December 19, 2016, EPA reclassified the Sheboygan nonattainment area to a classification of moderate (81 FR 91841). This same rulemaking established that the additional moderate nonattainment area SIP elements for areas "bumped up" to moderate status must be submitted by January 1, 2017. Guidance from EPA declares that in submitting a redesignation request, states must meet all Part D requirements that were applicable at the time the redesignation request was submitted.[7]

The EPA finalized a clean data determination for the Inland Sheboygan County area on July 15, 2019 (84 FR 33699). Under 40 CFR 51.1118, a clean data determination suspends some of the Part D requirements for a nonattainment area related to SIP planning, including: attainment demonstrations and associated reasonably available control measures (RACM), reasonable further progress (RFP) plans, and contingency measures for failure to attain or make reasonable progress related to attainment. Despite suspension of these requirements, the Inland Sheboygan County area has met all moderate area Part D requirements.

<u>Subpart 1 Requirements</u>

Section 172(c)(3) requires submission and approval of a comprehensive, accurate and complete inventory of actual emissions for the area. This requirement was superseded by the inventory requirement in Section 182(a)(1), discussed in the Subpart 2 section below.

Section 172(c)(4) requires the identification and quantification of allowable emissions for major new and modified stationary sources in an area. Section 172(c)(5) requires source permits for the construction and operation of new and modified major stationary sources in the nonattainment area. Wisconsin has an approved NSR program that meets these requirements. Furthermore, after redesignation, PSD requirements will apply. Wisconsin has an approved PSD program. The EPA approved additional provisions in Wisconsin's PSD rule on October 6, 2014 (79 FR 60064) and February 7, 2017 (82 FR 9515).

Section 172(c)(7) requires the SIP to meet the applicable provisions of CAA Section 110(a)(2). As noted in the previous section, Wisconsin submitted an affirmation of meeting the Section 110(a) requirements to the EPA on June 20, 2013, with a clarification submitted on January 28,

[7] "Procedures for Processing Requests to Redesignate Areas to Attainment," memo from John Calcagni to EPA Regional Air Directors, September 4, 1992.

2015. EPA approved the combined submittal and clarification on September 11, 2015 (80 FR 54725).

Section 176(c) of the CAA requires states to establish criteria and procedures to ensure that federally supported or funded activities, including highway projects, conform to the air quality planning goals in the applicable SIPs. The requirement to determine conformity applies to transportation plans, programs, and projects developed, funded, or approved under Title 23 of the U.S. Code and the Federal Transit Act (transportation conformity) as well as to all other federally-supported or funded projects (general conformity). Section 5 of this document includes transportation conformity budgets that, once determined adequate by EPA, will be required for use in future transportation planning efforts.

Subpart 2 Requirements

Section 182(a)(1) requires the submission of a comprehensive emissions inventory. An emissions inventory is included in Section 4 of this redesignation request.

Section 182(a)(2) requires the submission of certain corrections to VOC Reasonably Available Control Technology (RACT) rules, vehicle inspection and maintenance (I/M) programs and permitting programs. These corrections were addressed for the Sheboygan County portion of the nonattainment area under the 1-hour ozone standard and do not need to be addressed again under the 2008 8-hour standard.

Section 182(a)(3)(B) requires the submission of an emission statement SIP. On September 25, 2017, WDNR submitted to EPA the Attainment Plan for the Sheboygan County, Wisconsin 2008 8-Hour Ozone Nonattainment Area (the "Sheboygan attainment plan").[8] The WDNR affirmed in Section 6.6 of the Sheboygan attainment plan that the SIP contains approved emission statement rules that will remain in place after the area is redesignated to attainment of the 2008 ozone standard.[8]

Section 182(b)(2) requires states with moderate nonattainment areas to implement VOC RACT for major stationary sources and sources covered by EPA's control techniques guidelines (CTGs). The WDNR demonstrated in Section 6.3 of the Sheboygan attainment plan that Wisconsin has adopted and implemented administrative rules requiring existing major stationary sources of VOC in ozone nonattainment areas to meet VOC RACT.[8] Appendix 10 of this submittal lists the CTGs for which RACT requirements have been codified in Wisconsin Administrative Code. Appendix 11 of this submittal lists the CTGs for which Wisconsin has not adopted RACT requirements, and provides negative declarations certifying that no sources exist within the Inland Sheboygan County area that are applicable to these CTGs.

Section 182(b)(4) requires a vehicle I/M program for moderate nonattainment areas. EPA fully approved Wisconsin's I/M program on August 16, 2001 (66 FR 42949) and approved revisions to the program on September 19, 2013 (78 FR 57501).

[8] Attainment Plan for the Sheboygan County, Wisconsin 2008 8-Hour Ozone Nonattainment Area, submitted to U.S. EPA September 25, 2017. http://dnr.wi.gov/topic/AirQuality/documents/SheboyganAttainmentPlan.pdf

Section 182(b)(5) requires NOx and VOC emission offsets at a ratio of 1.15 to 1 for major source permits in moderate ozone nonattainment areas. These offset ratios are incorporated into Wisconsin's Nonattainment NSR permitting program, which was approved by EPA on January 18, 1995 (60 FR 3538).

Section 182(f) requires states with moderate nonattainment areas to implement NOx RACT. EPA approved Wisconsin's NOx RACT program in October 2010 (75 FR 64155). The WDNR demonstrated in Section 6.2 of the Sheboygan attainment plan that Wisconsin's current NOx RACT program fulfills RACT requirements for the 2008 ozone NAAQS.[8]

When EPA approves the enclosed emissions inventory and the moderate nonattainment area requirements submitted in the Sheboygan County attainment plan,[8] Wisconsin will have met all the applicable SIP requirements for the purposes of redesignation.

Subpart 1 and II Requirements Suspended by the Clean Data Determination

Section 172(c)(1) requires that states implement any RACM necessary for attainment of the NAAQS. The WDNR submitted an evaluation of RACM in Section 6.4 of the Sheboygan County attainment plan.[8] The WDNR concluded that no additional controls or emission reduction requirements were applicable for RACM under the 2008 ozone NAAQS in this area.

Section 172(c)(2) requires a demonstration of RFP. These requirements are further expanded upon in Section 182(b)(1) of Subpart 2 of the CAA and are discussed in the Subpart 2 section below.

Section 172(c)(9) requires contingency measures to be implemented in the event of failure to attain the standard. Section 3.2 of the Sheboygan attainment plan submitted to EPA included emission reductions that serve as the progress-related contingency measures under the 2008 ozone NAAQS.[8]

Section 182(b) requires the submission of an attainment plan. The WDNR submitted an attainment plan for the Sheboygan County 2008 ozone NAAQS nonattainment area on September 25, 2017.[8]

Section 182(b)(1), in combination with Section 172(c)(2), requires states with ozone nonattainment areas classified as moderate to make a demonstration of RFP reductions in VOC and/or NOx emissions in the area. The WDNR submitted a demonstration that the RFP requirement is satisfied for Sheboygan County in Section 3 of the Sheboygan attainment plan.[8]

3. OZONE MONITORING

3.1. Ozone Monitoring Network

The Sheboygan Haven monitor within the Inland Sheboygan County area has been operating since 2014. This monitor is located 3.2 miles inland from the lakeshore (Figure 1.1). The original nonattainment designation for all of Sheboygan County was made prior to the installation of the Sheboygan Haven monitor and was based on monitoring data from the Kohler Andrae monitor. Table 3.1 shows the data collected over the last three years at the Sheboygan Haven monitor.

3.2. Ambient Ozone Monitoring Data

The EPA's requirements for ozone air monitoring data are contained in Appendix P to 40 CFR Part 50 ("Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone"). The level of the 2008 ozone NAAQS is 0.075 ppm. A monitoring site measures compliance with the 2008 ozone NAAQS if it meets the following conditions:

1. There are three complete years of ozone monitoring data at the site.

2. The 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is equal to or less than 0.075 ppm. This value is called the "design value".

For an area to attain the standard, the design values for all monitoring sites within that area must be equal to or lower than the NAAQS.

Table 3.1 shows the fourth-highest daily maximum 8-hour average values for the Sheboygan Haven ozone monitor for 2016 through 2018. Table 3.1 also shows the 2016-2018 design value, which is well below the level of the 2008 ozone NAAQS. These data confirm that the Sheboygan Haven monitor attained the 2008 ozone NAAQS.

Significant reductions in emissions of ozone precursors, NOx and VOC, have resulted from a number of permanent and enforceable control measures implemented during the time period associated with the 2008 ozone standard, as discussed in more detail in Sections 4 and 6. As a result of these emissions reductions, meteorologically adjusted concentrations of atmospheric ozone have also decreased over this period, as described in detail in Section 5.2.3 of the Sheboygan attainment plan.[8]

Table 3.1. Monitoring data for the Sheboygan Haven monitor. The table shows annual fourth-highest daily maximum 8-hour concentrations and design values in parts per million (ppm). Data were downloaded from EPA's Air Quality System (AQS) database.

Site (Site ID)	4th high 8-hr ozone (ppm)			Design value (ppm)
	2016	2017	2018	2016-18
Sheboygan Haven (55-117-0009)	0.074	0.070	0.070	0.071

3.3. Quality Assurance

All available data for the Sheboygan Haven ozone monitoring site have been quality assured and archived in AQS. The WDNR has an approved Ozone Quality Assurance Project Plan and submits and certifies quality assured monitoring data in accordance with 40 CFR Part 58. The full dataset has been certified and is available to the public.

3.4. Data Completeness

EPA requires that daily maximum 8-hour average concentrations be available for at least 90% of the days in the ozone season for a given site over the 3-year period and that no site have less than 75% data completeness for a given year. The average data completeness for the Sheboygan Haven site for the years 2016 to 2018 was 99.7%.[9] The data completeness for each of the individual years was 99% to 100%, easily meeting EPA's data completeness criteria, as described in Appendix P to 40 CFR Part 50.

[9] Data completeness was determined from AMP430 Data Completeness reports downloaded from AQS.

4. EMISSIONS INVENTORIES

4.1. Overview and Choice of Inventory Years

The CAA requires that a state must demonstrate that the improvement in ozone air quality between the nonattainment and attainment years is based on permanent and enforceable emissions reductions in order for a nonattainment area to be redesignated to attainment.

Sheboygan County sources have little to no ability to influence ozone concentrations at monitors in the county. The WDNR has previously shown, using photochemical modeling, that local emissions have relatively little impact on ozone concentrations measured at the Sheboygan Kohler Andrae monitor.[8] Furthermore, emissions from upwind states contribute much more ozone to the Sheboygan Haven monitor than do sources in Wisconsin, as shown in Figure 4.1 and discussed below. Despite out-of-state transport contributing significantly to ozone concentrations measured at the Sheboygan Haven monitor, the fourth-highest daily maximum 8-hour average ozone values within the Inland Sheboygan County nonattainment area are still below the 2008 ozone NAAQS (Table 3.1).

The WDNR is submitting comprehensive inventories of actual and projected emissions for the Inland Sheboygan County nonattainment area. These inventories fulfill the demonstration of improvement required under the CAA. Section 6 documents the specific programs responsible for making the emissions reductions permanent and enforceable. These programs are the foundation for the actual emission inventory data discussed in this section. It should be noted that these emission budgets do not result in a limitation on emissions for any specific source or source category in the future. The emission budgets are a snapshot of recent emission levels and a best estimate of future emission levels used to demonstrate relative changes in total emissions and future maintenance of the standard.

EPA's Redesignation Guidance requires a state to submit emissions inventories for the following years:

1. A year in which the standard was not attained ("nonattainment year");
2. A year in which the standard was attained ("attainment year");
3. A year at least 10 years beyond the attainment year to demonstrate maintenance ("maintenance year"); and
4. An intermediate year between the attainment year and maintenance year ("interim year").

The WDNR has developed the following NOx and VOC emission inventories for the Inland Sheboygan County nonattainment area as part of the redesignation request:

1. 2011 nonattainment year emissions inventory;
2. 2014 attainment year emissions inventory;
3. 2020 interim maintenance year emissions inventory; and

4. 2030 maintenance year emissions inventory.

To be consistent with EPA's Redesignation Guidance, 2011 was selected as the "nonattainment year". However, actual Inland Sheboygan County nonattainment area ozone concentrations are unknown for 2011 because the Sheboygan Haven monitor began operating in 2014. The monitor attained the NAAQS in the 2014 attainment year and every year thereafter. Wisconsin is required to demonstrate continued maintenance of the NAAQS for ten years after redesignation. As part of this demonstration, WDNR is providing a projection of emissions for 2020 as the interim projection year and 2030 as the maintenance year. The emission projections through 2030 are relied upon in the maintenance demonstration presented in Section 7.

Tables 4.1 and 4.2 provide summaries of the Inland Sheboygan County nonattainment area emission inventories (in tons per summer day, or tpsd) for NOx and VOC for the different sectors. Appendices 2 through 8 contain details about how the inventories were constructed.

4.2. Nonattainment Year (2011) and Attainment Year (2014) Inventories

The WDNR developed the following emissions information to satisfy EPA's redesignation requirements to submit nonattainment and attainment year inventories for NO_x and VOC. The EPA has approved Wisconsin's 2011 emission inventories for the entirety of Sheboygan County and other nonattainment areas under the 2008 8-hour ozone standard (81 FR 11673). As part of this request, WDNR is submitting inventories for the Inland Sheboygan County nonattainment area for the 2011 nonattainment year to address the CAA section 182(1)(1) base year inventory requirement. The WDNR requests that EPA replace the previously approved 2011 inventory for all of Sheboygan County with this inventory for the Inland Sheboygan County nonattainment area. Appendix 2 includes a discussion of the methodology used to estimate sector-specific emissions for 2011 and 2014 (shown in Tables 4.1 and 4.2). Between 2011 and 2014, NOx emissions decreased 15%, and VOC emissions decreased 10% in the Inland Sheboygan County nonattainment area. These reductions are primarily due to decreases in NOx and VOC emissions from the onroad and nonroad mobile sectors provided by the federal and state mobile source control programs detailed in Sections 6.3 and 6.4.

4.3. Maintenance Year Inventories (2020 and 2030)

The WDNR developed emissions information to satisfy the EPA redesignation requirements to submit an interim maintenance year and maintenance year inventory for NOx and VOC. Appendix 3 includes information on sector-specific emissions projection methodology. Tables 4.1 and 4.2 show the projected NOx and VOC emissions (in tpsd) in 2020 and 2030 for electric generating unit (EGU) point, non-EGU point, area, onroad mobile, and nonroad mobile sources. These inventories project that NOx and VOC emissions will continue to decrease in future years. This analysis shows that the Inland Sheboygan County area is expected to maintain the air quality standard for more than ten years into the future.

Table 4.1. Inland Sheboygan County area comparison of NOx emissions (tpsd) by source type.

Sector	2011 nonattainment year	2014 attainment year	2020 interim year	2030 maintenance year
Point - EGU	0.48	0.53	0.62	0.62
Point - Non-EGU	0.82	0.86	0.99	1.06
Area	0.63	0.63	0.64	0.65
Onroad	2.60	1.90	1.16	0.54
Nonroad	2.10	1.74	1.22	0.86
TOTAL	**6.62**	**5.66**	**4.63**	**3.73**
Change from 2014 (% change)	-	-	-1.03 (-18%)	-1.93 (-34%)

Table 4.2. Inland Sheboygan County area comparison of VOC emissions (tpsd) by source type.

Sector	2011 nonattainment year	2014 attainment year	2020 interim year	2030 maintenance year
Point - EGU	0.04	0.04	0.04	0.04
Point - Non-EGU	1.10	1.10	1.26	1.36
Area	2.95	2.96	2.90	2.83
Onroad	1.26	0.90	0.65	0.34
Nonroad	2.29	1.92	1.38	1.21
TOTAL	**7.65**	**6.91**	**6.24**	**5.78**
Change from 2014 (% change)	-	-	-0.68 (-9.8%)	-1.13 (-16%)

4.4. Projected Emission Trends

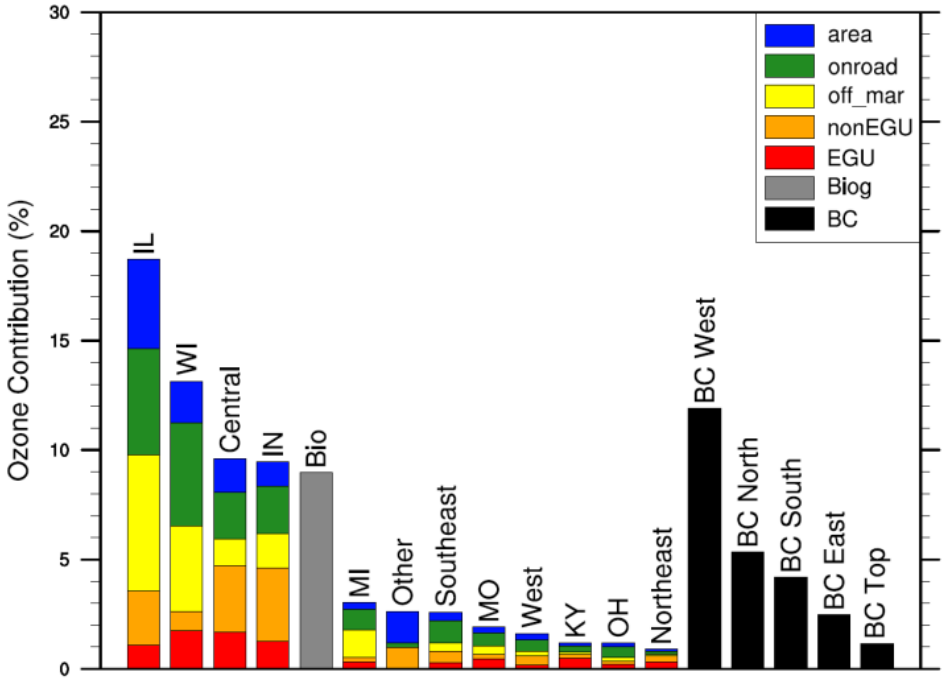
Emission trends are an important gauge for continued compliance of the ozone standard. The WDNR compared actual emissions from 2014 to projected emissions from the interim year (2020) and the maintenance year (2030) for the Inland Sheboygan County area. Total NOx emissions in the Inland Sheboygan County area are projected to decrease by approximately 34% (1.93 tpsd) from 2014 to 2030 (Table 4.1). The largest reductions are projected from the onroad mobile sector (1.35 tpsd) and the nonroad mobile sector (0.89 tpsd), due to ongoing implementation of the federal and state mobile source control programs detailed in Section 6.3. VOC emissions are projected to decrease in the Inland Sheboygan County area by approximately 16% (or 1.13 tpsd) during the 16-year period (Table 4.2). The largest VOC reductions are projected from the nonroad mobile sector (0.70 tpsd) followed by the on-road mobile sector (0.56 tpsd). These reductions help counter a projected emissions increase from the non-EGU

point source sector (0.26 tpsd) due to anticipated increases in energy consumption by existing point sources and emissions from new and modified point sources.

4.5. Trends in Emissions from Upwind Areas

NOx and VOC emissions from out-of-state sources located to the south are the largest contributors to ozone at the Sheboygan Haven monitor (Figure 4.1), despite the fact that ozone at this monitor has been shown to be less heavily impacted by over-lake transport from the south relative to the Kohler Andrae monitor.[10] Figure 4.1 shows that emissions sources in Wisconsin contributed only about 13% to concentrations at the Sheboygan Haven monitor.[11] Reductions in emissions from upwind areas are therefore likely to have a greater impact on ozone concentrations measured at this monitor than are those from Wisconsin sources, including those in Sheboygan County.

Figure 4.1. Ozone source apportionment modeling from the Lake Michigan Air Directors Consortium (LADCO) for the Sheboygan Haven monitor.[11] Colors correspond to emission source categories.



[10] Both Sheboygan County monitors record high ozone concentrations almost exclusively with southerly winds that travel over Lake Michigan. For more information, see: Supplemental Information for 2015 Ozone National Ambient Air Quality Standard (NAAQS) Area Designations, submittal from WDNR to EPA on April 20, 2017. http://dnr.wi.gov/topic/AirQuality/documents/OzoneTSD20170420.pdf

[11] The values represent 2017 emissions projected from a 2011 base year. The Central region includes MN, IA, NE, KS, OK, TX, AR and LA. The Southeast region includes MS, AL, GA, FL, TN, VA, NC and SC. The West region includes WA, OR, CA, NV, ID, MT, WY, UT, CO, AZ, NM, ND and SD. The Northeast region includes ME, NH, VT, MA, RI, CT, NY, NJ, PA, DE, MD, and WV. BC refers to "boundary conditions" which are contributions from outside the U.S. "Bio" and "Biog" are biogenic emissions. "Off_mar" are nonroad emissions.

5. TRANSPORTATION CONFORMITY BUDGETS

Transportation conformity is required under CAA section 176(c) (42 U.S.C. 7506(c)) to ensure that federally funded or approved highway and transit activities are consistent with ("conform to") the purpose of the SIP. "Conform to" the purpose of the SIP means that transportation activities will not cause or contribute to new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS or any interim milestones. Transportation conformity applies to designated nonattainment and maintenance areas for transportation-related criteria pollutants: ozone, fine particles ($PM_{2.5}$), coarse particles (PM_{10}), carbon monoxide, and nitrogen dioxide. The EPA's transportation conformity rule (40 CFR Parts 51 and 93) establishes the criteria and procedures for determining whether metropolitan transportation plans, metropolitan transportation improvement programs, federally supported highways projects, and federally supported transit projects conform to the SIP.

Sheboygan County currently demonstrates transportation conformity using the "Motor Vehicle Emissions Budget (MVEB) Test" (40 CFR 93.119). EPA requirements outlined in 40 CFR 93.118(e)(4) stipulate that MVEBs for NOx and VOC are established as part of a control strategy implementation plan revision or maintenance plan. MVEBs are necessary to demonstrate conformance of transportation plans and improvement programs with the SIP.

5.1. Motor Vehicle Emissions Model

The MVEBs are developed using a recent version of EPA's MOtor Vehicle Emission Simulator model (MOVES2014a) and a travel demand model. The MOVES2014a model is used to derive estimates of hot summer day emissions for the ozone precursors NOx and VOC. Numerous variables can affect these emissions, especially the size of the vehicle fleet (the number of vehicles on the road), the fleet's age, the distribution of vehicle types, and the vehicle miles of travel. The transportation information is derived from the travel demand model. Appendix 8 contains key data used to develop inputs to MOVES2014a.[12]

5.2. Motor Vehicle Emissions Budgets

The WDNR submitted a 2008 Ozone Standard Attainment Demonstration for Transportation Conformity Purposes for Sheboygan County with updated MVEBs for 2017 and 2018 on September 25, 2017. On April 20, 2018, EPA found the MVEBs for Wisconsin's 8-hour ozone nonattainment area were adequate for use in transportation conformity determinations (83 FR 14637).

In this submission, WDNR is submitting MVEBs for the Inland Sheboygan County 2008 ozone NAAQS maintenance area for the years 2020 and 2030. Once EPA determines that the budgets meet the adequacy criteria of the transportation conformity rule, the budgets will replace the MVEBs established for the 2008 Ozone Standard Attainment Demonstration (83 FR 14637).

[12] The complete set of inputs to MOVES2014a is too lengthy to include in this document. However, electronic copies of the inputs can be obtained from WDNR by sending an email to christopher.bovee@wisconsin.gov or by phone at (608) 266-5542.

Table 5.1 contains the MVEBs for the Inland Sheboygan County 2008 ozone NAAQS maintenance area for the years 2020 and 2030. It is necessary for the budgets to include a margin of safety that accounts for uncertainties in future mobile source emissions. 40 CFR 93.101 defines safety margin as the amount by which the total projected emissions from all sources of a given pollutant are less than the total emissions that would satisfy the applicable requirement for RFP, attainment, or maintenance. The WDNR increased the on-road mobile source portions of the 2020 and 2030 projected emissions inventories by 15% for the Inland Sheboygan County maintenance area to include an appropriate margin of safety. To ensure consistency between SIP inventories and photochemical modeling inventories, the vehicle miles traveled and vehicle population data for Sheboygan County provided by WDNR to EPA for the upcoming 2016 emissions modeling platform also include this 15% safety margin for the platform's projection years (2023 and 2028).

Table 5.1. Motor vehicle emissions budgets (MVEBs) for the Inland Sheboygan County Maintenance Area for 2020 and 2030.

	Emissions (tons per hot summer day)	
Year	**VOC**	**NO_x**
2020	0.65	1.16
2030	0.34	0.54

6. PERMANENT AND ENFORCEABLE CONTROL MEASURES

The CAA Section 107(d)(3)(E)(iv) specifies that improvements in air quality must be due to permanent and enforceable emission reductions. This section outlines the permanent and enforceable control measures that applied to sources in the Inland Sheboygan County area. These control measures significantly reduced emissions in this area by the 2014 attainment year, leading to the emission reductions shown in Section 4. These control programs are described in greater detail in Appendix 9.

Table 6.1 lists the permanent and enforceable emission control programs implemented for each emission source sector. Many of the control measures have been implemented under long-standing programs that began prior to 2011. Because a focus of this CAA requirement is to show that emission reductions occurred between 2011 (the base nonattainment year) and 2014 (the attainment year), this discussion highlights those control measures or a characterization of emission reductions that have occurred since 2011.

Table 6.1. Emission control programs that have reduced NOx and VOC emissions in the Inland Sheboygan County area and in contributing regions.[a]

Sector	NOx Control Measures	VOC Control Measures
Point	-Wisconsin NOx RACT -Federal NOx Transport Rules	-VOC RACT / CTGs -National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules
Area		-VOC RACT / CTGs -Federal VOC emission standards for consumer/commercial products -Area source NESHAP Rules
Onroad	-Numerous federal onroad mobile source control programs[a] -Wisconsin I/M program	
Nonroad	-Numerous federal nonroad mobile source control programs[a]	

[a] See Appendix 9 for more details.

It is important to note that: (1) emissions sources located in the Inland Sheboygan County area are already very well-controlled in all respects; and (2) most of the ozone measured in the Inland Sheboygan County area comes from ozone and ozone precursors originating in upwind states. For these reasons, even though pollution control programs continue to decrease emissions within the Inland Sheboygan County area, emission reductions in upwind areas will have an outsized impact on the area's air quality.

6.1. Point Source Control Measures

Wisconsin implemented RACT for major NO_x sources (sources with a potential to emit 100 tons or greater per year) in the state's nonattainment areas for the 1997 ozone NAAQS. This area included the Inland Sheboygan County area.

EGUs in 22 states east of the Mississippi, including Wisconsin, have been subject to a series of federal NOx transport rules since 2009. These rules have included the Clean Air Interstate Rule (CAIR), CSAPR and the CSAPR Update Rule. These rules contributed to a 24% reduction from 2008 to 2014 in total EGU NOx emissions across the states that contribute >0.75 ppb to Sheboygan County ozone concentrations (Appendix 9). The three states contributing the most to Sheboygan County ozone concentrations (in decreasing order): Illinois, Indiana, and Wisconsin, had proportionately larger individual EGU emission reductions of 42.7%, 24.1%, and 54.5%, respectively, from 2008 to 2014.

Wisconsin implemented VOC RACT to fulfill applicable CTG requirements for Wisconsin nonattainment areas under the 1997 ozone NAAQS. These nonattainment areas include the Inland Sheboygan County area. The list of the CTGs in place in Wisconsin are provided in Appendix 10. Appendix 11 of this submittal lists the CTGs for which Wisconsin has not adopted RACT requirements, and provides negative declarations that no sources exist within the Inland Sheboygan County area that are applicable to these CTGs.

Non-combustion sources accounted for 92% of point source VOC emissions in the Inland Sheboygan County area in 2014. These sources are subject to source-specific National Emission Standards for Hazardous Air Pollutant (NESHAP) requirements and/or VOC RACT/CTG rules, as applicable. The non-combustion NESHAP rules were implemented prior to 2011 with no additional reductions expected after 2011, however. The combustion point sources are subject to NESHAP rules that became effective since 2011. These NESHAP rules also apply to sources nationally, thereby reducing the transport of VOC emissions into the nonattainment area. See Section 1 of Appendix 9 for more information about all of these federally enforceable control programs.

6.2. Area Source Control Measures

Wisconsin has implemented a number of VOC RACT/CTG rules limiting VOC emissions from area sources. These rules are listed in Appendix 10. In addition, VOC emission standards for consumer and commercial products also limited VOC emissions from area sources, as did NESHAPs for gasoline distribution (Stage I vapor recovery requirements) and Area Source Industrial, Commercial and Institutional Boilers. See Section 2 of Appendix 9 for more information about all of these federally enforceable control programs.

6.3. Onroad Source Control Measures

Both NOx and VOC emissions from onroad mobile sources are substantially controlled through federal emission standard programs for new vehicles and low sulfur fuels. Although initial compliance dates in many cases were prior to 2011, these regulations have continued to reduce area-wide emissions as fleets turn over to newer vehicles. All of these programs apply nationally and have reduced emissions both within the nonattainment area and in contributing ozone precursor transport areas. Wisconsin's vehicle I/M program also limits onroad VOC and NOx emissions in southeastern Wisconsin, including within the Inland Sheboygan County area. See Section 3 of Appendix 9 for more information about these federally enforceable control programs.

6.4. Nonroad Source Control Measures

VOC and NOx emitted by nonroad mobile sources are significantly controlled via a number of different federal standards for new engines and low sulfur fuels. The nonroad regulations continue to slowly lower average unit and total sector emissions as equipment fleets are replaced each year, pulling the highest emitting equipment out of circulation or substantially reducing its use. Fuel programs regulating fuel sulfur content also enable achievement of various new engine tier VOC and NOx emission limits. See Section 4 of Appendix 9 for more information about these federally enforceable control programs.

6.5. Section 110(l) Noninterference Requirements

When revising rules and regulations in the SIP, the state is responsible for demonstrating that such a change will not interfere with attainment of the NAAQS, Rate of Progress (ROP), or other applicable CAA requirements for any of the criteria pollutants. This request for redesignation does not implement any changes in the control programs or requirements approved in the SIP and in place during the 2014 attainment year. Therefore, all requirements related to section 110(l) noninterference are fulfilled under this request. Further, Wisconsin will continue to implement all control programs currently in the SIP for emissions of ozone precursors in this maintenance area. As documented in Wisconsin's iSIP for the 2008 ozone NAAQS (Appendix 1), WDNR has the legal authority and necessary resources to actively enforce any violations of its rules or permit provisions. Removal of any control program from the SIP will be subject to a public hearing process, a demonstration of noninterference, and approval by EPA.

7. MAINTENANCE PLAN FOR INLAND SHEBOYGAN COUNTY

Section 175A of the CAA sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. The plan must demonstrate continued attainment of the applicable NAAQS for at least 10 years after EPA approves a redesignation to attainment. Eight years after the redesignation, the state must submit a revised maintenance plan, which demonstrates attainment for the 10 years following the initial 10-year period.

Based on certified data, the Sheboygan Haven monitor's last three design values were below the 2008 ozone NAAQS (Section 3). Comparison of nonattainment (2011) and attainment (2014) year inventories showed that attainment of the NAAQS was accompanied by significant reductions in ozone precursor emissions from the nonattainment area (Section 4). These emissions reductions were due to permanent and enforceable measures, many of which will further reduce emissions during the maintenance period (Section 6). In this section, maintenance of the attainment status of the Inland Sheboygan County area is demonstrated via reported and projected summer day emissions provided on a sector-specific basis that show continued reductions in emissions during maintenance years. This section also includes contingency measures and commitments to continue monitoring and to revise this maintenance plan.

7.1. Demonstration of Maintenance via Comparison of Attainment and Maintenance Emissions Inventories

Maintenance emission inventory projections are described in Section 4 and summarized in Tables 7.1 and 7.2. 2014 was chosen as the representative attainment year inventory because of the availability of National Emissions Inventory (NEI) data for this year.[13] 2020 and 2030 were chosen as interim and final maintenance years because their status as transportation planning years ensures the availability of robust transportation projections for these years.

The forecast maintenance inventories for 2020 and 2030 demonstrate that emissions of NOx and VOC are projected to decrease in future years relative to the 2014 attainment year for the Inland Sheboygan County area (Tables 7.1 and 7.2). Total emissions affecting ozone concentrations from the nonattainment area are projected to decrease 34% for NOx and 16% for VOC from 2014 to 2030. Since the monitor attained the standard in 2014-2016 and emissions are projected to decrease through 2030, this inventory analysis demonstrates that the Inland Sheboygan County area is expected to maintain the 2008 NAAQS for more than ten years into the future.

[13] EPA guidance for redesignation inventories provides the flexibility to use any one of the three years contained in the attainment design value provided emissions from the season selected are found representative in terms of economic conditions, key sector emissions characteristics and weather/ozone conduciveness conditions. 2014 is the first year in the attainment design value (2014-2016) and also meets the other conditions. This year therefore forms a reasonable basis for assessing the "real and permanent" nature of attainment as required by the CAA.

Table 7.1. NOx emissions in the Inland Sheboygan County area.

	Total NOx emissions (tons per summer day)			
	2014 attainment year	**2020 interim year**	**2030 maintenance year**	**Net Change (2014-2030)**
Point	1.39	1.61	1.68	0.29 (21%)
Area	0.63	0.64	0.65	0.02 (3%)
Onroad	1.90	1.16	0.54	-1.36(-72%)
Nonroad	1.74	1.22	0.86	-0.88 (-51%)
Total	**5.66**	**4.63**	**3.73**	**-1.93 (-34%)**

Table 7.2. VOC emissions in the Inland Sheboygan County area.

	Total VOC emissions (tons per summer day)			
	2014 attainment year	**2020 interim year**	**2030 maintenance year**	**Net Change (2014-2030)**
Point	1.14	1.30	1.40	0.26 (23%)
Area	2.96	2.90	2.83	-0.13 (-4%)
Onroad	0.90	0.65	0.34	-0.56 (-62%)
Nonroad	1.92	1.38	1.21	-0.71(-37%)
Total	**6.91**	**6.24**	**5.78**	**-1.13 (-16%)**

7.2. Verification of Continued Attainment

Per EPA's redesignation request guidance,[7] WDNR will verify continued attainment of the 2008 8-hour ozone NAAQS in the Inland Sheboygan County area during the maintenance period via continued ozone monitoring. The WDNR commits to continue monitoring ozone levels in this area and will discuss any changes in siting that may become necessary with EPA Region 5 staff. The WDNR will continue to quality assure the monitoring data to meet the requirements of 40 CFR 58 and will enter all data into EPA's Air Quality System database (AQS) on a timely basis in accordance with federal guidelines. Ozone concentration data will continue to be available on the WDNR website,[14] providing real-time data and information about any NAAQS exceedances to the public.

In addition, ozone precursor inventories will be prepared for 2017, 2020, 2029, and 2032 as part of the CAA-required NEI program. These inventories will be compared with the 2014 attainment year inventory and projected 2020 interim and 2030 maintenance year inventories to assess emissions trends, as necessary, to assure continued attainment of the 2008 ozone NAAQS.

[14] Select "View Wisconsin's current air quality" from the webpage http://dnr.wi.gov/topic/AirQuality.

7.3. Maintenance Contingent Response Plan

The EPA's Redesignation Guidance says that a state's "maintenance plan shall contain such contingency measures as the Administrator deems necessary to ensure prompt correction of any violation of the NAAQS." As part of Wisconsin's maintenance plan for the Inland Sheboygan County area, Wisconsin commits to two separate levels of contingent response to any renewed exceedance and/or violation of the 2008 ozone NAAQS. The first step, a "warning level response," initiates a study to investigate whether the observed exceedance requires further evaluation or action to ensure maintenance going forward. The second step, an "action level response," would identify and implement any needed control measures necessary to ensure maintenance.

Specifics of Wisconsin's contingency response are as follows:

Warning Level Response

A warning level response would be triggered if an annual (1-year) 4th high monitored concentration is above the level of the 2008 ozone NAAQS (0.075 ppm). A warning level response would initiate a study to determine whether the high ozone concentrations indicate a trend towards higher ozone levels and whether emissions are significantly higher than projected in the maintenance plan. The study would include the following elements:

- An assessment of whether actual emissions have deviated significantly from the emissions projections contained in this maintenance plan for the nonattainment area, along with an evaluation of which sectors and states are responsible for any emissions increases; and
- A study of whether unusual meteorological conditions during the high-ozone year led to the high monitored ozone concentrations.

Should it be determined through the warning level study that action is necessary to ensure maintenance, Wisconsin will follow the procedures for control selection and implementation outlined under the action level response below. The warning level study will be completed no later than the beginning of the following summer ozone control period (May 1).

Action Level Response

An action level response would be triggered if a three-year design value exceeds the level of the 2008 ozone NAAQS (0.075 ppm). This response would follow a study to determine whether additional control measures are needed to assure attainment and maintenance of the 2008 ozone NAAQS within the maintenance area. This analysis will examine the following factors for the entire maintenance area:

- The level, distribution, and severity of ambient ozone concentrations;
- The weather patterns contributing to ozone levels;
- Potential contributing emissions sources;
- The geographic applicability of possible contingency measures;

- Emission trends, including the impact of existing or forthcoming control measures that have not yet been implemented;
- Current and recently identified control technologies; and
- Air quality contributions from outside the maintenance area.

The selection of emission reduction measures to be implemented will be based upon their potential to reduce ozone concentrations at violating monitors in the nonattainment area, cost-effectiveness, emission reduction potential, economic and social considerations, ease and timing of implementation, and other appropriate factors. When considering these criteria, priority will be given to measures that can be in place within 18 months.

Potential additional control measures are listed below. Because it is not possible to determine what control measures, if any, will be appropriate at an unspecified time in the future, this list is neither comprehensive nor in order of priority.

- Anti-idling control program for mobile sources, targeting diesel vehicles
- Diesel exhaust retrofits
- Traffic flow improvements
- Park and ride facilities
- Rideshare/carpool program
- Expansion of the vehicle emissions testing program

Wisconsin has an extremely limited ability to affect ozone concentrations in the Inland Sheboygan County area due to the influence of emissions originating in upwind states. High ozone events at Sheboygan monitors occur almost exclusively when these sites are downwind of Chicago and other source areas to the south. Out-of-state sources of ozone overwhelm local sources at the Inland Sheboygan County area monitor (Figure 4.1). As a consequence, additional controls on NOx and VOC emissions from Wisconsin are likely to have very little, if any, impact on ozone concentrations in this area. When identifying additional controls for implementation, the state will have to consider the potential of those controls to reduce ozone concentrations at violating monitors in the maintenance area. Federal regulatory programs may be more appropriate to limit the transport of ozone and its precursors to the Inland Sheboygan County area from upwind states. Examples of such programs include:

- Implementation of any federally promulgated rule regulating transport of ozone precursors.
- Updated federal NOx emission limits for heavy-duty vehicles.
- Updated (Phase 2) federal fuel efficiency standards for medium- and heavy-duty engines and vehicles.
- New federal regulations on the sale of aftermarket catalysts for vehicle catalytic converters.

Should it be determined through the action level study that existing and on-the-way measures are inadequate to return the area to attainment, WDNR will identify and implement candidate control measures as necessary to assure attainment and maintenance of the area within 18 months of certification of the monitoring data that triggered the action level response. Given the impact of

upwind emissions on ozone formation along Wisconsin's Lake Michigan shoreline, WDNR notes that the action level study findings may indicate that additional Wisconsin control measures would do little to help the Inland Sheboygan County area return to and maintain attainment. Adoption of any additional control measures is subject to the necessary Wisconsin administrative, legal, and legislative processes. The WDNR will solicit input from interested and affected parties in the area prior to selecting appropriate control measures. This process will include publication of notices, an opportunity for a public hearing, and other measures required by Wisconsin law.

7.4. Commitment to Revise Maintenance Plan

Wisconsin hereby commits to review its maintenance plan eight (8) years after redesignation, as required by Section 175(A) of the CAA. This revised SIP will provide for maintenance for an additional 10 years.

8. PUBLIC PARTICIPATION

In accordance with section 110(a)(2) of the CAA, the WDNR published a notice on the internet (https://dnr.wi.gov/calendar/hearings/?id=12945) on May 6, 2019 stating that it would hold a public hearing on the Redesignation Request and Maintenance Plan for the Inland Sheboygan County, Wisconsin 1997 and 2008 8-hour Ozone Nonattainment Area. A notice of availability was also posted on the website. The public hearing took place on June 7, 2019 at the Plymouth Public Library (130 Division St., Plymouth, WI 53073) and the redesignation request was available for public comment through June 17, 2019.

The WDNR received 20 verbal comments at the public hearing. Eight attendees who provided verbal comments also submitted written comments. Additionally, the WDNR received seven comments submitted via email, one of which included an attached petition request signed by 230 individuals. Many of the comments were not directly related to this SIP submittal, but addressed or concerned other aspects associated with air quality in Sheboygan County. The WDNR's responses to these comments can be found in Appendix 12.

9. CONCLUSIONS

Air quality measured at the Sheboygan Haven monitor in the Inland Sheboygan County nonattainment area in Wisconsin has attained the 2008 ozone NAAQS, as well as the less stringent 1997 ozone NAAQS. As described within this document, applicable provisions of the CAA regarding redesignation to attainment have been met. Therefore, WDNR, on behalf of the State of Wisconsin, hereby requests that EPA redesignate the Inland Sheboygan County area from nonattainment to attainment for the 1997 and 2008 ozone NAAQS.

APPENDIX 1

Wisconsin's Infrastructure SIP for the 2008 Ozone NAAQS

This appendix includes:

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

June 20, 2013

Ms. Susan Hedman
Regional Administrator - R19J
U.S. Environmental Protection Agency (EPA) - Region 5
77 W. Jackson Blvd.
Chicago IL 60604

Subject: Wisconsin Nitrogen Dioxide (NO_2), Ozone (O_3), and Sulfur Dioxide (SO_2) Infrastructure State Implementation Plan (SIP)

Dear Ms. Hedman:

The Wisconsin Department of Natural Resources (WDNR) hereby submits an infrastructure SIP for the 2008 O_3 and 2010 NO_2 and SO_2 National Ambient Air Quality Standards (NAAQS) in accordance with the requirements contained in Sections 110(a)(1) and 110(a)(2) of the Clean Air Act (CAA). This submittal describes the state's ability to implement, maintain, and enforce these NAAQS.

The WDNR has the legal authority under Wisconsin law to adopt and implement the requested SIP revisions. Section 285.11(6), *Wis. Stats.*, authorizes the WDNR to develop and revise a SIP for prevention, abatement, and control of air pollution. The WDNR conducted a public hearing on June 10, 2013 regarding this SIP submittal. A copy of the public hearing notice is included as an attachment. In addition, a summary of comments received during the WDNR's public comment process is included as an attachment.

In accordance with the April 6, 2011 McCabe Memo, one paper copy of the SIP documents is enclosed. In addition, an electronic copy of these documents is provided on an enclosed CD. If you have any questions regarding this submittal, please contact Joseph Hoch at (608) 267-7543 or Ralph Patterson at (608) 267-7546.

Sincerely,

Andrea M Stewart

Sor

Bart Sponseller, Director
Bureau of Air Management

cc: Patrick Stevens – AD/8
Joseph Hoch – AM/7
Ralph Patterson – AM/7
George Czerniak – U.S. EPA Region V (A-18J)
John Mooney – U.S. EPA Region V (A-18J)
Douglas Aburano – U.S. EPA Region V (AR-18J)

Attach: Wisconsin's NO_2, O_3, and SO_2 Infrastructure SIP
Infrastructure SIP public hearing notice
Proof of publication for the public comment period and public hearing
Summary and responses to public comments
EPA Region V SIP Submittal Checklist

Wisconsin's Infrastructure State Implementation Plan (SIP) Elements for Nitrogen Dioxide (NO_2), Ozone (O_3), and Sulfur Dioxide (SO_2)

1. Section 110(a)(2)(A): Emission limits and other control measures
   "Each such plan shall […] include enforceable emission limitations and other control measures, means, or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance, as may be necessary or appropriate to meet the applicable requirements of this chapter."

   The Wisconsin Department of Natural Resources (WDNR) continues to monitor, update, and implement revisions to Wisconsin's SIP as emission limits and/or other control measures are needed in order to meet National Ambient Air Quality Standards (NAAQS), including the 2008 O_3 NAAQS, 2010 NO_2 NAAQS, and 2010 SO_2 NAAQS. Authority for this effort is established under ss. 285.11 through 285.19, *Wis. Stats.* Authorities related to specific pollutants, including the establishment of ambient air quality standards and increments, identification of nonattainment areas, air resource allocations, and various performance and emissions standards, are contained in ss. 285.21 through 285.29, *Wis. Stats.*

2. Section 110(a)(2)(B): Ambient air quality monitoring/data system
   "Each such plan shall […] provide for establishment and operation of appropriate devices, methods, systems, and procedures necessary to

   (i) monitor, compile, and analyze data on ambient air quality, and

   (ii) upon request, make such data available to the Administrator."

   The WDNR continues to operate an extensive air monitoring network. The data is used after full quality assurance to determine compliance with the NAAQS.

   Wisconsin's most recently adopted annual network plan for 2013 was approved by the United States Environmental Protection Agency (U.S. EPA) on October 31, 2012. All monitored data is submitted to the U.S. EPA's Air Quality System (AQS) in a timely manner in accordance with *40 CFR 51.320*. The WDNR continues to provide the U.S. EPA regional office notice of any planned changes to monitoring sites or to the network plan. In addition, the WDNR actively participated in the development of a five-year regional network assessment for U.S. EPA Region 5 States dated July 1, 2010. Authority for monitoring efforts exists under general air pollution duties in s. 285.11, *Wis. Stats*. Funding for Wisconsin's air monitoring network comes from a variety of sources, including from the U.S. EPA under its Section 103 and 105 grant programs supporting federal monitoring requirements specified in *40 CFR 58.10*.

3. Section 110(a)(2)(C): Programs for enforcement, PSD, and NSR
   "Each such plan shall […] include a program to provide for the enforcement of the measures described in subparagraph (A), and regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in parts C and D of this subchapter."

   The WDNR Air Management and Environmental Enforcement Programs work together to ensure compliance with Air Management Program SIP provisions, administrative code, and permit requirements. Authority to enforce violations and to assess penalties is contained in ss. 285.83 and 285.87, *Wis. Stats.* The WDNR follows a stepped enforcement process to address violations. The

enforcement response ranges from issuance of a Letter of Inquiry (the state counterpart of a U.S. EPA 114 request) where additional information is needed to confirm or assess the significance of a violation, up through referral to the Wisconsin Department of Justice (DOJ) for civil or criminal enforcement as appropriate.

The Environmental Performance Partnership Agreement (EnPPA) between the Wisconsin Air Management Program and U.S. EPA Region 5 addresses implementation of the U.S. EPA's High Priority Violation (HPV) policy. The process for prosecution of violations is also addressed in an Air Management Program Compliance and Enforcement Memorandum of Understanding (MOU) between U.S. EPA Region 5 and the WDNR Air Management Program. Consistent with the provisions of this MOU, the two agencies conduct monthly compliance and enforcement conference calls to discuss program issues and specific cases.

The WDNR regulates modification and construction of stationary sources through its U.S. EPA approved nonattainment New Source Review (NSR), Prevention of Significant Deterioration (PSD), and Title V permits programs under s. 285.11, s. 285.13, s. 285.17, s. 285.19, and ss. 285.60 through 285.69, *Wis. Stats*. The WDNR collects revenue to support these permit programs through application of applicable fee requirements under s. 285.69, *Wis. Stats*.

On March 28, 2011, the WDNR transmitted a letter to the U.S. EPA clarifying that the infrastructure SIP before the U.S. EPA review at that time (with respect to the 1997 O_3 and 1997 fine particulate matter ($PM_{2.5}$) NAAQS) only included PSD regulations that remained approved after the U.S. EPA issued the PSD SIP narrowing rule. Thus, the greenhouse gas (GHG) PSD permitting requirement in Wisconsin's infrastructure SIP submittal consisted of only that portion of the PSD SIP program that applies PSD permitting requirements to GHG emissions at or above the tailoring rule thresholds. The WDNR made a subsequent submittal on May 4, 2011, asking that revisions to the State's PSD program with respect to aligning the state threshold for GHG emitting sources with the federal threshold be incorporated into the SIP. Therefore, Wisconsin retains all necessary resources and authority to permit GHG emitting sources at the federal tailoring rule threshold.

4. <u>Section 110(a)(2)(D)(i): Interstate transport provisions</u>
"Each such plan shall […] contain adequate provisions:

(i) prohibiting, consistent with the provisions of this subchapter, any source or other type of emissions activity within the state from emitting any air pollutant in amounts which will-

(I) contribute significantly to nonattainment in, or

(II) interfere with maintenance by, any other state with respect to any such national primary or secondary ambient air quality standard, or interfere with measures required to be included in the applicable implementation plan for any other state under part C of this subchapter to prevent significant deterioration of air quality to protect visibility."

The WDNR has adopted and implemented the various major programs related to interstate transport of pollution, as required by the U.S. EPA. The WDNR developed implementation programs in ch. NR 432, *Wis. Adm. Code*, in 2007, for the state portions of the Clean Air Interstate Rule (CAIR), to address interstate transport of O_3 and $PM_{2.5}$ precursor emissions. Emissions of NO_2 and SO_2 are addressed regionally as $PM_{2.5}$ precursors, as well as locally within the state as described in section 110(a)(2)(K).

When the U.S. EPA finalizes a replacement to CAIR, as required by the U.S. Court of Appeals for the D.C. Circuit, the WDNR has the authority to develop refined control requirements to address that forthcoming federal program – either by adopting a Federal Implementation Plan (FIP) directly or through development of an approvable substitute regulation embodying a more unique state program. In addition, as part of the U.S. Court of Appeals for the D.C. Circuit August 21, 2012 decision regarding the Cross State Air Pollution Rule (CSAPR), the U.S. EPA must first define "significant contribution" before requiring states to eliminate that contribution.

In August 2012, the U.S. EPA fully approved Wisconsin's Regional Haze SIP, which satisfies the visibility protection requirements under 40 CFR Part 51 Subpart P. Wisconsin has entered into agreements and working relationships with the surrounding States of Illinois, Indiana, Michigan, Ohio and Minnesota through the Lake Michigan Air Directors Consortium (LADCO) to address a continuing assessment and control strategy program to ensure multi-state nonattainment areas meet required Clean Air Act (CAA) timelines. Together these regulations and cooperative agreements address CAA and U.S. EPA concerns over the interstate transport of emissions of regulated pollutants.

If needed, ss. 285.11, 285.13 and 285.15, *Wis. Stats.*, address circumstances where interstate transport reduction agreements between states are needed to resolve SIP development of cross-boundary nonattainment areas. As detailed in the section addressing Section 110(a)(2)(C), Wisconsin has adequate PSD and NSR regulations; these regulations satisfy all applicable elements of Section 110(a)(2)(D)(i), as well as those of Section 110(a)(2)(C).

5. Section 110(a)(2)(D)(ii): Interstate and International transport provisions
"Each such plan shall […] contain adequate provisions insuring compliance with the applicable requirements of sections 126 and 115 (relating to interstate and international pollution abatement)."

Wisconsin's Air Management Program contains adequate provisions to insure compliance with Section 126 of the CAA relating to interstate pollution abatement. Neighboring states and tribes are notified regarding new or modified sources. Additionally, Section 115 of the CAA relates to international pollution abatement. Wisconsin has no pending obligations under Section 115.

6. Section 110(a)(2)(E): Adequate personnel, funding, and authority
"Each such plan shall […] provide:

(i) necessary assurances that the State (or, except where the Administrator deems inappropriate, the general purpose local government or governments, or a regional agency designated by the State or general purpose local governments for such purpose) will have adequate personnel, funding, and authority under state (and, as appropriate, local) law to carry out such implementation plan (and is not prohibited by any provision of Federal or State law from carrying out such implementation plan or portion thereof),

(ii) requirements that the state comply with the requirements respecting State boards under section 128,

(iii) necessary assurances that, where the State has relied on a local or regional government agency, or instrumentality for the implementation of any plan provision, the State has responsibility for ensuring adequate implementation of such plan provision."

Funding and personnel for the WDNR is through the state's biennial budget process. The WDNR Air Management Program has several funding sources, including program revenue (fees paid by

businesses), tax revenue, and grants (federal and state). There are separate accounts affiliated with the different funding sources to ensure the funding and related personnel are used for the intended purpose. The primary federal grant the Air Management Program receives is the Section 105 Air Pollution Control Grant. It is an annual grant that includes extensive review by the U.S. EPA. In addition, the WDNR and the U.S. EPA negotiate priorities and grant commitments under the EnPPA, which is a two year agreement itemizing performance measures and outcomes across the various funding sources and grants. Wisconsin's basic Air Management Program duties and authorities are ensured under s. 285.11, *Wis. Stats*.

As specified in the section addressing Section 110(a)(2)(C), the WDNR also retains both the legal authority and adequate personnel to permit GHG emitting sources at the appropriate federal tailoring threshold.

With respect to the requirements of Section 128, the WDNR notes that the Wisconsin Natural Resources Board (NRB) does not generally approve enforcement or permit orders. Therefore, only the second requirement of Section 128 applies to Wisconsin. Rules that apply to the Wisconsin NRB can be found in s. 15.34, *Wis. Stats*. Wisconsin Statute Chapter 19, "General Duties of Public Officials" contains provisions, specifically in s. 19.46, 19.47, and 19.48, *Wis. Stats.*, that address conflict of interest over public officials, which would include the NRB.

7. Section 110(a)(2)(F): Stationary source monitoring and reporting
"each such plan shall […] require, as may be prescribed by the Administrator:

(i) the installation, maintenance, and replacement of equipment, and the implementation of other necessary steps, by owners or operators of stationary sources to monitor emissions from such sources,

(ii) periodic reports on the nature and amounts of emissions and emissions-related data from such source

(iii) correlation of such reports by the state agency with any emission limitations or standards established pursuant to this chapter, which reports shall be available at reasonable times for public inspection."

The WDNR requires regulated sources to monitor, keep records, and submit reports dependent on applicable requirements and the type of permit issued. Frequency and requirements for review are incorporated as part of chs. NR 438 and 439, *Wis. Adm. Code*. Emission reports are submitted to meet requirements in our emission statement SIP. Wisconsin has a web-based monitoring, reporting, permits and compliance database called the Wisconsin Air Resource Program (WARP) that substantially strengthens the integrity of each of its component units. Basic authority for this effort is provided in s. 285.65, *Wis. Stats*. Public inspection of reports is available under Wisconsin's open records law contained in s. 19.35, *Wis. Stats*.

8. Section 110(a)(2)(G): Emergency episodes:
"Each such plan shall provide for authority comparable to that in section 303 of this Title and adequate contingency plans to implement such authority,"

Wisconsin Statute s. 285.85 requires the WDNR to act upon a finding that episode or emergency conditions exist. This language authorizes the WDNR to seek immediate injunctive relief in circumstances of substantial danger to the environment or to public health.

9. Section 110(a)(2)(H): Future SIP revisions
"Each such plan shall [...] provide for revisions of such plan-

(i) from time to time as may be necessary to take account of revisions of such national primary or secondary ambient air quality standard or the availability of improved or expeditious methods of attaining such standard, and

(ii) except as provided in paragraph (3)(C), whenever the Administrator finds on the basis of information available to the Administrator that the plan is substantially inadequate to attain the national ambient air quality standard which it implements or to otherwise comply with any additional requirements established under this chapter (CAA)."

Wisconsin Statute s. 285.11(6) provides the WDNR the authority to develop all rules, limits, and regulations necessary to meet NAAQS as they evolve and to respond to any U.S. EPA findings of inadequacy with the overall Wisconsin SIP and Air Management Programs.

10. Section 110(a)(2)(J): Consultation with government officials, public notification, PSD and visibility protection
"Each such plan shall […] meet the applicable requirements of section 121 of this Title (relating to consultation), section 127 of this Title (relating to public notification), and part C of this subchapter (relating to prevention of significant deterioration of air quality and visibility protection)."

The WDNR follows an administrative process for public input and legislative review on non-rule SIP revisions for air quality control programs or measures. In addition, the WDNR follows an administrative process for public input, adoption by the Wisconsin NRB, and legislative review on rule SIP revisions for air quality control programs or measures. These processes ensure that potentially impacted public entities are identified and allowed to become engaged in the SIP development process. The WDNR Air Management Program has effectively used formal stakeholder structures in the development and refinement of all major SIP revisions. The WDNR is given the authority in s. 285.13(5), *Wis. Stats.*, to "advise, consult, contract and cooperate with other agencies of the state, local governments, industries, other states, interstate or inter-local agencies, and the federal government, and with interested persons or groups" during the entire SIP revision process and for other elements related to air management for which the WDNR is the officially-charged agency.

The WDNR maintains an active and fully-approved monitoring network for criteria pollutants . As provided for under s. 285.11, *Wis. Stats.*, public notice is provided at levels associated with the extent of the monitored problem ranging from an advisory to alert levels. The State of Wisconsin actively participates in development of regional air quality forecasts and the U.S. EPA's AIRNow air quality data outreach program. The WDNR maintains an active multi-media outreach effort through a variety of partners to ensure adequate public notice of air quality and to advise the public of actions to reduce immediate exposure and improve air quality. Public notification is provided through the Department's website and through a contracted e-mail subscription service known as "GovDelivery".

The WDNR's satisfaction of the PSD and visibility requirements of this section have been previously addressed in the section addressing 110(a)(2)(C) and 110(a)(2)(D) requirements. Insofar as those provisions satisfy the applicable requirements of those sections, the WDNR intends the same provisions to satisfy the applicable requirements of Section 110(a)(2)(J).

11. Section 110 (a)(2)(K): Air quality modeling/data
"Each such plan shall […] provide for-

(i) the performance of such air quality modeling as the administrator may prescribe for the purpose of predicting the effect on ambient air quality of any emissions of any pollutant for which the Administrator has established a national ambient air quality standard, and

(ii) the submission upon request, of data related to such air quality modeling to the Administrator."

The WDNR has the authority and capability to perform source-oriented dispersion modeling of all criteria pollutants – including NO_2, O_3, and SO_2 – using models such as AERMOD. The WDNR works with LADCO and the U.S. EPA to perform regional modeling of O_3 and $PM_{2.5}$ precursors – including NO_2 and SO_2 – from consistent emissions inventory and meteorology platforms. This regional modeling supports SIP development for Wisconsin, nearby nonattainment areas, addresses interstate pollutant transport quantification, and supports visibility impact assessments. The WDNR requires source-specific modeling for PSD-NSR assessment and permitting for the construction of major and some minor sources. These authorities reside under ss. 285.11, 285.13 and 285.60 - 285.69, *Wis. Stats*.

12. Section 110(a)(2)(L): permitting fees
"Each such plan shall require the owner or operator of each major stationary source to pay to the permitting authority, as a condition of any permit required under this chapter, a fee sufficient to cover-

(i) the reasonable costs of reviewing and acting upon any application for such a permit, and

(ii) if the owner or operator receives a permit for such source, the reasonable costs of implementing and enforcing the terms and conditions of any such permit (not including any court costs or other costs associated with any enforcement action), until such fee requirement is superseded with respect to such sources by the Administrator's approval of a fee program under subchapter Title V of this chapter."

Major stationary sources receive permits under Wisconsin's Title 5 and NSR programs. The Title 5 program is funded by emission fees paid by sources and the level of funding is included in the State's biennial budget process. The NSR program is funded by application and review fees that vary based on the type and complexity of the permit. The NSR program fees were revised effective January 1, 2011. Authority is established under s. 285.69, *Wis. Stats*.

13. Section 110(a)(2)(M): Consultation/participation by affected local entities
"Each such plan shall […] provide for consultation and participation by local political subdivisions affected by the plan."

Consultative authorities and responsibilities are noted in response to Section 110(a)(2)(J) requirements above regarding intergovernmental consultation. In addition, the WDNR follows formal public hearing processes in developing and adopting all formal SIP revisions that entail new or revised air pollution control programs or strategies. The WDNR actively engages potentially impacted stakeholders and other interested parties including local governmental entities. The WDNR is required to adopt all formal emission control programs and strategies as rules following the state's formal regulatory processes of notice prior to adoption of rules. For any SIP revision not related to a single source, the WDNR is required to provide the standing committees of the Wisconsin State Legislature with jurisdiction over environmental matters, a 60-day review period, which effectively ensures local entities have been engaged in the program development process. The WDNR is obligated to respond to inquiries by the committee chairs within 15 days under s. 285.14, *Wis. Stats*.

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
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Madison WI 53707-7921

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January 28, 2015

Ms Susan Hedman
USEPA Region V
77 West Jackson Boulevard
Chicago IL 60604

Subject: June 20, 2013 Infrastructure SIP Submission Clarification

Dear Ms. Hedman:

This letter is clarifying our June 20, 2013 Infrastructure SIP submission for the 2008 ozone and 2010 NO2 and SO2 National Ambient Air Quality Standards (NAAQS).

Our authority under Chapters 227 and 285, Wis. Stats, to create new rules and implement existing emission limits and controls allow us to meet the requirements on 110(a)(2)(A). The authority for WDNR to develop rules and regulations is found in Sections 227.11(2)(a), 285.11(1), and 285.21(1)(a), Wis. Stats. Section 227.11(2)(a), Stats., expressly confers rule making authority to an agency. Section 285.11(1) and (6) requires the WDNR promulgate rules and establish control strategies in order to prepare and implement the State Implementation Plan (SIP) for the prevention, abatement and control of air pollution in the state. Section 285.21(1)(a) requires that the WDNR promulgate by rule ambient air quality standards that are similar to, but not more restrictive than the NAAQS.

The current Wisconsin administrative code contains existing controls and emission limits that addresses the NAAQS supplied in the June 20, 2013 Infrastructure SIP submission.

- 2008 ozone NAAQS- Chapters NR 419 through NR 425, Wis. Adm. Code, control VOC as an ozone precursor and Chapter NR 428, Wis. Adm. Code, control NOx as an ozone precursor.
- 2010 NO2 NAAQS- Chapter NR 428, Wis. Adm. Code contains the controls and emission limits for nitrogen dioxide control.
- 2010 SO2 NAAQS - Chapter NR 418, Wis. Adm. Code, contain the controls and emissions limits for sulfur dioxide control.

If you should have any questions regarding this letter, please feel free to contact Ralph Patterson of my staff at 608-267-7546.

Sincerely,

Bart Sponseller
Director
Bureau of Air Management

Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by November 10, 2015. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. Parties with objections to this direct final rule are encouraged to file a comment in response to the parallel notice of proposed rulemaking for this action published in the proposed rules section of today's **Federal Register,** rather than file an immediate petition for judicial review of this direct final rule, so that EPA can withdraw this direct final rule and address the comment in the proposed rulemaking. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Emissions Reporting, Incorporation by reference, Reporting and recordkeeping requirements, Sulfur dioxide.

Dated: August 28, 2015.

Susan Hedman,

Regional Administrator, Region 5.

40 CFR part 52 is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 2. Section 52.770, the table in paragraph (c) is amended by revising the entry for Rule 7–4.1–21 ''Walsh and Kelly sulfur dioxide emission limitations'' under the subheading entitled ''Rule 4.1 Lake County Sulfur Dioxide Emission Limitations'' under the heading entitled ''Article 7. Sulfur Dioxide Rules'' to read as follows:

§ 52.770 Identification of plan.

* * * * *

(c) * * *

EPA-APPROVED INDIANA REGULATIONS

Indiana citation	Subject	Indiana effective date	EPA Approval date	Notes
*	*	*	*	*
Article 7. Sulfur Dioxide Rules				
*	*	*	*	*
Rule 4.1 Lake County Sulfur Dioxide Emission Limitations				
*	*	*	*	*
7–4.1–21	Walsh and Kelly sulfur dioxide emission limitations ..	5/29/2015	9/11/2015, [insert **Federal Register** citation].	
*	*	*	*	*

* * * * *

[FR Doc. 2015–22716 Filed 9–10–15; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R05–OAR–2014–0704; FRL–9933–62–Region 5]

Air Plan Approval; Wisconsin; Infrastructure SIP Requirements for the 2008 Ozone, 2010 NO_2, and 2010 SO_2 NAAQS

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is taking final action to approve some elements of state implementation plan (SIP) submissions from Wisconsin regarding the infrastructure requirements of section 110 of the Clean Air Act (CAA) for the 2008 ozone, 2010 nitrogen dioxide (NO_2), and 2010 sulfur dioxide (SO_2) National Ambient Air Quality Standards (NAAQS). The infrastructure requirements are designed to ensure that the structural components of each state's air quality management program are adequate to meet the state's responsibilities under the CAA. The

proposed rulemaking associated with this final action was published on April 20, 2015, and EPA received no comments during the comment period, which ended on May 20, 2015.

DATES: This final rule is effective on October 13, 2015.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–R05–OAR–2014–0704. All documents in the docket are listed on the *www.regulations.gov* Web site. Although listed in the index, some information is not publicly available, *e.g.,* Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *www.regulations.gov* or in hard copy at the Environmental Protection Agency, Region 5, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. This facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding Federal holidays. We recommend that you telephone Eric Svingen, Environmental Engineer, at (312) 353–4489 before visiting the Region 5 office.

FOR FURTHER INFORMATION CONTACT: Eric Svingen, Environmental Engineer, Attainment Planning and Maintenance Section, Air Programs Branch (AR–18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353–4489, *svingen.eric@epa.gov.*

SUPPLEMENTARY INFORMATION: Throughout this document whenever ''we,'' ''us,'' or ''our'' is used, we mean EPA. This supplementary information section is arranged as follows:

I. What is the background of these SIP submissions?

A. What state submissions does this rulemaking address?

This rulemaking addresses June 20, 2013, submissions and a January 28, 2015, clarification from the Wisconsin Department of Natural Resources (WDNR) intended to address all applicable infrastructure requirements for the 2008 ozone, 2010 NO_2, and 2010 SO_2 NAAQS.

B. Why did the state make these SIP submissions?

Under section 110(a)(1) and (2) of the CAA, states are required to submit infrastructure SIPs to ensure that their SIPs provide for implementation, maintenance, and enforcement of the NAAQS, including the 2008 ozone, 2010 NO_2, and 2010 SO_2 NAAQS. These submissions must contain any revisions needed for meeting the applicable SIP requirements of section 110(a)(2), or certifications that their existing SIPs for the NAAQS already meet those requirements.

EPA has highlighted this statutory requirement in multiple guidance documents. The most recent, entitled ''Guidance on Infrastructure State Implementation Plan (SIP) Elements under CAA Sections 110(a)(1) and (2)'', was published on September 13, 2013.

C. What is the scope of this rulemaking?

EPA is acting upon the SIP submissions from Wisconsin that address the infrastructure requirements of CAA section 110(a)(1) and (2) for the 2008 ozone, 2010 NO_2, and 2010 SO_2 NAAQS. The requirement for states to make SIP submissions of this type arises out of CAA section 110(a)(1), which states that states must make SIP submissions ''within 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a national primary ambient air quality standard (or any revision thereof),'' and these SIP submissions are to provide for the ''implementation, maintenance, and enforcement'' of such NAAQS. The statute directly imposes on states the duty to make these SIP submissions, and the requirement to make the submissions is not conditioned upon EPA's taking any action other than promulgating a new or revised NAAQS. Section 110(a)(2) includes a list of specific elements that ''[e]ach such plan'' submission must address.

EPA has historically referred to these SIP submissions made for the purpose of satisfying the requirements of CAA section 110(a)(1) and (2) as ''infrastructure SIP'' submissions. Although the term ''infrastructure SIP'' does not appear in the CAA, EPA uses the term to distinguish this particular type of SIP submission from submissions that are intended to satisfy other SIP requirements under the CAA, such as SIP submissions that address the nonattainment planning requirements of part D and the Prevention of Significant Deterioration (PSD) requirements of part C of title I of the CAA, and ''regional haze SIP'' submissions required to address the visibility protection requirements of CAA section 169A.

This rulemaking will not cover three substantive areas because they are not integral to acting on a state's infrastructure SIP submissions: (i) Existing provisions related to excess emissions during periods of start-up, shutdown, or malfunction (''SSM'') at sources, that may be contrary to the CAA and EPA's policies addressing such excess emissions; (ii) existing provisions related to ''director's variance'' or ''director's discretion'' that purport to permit revisions to SIP approved emissions limits with limited public notice or without requiring further approval by EPA, that may be contrary to the CAA; and, (iii) existing provisions for PSD programs that may be inconsistent with current requirements of EPA's ''Final NSR Improvement Rule,'' 67 FR 80186 (December 31, 2002), as amended by 72 FR 32526 (June 13, 2007) (''NSR Reform''). Instead, EPA has the authority to address each one of these substantive areas in separate rulemakings. A detailed history, interpretation, and rationale as they relate to infrastructure SIP requirements can be found in EPA's May 13, 2014, proposed rule entitled, ''Infrastructure SIP Requirements for the 2008 Lead NAAQS'' in the section, ''What is the scope of this rulemaking?'' (*see* 79 FR 27241 at 27242–27245).

II. What action is EPA taking?

EPA is taking final action to approve most elements of submissions from Wisconsin certifying that its current SIP is sufficient to meet the required infrastructure elements under section 110(a)(1) and (2) for the 2008 ozone, 2010 NO_2, and 2010 SO_2 NAAQS.

The proposed rulemaking associated with this final action was published on April 20, 2015 (75 FR 21685), and EPA received no comments during the comment period, which ended on May 20, 2015. EPA is therefore taking final action to approve, as proposed, most elements of Wisconsin's submissions.

EPA's actions for the state's satisfaction of infrastructure SIP requirements, by element of section 110(a)(2) and NAAQS, are contained in the table below.

Element	2008 Ozone	2010 NO_2	2010 SO_2
(A)—Emission limits and other control measures	A	A	A
(B)—Ambient air quality monitoring/data system	A	A	A
(C)1—Program for enforcement of control measures	A	A	A
(C)2—PSD	NA	NA	NA
(D)1—I Prong 1: Interstate transport—significant contribution	NA	A	NA
(D)2—I Prong 2: Interstate transport—interfere with maintenance	NA	A	NA
(D)3—II Prong 3: Interstate transport—prevention of significant deterioration	NA	NA	NA
(D)4—II Prong 4: Interstate transport—protect visibility	A	A	A
(D)5—Interstate and international pollution abatement	A	A	A
(E)1—Adequate resources	A	A	A
(E)2—State board requirements	NA	NA	NA
(F)—Stationary source monitoring system	A	A	A
(G)—Emergency power	A	A	A
(H)—Future SIP revisions	A	A	A
(I)—Nonattainment planning requirements of part D	NA	NA	NA
(J)1—Consultation with government officials	A	A	A
(J)2—Public notification	A	A	A
(J)3—PSD	NA	NA	NA
(J)4—Visibility protection	A	A	A
(K)—Air quality modeling/data	A	A	A
(L)—Permitting fees	A	A	A
(M)—Consultation and participation by affected local entities	A	A	A

In the above table, the key is as follows:

A	Approve.
NA	No Action/Separate Rulemaking.

III. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by November 10, 2015. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: August 27, 2015.

Susan Hedman,

Regional Administrator, Region 5.

40 CFR part 52 is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 2. Section 52.2591 is amended by adding paragraphs (g), (h), and (i) to read as follows:

§ 52.2591 Section 110(a)(2) infrastructure requirements.

* * * * *

(g) Approval—In a June 20, 2013, submission with a January 28, 2015, clarification, Wisconsin certified that the state has satisfied the infrastructure SIP requirements of section 110(a)(2)(A) through (H), and (J) through (M) for the 2008 ozone NAAQS. We are not taking action on the prevention of significant deterioration requirements related to section 110(a)(2)(C), (D)(i)(II), and (J), the transport provisions in section 110(a)(2)(D)(i)(I), and the state board requirements of (E)(ii). We will address these requirements in a separate action.

(h) Approval—In a June 20, 2013, submission with a January 28, 2015, clarification, Wisconsin certified that the state has satisfied the infrastructure SIP requirements of section 110(a)(2)(A) through (H), and (J) through (M) for the 2010 nitrogen dioxide (NO_2) NAAQS. We are not taking action on the prevention of significant deterioration requirements related to section 110(a)(2)(C), (D)(i)(II), and (J), and the state board requirements of (E)(ii). We will address these requirements in a separate action.

(i) Approval—In a June 20, 2013, submission with a January 28, 2015, clarification, Wisconsin certified that the state has satisfied the infrastructure SIP requirements of section 110(a)(2)(A) through (H), and (J) through (M) for the 2010 sulfur dioxide (SO_2) NAAQS. We are not taking action on the prevention of significant deterioration requirements related to section 110(a)(2)(C), (D)(i)(II), and (J), the transport provisions in section 110(a)(2)(D)(i)(I), and the state board requirements of (E)(ii). We will address these requirements in a separate action.

[FR Doc. 2015–22864 Filed 9–10–15; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2011–0817; FRL–9933–76–OAR]

RIN 2060–AQ93

National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants; Correction

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; correcting amendments.

SUMMARY: The Environmental Protection Agency (EPA) published a final rule in the **Federal Register** on July 27, 2015, titled National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants. This final rule makes technical corrections and clarifications to the regulations published in that final rule. The rule also includes a provision describing performance testing requirements when a source demonstrates compliance with the hydrochloric acid (HCl) emissions standard using a continuous emissions monitoring system (CEMS) for sulfur dioxide measurement and reporting.

DATES: Effective September 9, 2015.

FOR FURTHER INFORMATION CONTACT: Ms. Sharon Nizich, Sector Policies and Programs Division (D243–04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number: (919) 541–2825; facsimile number: (919) 541–5450; email address: *nizich.sharon@epa.gov.* For information about the applicability of the national emission standards for hazardous air pollutants or new source performance standards, contact Mr. Patrick Yellin, Monitoring, Assistance and Media Programs Division (2227A), Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, Washington, DC 20460; telephone number (202) 564–2970; email address *yellin.patrick@epa.gov.*

SUPPLEMENTARY INFORMATION:

Summary of Technical Corrections

The EPA received communications from representatives of the Portland cement industry on five occasions in August 2015 (see memo to the docket (EPA–HQ–OAR–2011–0817) titled, ''Communications on Errors PCA August 2015''). These communications outlined several errors in the regulatory text of the final rule (80 FR 44772). These all pertain to monitoring requirements. The EPA agrees that these are errors (typographical and unintended phrasing or omissions), and is correcting these errors in this document. We are also removing two passages (which consisted of four sentences) that were inadvertently left in the final amendments, but were discussed by the EPA as being removed in the Response to Comment (RTC) document for the final amendments (see docket item EPA–HQ–OAR–2011–0817–0870, page 8). In the RTC, we discussed that data substitution is not an allowed practice when determining compliance, but these four sentences discuss procedures for data substitution. Leaving these sentences in the rule, thus, does not reflect the EPA's stated intention, and would lead to confusion given the direct conflict between the RTC document and the rule text.

We are making one further technical correction involving timing of performance tests. The correction keeps in place the specified time by which performance tests must be conducted, but will no longer set out a window of time in which the test must be conducted. The net effect is that performance tests can be conducted earlier than the window of time in the current rule text if a source desires to conduct its performance test earlier. The EPA had already indicated in the RTC document that it was making this change (see docket item EPA–HQ–OAR–2011–0817–0870, page 5). The EPA regards this amendment as a clarification (the current rule could be interpreted to allow earlier testing) so that the rule reads precisely as intended, as stated by the EPA in the RTC document.

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

■ 1. The authority citation for part 63 continues to read as follows:

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R05–OAR–2014–0242; FRL–9915–94–Region 5]

Approval and Promulgation of Air Quality Implementation Plans; Wisconsin; Revisions to PSD and NNSR Programs

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: Pursuant to its authority under the Clean Air Act (CAA or Act), the Environmental Protection Agency (EPA) is approving a revision to the Wisconsin State Implementation Plan (SIP) for the Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR) programs.

DATES: This final rule is effective on November 5, 2014.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–R05–OAR–2014–0242. All documents in the docket are listed on the *www.regulations.gov* Web site. Although listed in the index, some information is not publicly available, i.e., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *www.regulations.gov* or in hard copy at the Environmental Protection Agency, Region 5, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. This facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding Federal holidays. We recommend that you telephone Anthony Maietta, Life Scientist, at (312) 353–8777 before visiting the Region 5 office.

FOR FURTHER INFORMATION CONTACT: Anthony Maietta, Life Scientist, Control Strategies Section, Air Programs Branch (AR–18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353–8777, *maietta.anthony@epa.gov.*

SUPPLEMENTARY INFORMATION: Throughout this document whenever ''we,'' ''us,'' or ''our'' is used, we mean EPA. This supplementary information section is arranged as follows:

I. What is the background for this action?

On March 12, 2014, the Wisconsin Department of Natural Resources (WDNR) submitted a request to EPA to revise portions of its PSD and NNSR programs. The submittal requested that EPA approve the following revised rules into Wisconsin's SIP: (1) NR 400.02(123m) and (124); (2) NR 405.02(21)(b)5.a. and b. and 6; (3) NR 405.02(25i)(a); (4) NR 405.02(25i)(ag) and (ar)1–3; and (5) NR 408.02(20)(e) 5.a and b. and 6. On May 2, 2014, EPA published in the **Federal Register** (79 FR 25063) a proposal to take action on portions of the March 12, 2014, submittal that pertained to the definition of ''major modification'', and explicitly identify oxides of nitrogen (NO_X) as a precursor to ozone. Specifically, EPA's May 2, 2014, proposed rulemaking was limited to the following provisions: (1) NR 405.02(21)(b)5.a. and b. and 6; (2) NR 405.02(25i)(a); (3)NR 405.02(25i)(ar)(intro) and 1.; and, (4) NR 408.02(20)(e) 5.a and b. and 6. The remainder of WDNR's submission, as it relates to the identification of precursors to particulate matter of less than 2.5 micrometers ($PM_{2.5}$), and the definition of $PM_{2.5}$ and particulate matter of less than 10 micrometers, will be addressed in a separate rulemaking.

Because the SIP revision was not effective at the state level at the time of the March 12, 2014, submittal, Wisconsin requested that EPA parallel process the SIP revision. EPA's May 2, 2014, proposal was contingent upon both the effectiveness of amended rules at the state level and a formal, fully adopted SIP revision request.

II. Effective Date of Wisconsin's Adopted Rule and Formal SIP Submission

On June 30, 2014, revisions to Wisconsin's PSD and NNSR rules, as submitted in draft to EPA on March 12, 2014, were published in the Wisconsin Administrative Register, and became effective on July, 1, 2014. On August 11, 2014, Wisconsin formally submitted its request for EPA to take final action on our May 2, 2014 proposal.

III. What action is EPA taking?

EPA is approving revisions to Wisconsin rules NR 405.02(21)(b)5.a. and b. and 6; NR 405.02(25i)(a); NR 405.02(25i)(ar)(intro) and 1.; and NR 408.02(20)(e) 5.a and b. and 6., as submitted by WDNR on August 11, 2014, into the Wisconsin SIP.

IV. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a ''significant regulatory action'' subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by December 5, 2014. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen oxides, Ozone, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: August 19, 2014.

Susan Hedman,

Regional Administrator, Region 5.

40 CFR part 52 is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 2. Section 52.2570 is amended by adding paragraph (c)(131) to read as follows:

§ 52.2570 Identification of plan.

* * * * *

(c) * * *

(131) On August 11, 2014, the Wisconsin Department of Natural Resources submitted a request to revise Wisconsin's Prevention of Significant Deterioration and Nonattainment New Source Review rules.

(i) Incorporation by reference.

(A) Wisconsin Administrative Code, NR 405.02(21)(b)5.a. and b. and 6; NR 405.02(25i)(a); NR 405.02(25i)(ar)(intro) and 1., as published in the Wisconsin Administrative Register July 2014, No. 703, effective August 1, 2014.

(B) Wisconsin Administrative Code, NR 408.02(20)(e) 5.a and b. and 6., as published in the Wisconsin Administrative Register July 2014, No. 703, effective August 1, 2014.

[FR Doc. 2014–23769 Filed 10–3–14; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R05–OAR–2013–0273; FRL–9914–97–Region 5]

Approval and Promulgation of Air Quality Implementation Plans; Illinois; Amendments to Gasoline Volatility Standards and Motor Vehicle Refinishing Requirements for Illinois

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: The Environmental Protection Agency (EPA) is approving state implementation plan (SIP) revisions submitted by the Illinois Environmental Protection Agency (IEPA) on March 19, 2013, concerning the state's gasoline volatility standards. The SIP revisions also include amendments to the state's motor vehicle refinishing regulations to allow for the alternative use of a high volume, low pressure (HVLP) equivalent coating applicator in motor vehicle refinishing operations, and repeal a registration program under these regulations that overlaps with Federal registration requirements.

DATES: This direct final rule is effective December 5, 2014, unless EPA receives adverse comments by November 5, 2014. If adverse comments are received, EPA will publish a timely withdrawal of the direct final rule in the **Federal Register** informing the public that the rule will not take effect.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R05–OAR–2013–0273, by one of the following methods:

1. *www.regulations.gov:* Follow the on-line instructions for submitting comments.

2. *Email: blakley.pamela@epa.gov.*

3. *Fax:* (312) 692–2450.

4. *Mail:* Pamela Blakley, Chief, Control Strategies Section, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604.

5. *Hand Delivery:* Pamela Blakley, Chief, Control Strategies Section, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604. Such deliveries are only accepted during the Regional Office normal hours of operation, and special arrangements should be made for deliveries of boxed information. The Regional Office official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

Instructions: Direct your comments to Docket ID No. EPA–R05–OAR–2013–0273. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *www.regulations.gov,* including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *www.regulations.gov* or email. The *www.regulations.gov* Web site is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through *www.regulations.gov* your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available

Show, Detroit River, Detroit, MI. This security zone is intended to restrict vessels from a portion of the Detroit River in order to ensure the safety and security of participants, visitors, and public officials at the North American International Auto Show (NAIAS), which is being held at Cobo Hall in downtown Detroit, MI. Vessels in close proximity to the security zone will be subject to increased monitoring and boarding during the enforcement of the security zone. No person or vessel may enter the security zone while it is being enforced without permission of the Captain of the Port Detroit.

DATES: The security zone regulation described in 33 CFR 165.915(a)(3) is effective without actual notice from January 21, 2016 through 11:59 p.m. on January 24, 2016. For purposes of enforcement, actual notice will be used from 8 a.m. on January 11, 2016 through January 21, 2016.

FOR FURTHER INFORMATION CONTACT: If you have questions on this document, call or email LCDR Nicholas Seniuk, Prevention, U.S. Coast Guard Sector Detroit, 110 Mount Elliot Ave., Detroit, MI 48207; telephone (313) 568–9508; email *Nicholas.C.Seniuk@uscg.mil*.

SUPPLEMENTARY INFORMATION: The Coast Guard will enforce the *North American International Auto Show, Detroit River, Detroit, MI* security zone listed in 33 CFR 165.915(a)(3). This security zone includes all waters of the Detroit River encompassed by a line beginning at a point of origin on land adjacent to the west end of Joe Louis Arena at 42°19.44′ N., 083°03.11′ W.; then extending offshore approximately 150 yards to 42°19.39′ N., 083°03.07′ W.; then proceeding upriver approximately 2000 yards to a point at 42°19.72′ N., 083°01.88′ W.; then proceeding onshore to a point on land adjacent the Tricentennial State Park at 42°19.79′ N., 083°01.90′ W.; then proceeding downriver along the shoreline to connect back to the point of origin. All coordinates are North American Datum 1983.

All persons and vessels shall comply with the instructions of the Captain of the Port Detroit or his designated on-scene representative, who may be contacted via VHF Channel 16.

Under the provisions of 33 CFR 165.33, no person or vessel may enter or remain in this security zone without the permission of the Captain of the Port Detroit. Each person and vessel in this security zone shall obey any direction or order of the Captain of the Port Detroit. The Captain of the Port Detroit may take possession and control of any vessel in this security zone. The Captain of the Port Detroit may remove any person, vessel, article, or thing from this security zone. No person may board, or take or place any article or thing on board any vessel in this security zone without the permission of the Captain of Port Detroit. No person may take or place any article or thing upon any waterfront facility in this security zone without the permission of the Captain of the Port Detroit.

Vessels that wish to transit through this security zone shall request permission from the Captain of the Port Detroit or his designated representative. Requests must be made in advance and approved by the Captain of Port before transits will be authorized. Approvals may be granted on a case by case basis. The Captain of the Port may be contacted via U.S. Coast Guard Sector Detroit on channel 16, VHF–FM. The Coast Guard will give notice to the public via Local Notice to Mariners and VHF radio broadcasts that the regulation is in effect.

This document is issued under authority of 33 CFR 165.915 and 5 U.S.C. 552(a). If the Captain of the Port determines that this security zone need not be enforced for the full duration stated in this document; he may suspend such enforcement and notify the public of the suspension via a Broadcast Notice to Mariners.

Dated: January 8, 2016.

Raymond Negron,

Commander, U.S. Coast Guard, Acting Captain of the Port Detroit.

[FR Doc. 2016–01190 Filed 1–20–16; 8:45 am]

BILLING CODE 9110–04–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R05–OAR–2015–0464; FRL–9939–78–Region 5]

Air Plan Approval; Wisconsin; Wisconsin State Board Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is finalizing approval of state implementation plan (SIP) submissions from Wisconsin regarding the state board requirements under section 128 of the Clean Air Act (CAA). EPA is also approving elements of SIP submissions from Wisconsin regarding the infrastructure requirements of section 110, relating to state boards for the 1997 ozone, 1997 fine particulate ($PM_{2.5}$), 2006 $PM_{2.5}$, 2008 lead (Pb), 2008 ozone, 2010 nitrogen dioxide (NO_2), and 2010 sulfur dioxide (SO_2) National Ambient Air Quality Standards (NAAQS). The proposed rulemaking associated with this final action was published on September 11, 2015, and EPA received no comments during the comment period, which ended on October 13, 2015.

DATES: This final rule is effective on February 22, 2016.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–R05–OAR–2015–0464. All documents in the docket are listed on the *www.regulations.gov* Web site. Although listed in the index, some information is not publicly available, *i.e.,* Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *www.regulations.gov* or in hard copy at the Environmental Protection Agency, Region 5, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. This facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding Federal holidays. We recommend that you telephone Eric Svingen, Environmental Engineer, at (312) 353–4489 before visiting the Region 5 office.

FOR FURTHER INFORMATION CONTACT: Eric Svingen, Environmental Engineer, Attainment Planning and Maintenance Section, Air Programs Branch (AR–18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353–4489, *svingen.eric@epa.gov*.

SUPPLEMENTARY INFORMATION: Throughout this document whenever ''we,'' ''us,'' or ''our'' is used, we mean EPA. This supplementary information section is arranged as follows:

I. What is the background of these SIP submissions?

This rulemaking addresses submissions from the Wisconsin Department of Natural Resources (WDNR) dated July 2, 2015. These

submissions are intended to address CAA requirements relating to the state board requirements under section 128, as well as infrastructure requirements of section 110, relating to state boards for the 1997 ozone, 1997 $PM_{2.5}$, 2006 $PM_{2.5}$, 2008 Pb, 2008 ozone, 2010 NO_2, and 2010 SO_2 NAAQS.

The requirement for states to make infrastructure SIP submissions arises out of CAA section 110(a)(1). Pursuant to section 110(a)(1), states must make SIP submissions ''within 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a national primary ambient air quality standard (or any revision thereof),'' and these SIP submissions are to provide for the ''implementation, maintenance, and enforcement'' of such NAAQS. The statute directly imposes on states the duty to make these SIP submissions, and the requirement to make the submissions is not conditioned upon EPA's taking any action other than promulgating a new or revised NAAQS. Section 110(a)(2) includes a list of specific elements that ''[e]ach such plan'' submission must address.

EPA has historically referred to these SIP submissions made for the purpose of satisfying the requirements of CAA section 110(a)(1) and (2) as ''infrastructure SIP'' submissions. Although the term ''infrastructure SIP'' does not appear in the CAA, EPA uses the term to distinguish this particular type of SIP submission from submissions that are intended to satisfy other SIP requirements under the CAA. This specific rulemaking is only taking action on the CAA 110(a)(2)(E)(ii) element of these infrastructure SIP requirements, which is the only infrastructure SIP element addressed in WDNR's submittal dated July 2, 2015.

II. What guidance is EPA using to evaluate these SIP submissions?

EPA's guidance for these submissions is highlighted in an October 2, 2007, guidance document entitled ''Guidance on SIP Elements Required Under Sections 110(a)(1) and (2) for the 1997 8-hour Ozone and $PM_{2.5}$ [1] National Ambient Air Quality Standards'' (2007 Guidance). Further guidance is provided in a September 13, 2013, document entitled ''Guidance on Infrastructure State Implementation Plan (SIP) Elements under CAA Sections 110(a)(1) and (2)'' (2013 Guidance).

[1] $PM_{2.5}$ refers to particles with an aerodynamic diameter of less than or equal to 2.5 micrometers, oftentimes referred to as ''fine'' particles.

III. What is the result of EPA's review of these SIP submissions?

Pursuant to section 110(a), states must provide reasonable notice and opportunity for public hearing for all infrastructure SIP submissions. WDNR provided notice of a public comment period on May 9, 2015, held a public hearing at WDNR State Headquarters on June 9, 2015, and closed the public comment period on June 11, 2015. No comments were received.

Wisconsin provided a detailed synopsis of how various components of its SIP meet each of the applicable requirements in section 128 and 110(a)(2)(E)(ii) for the 1997 ozone, 1997 $PM_{2.5}$, 2006 $PM_{2.5}$, 2008 Pb, 2008 ozone, 2010 NO_2, and 2010 SO_2 NAAQS, as applicable.

On September 11, 2015 (80 FR 54744), EPA published a proposed rule that would approve these submissions into Wisconsin's SIP. This proposed rule contained a detailed evaluation of how Wisconsin's submissions satisfy certain requirements under CAA sections 110 and 128. No comments were received. Therefore, EPA is finalizing this rule as proposed.

IV. What action is EPA taking?

EPA is taking final action to incorporate *Wis. Stats.* 15.05, 19.45(2), and 19.46 into Wisconsin's SIP. EPA is further approving these submissions as meeting CAA obligations under section 128, as well as 110(a)(2)(E)(ii) for the 1997 ozone, 1997 $PM_{2.5,}$ 2006 $PM_{2.5}$, 2008 Pb, 2008 ozone, 2010 NO_2, and 2010 SO_2 NAAQS.

V. Incorporation by Reference

In this rule, EPA is finalizing regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is finalizing the incorporation by reference of the Wisconsin Regulations described in the amendments to 40 CFR part 52 set forth below. EPA has made, and will continue to make, these documents generally available electronically through *www.regulations.gov* and/or in hard copy at the appropriate EPA office (see the **ADDRESSES** section of this preamble for more information).

VI. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the

Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by March 21, 2016. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: November 23, 2015.

Susan Hedman,

Regional Administrator, Region 5.

40 CFR part 52 is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 2. Section 52.2570 is amended by adding paragraph (c)(134) to read as follows:

§ 52.2570 Identification of plan.

* * * * *

(c) * * *

(134) On July 2, 2015, the Wisconsin Department of Natural Resources submitted a request to revise the State Implementation Plan to satisfy the state board requirements under section 128 of the Clean Air Act.

(i) Incorporation by reference.

(A) Wisconsin Statutes, section 15.05 Secretaries, as revised by 2013 Wisconsin Act 20, enacted on June 30, 2013. (A copy of 2013 Wisconsin Act 20 is attached to section 15.05 to verify the enactment date.)

(B) Wisconsin Statutes, section 19.45(2), as revised by 1989 Wisconsin Act 338, enacted on April 27, 1990. (A copy of 1989 Wisconsin Act 338 is attached to section 19.45(2) to verify the enactment date.)

(C) Wisconsin Statutes, section 19.46 Conflict of interest prohibited; exception, as revised by 2007 Wisconsin Act 1, enacted on February 2, 2007. (A copy of 2007 Wisconsin Act 1 is attached to section 19.46 to verify the enactment date.)

■ 3. Section 52.2591 is amended by adding paragraph (j) to read as follows:

§ 52.2591 Section 110(a)(2) infrastructure requirements.

* * * * *

(j) Approval—In a July 2, 2015, submission, Wisconsin certified that the state has satisfied the infrastructure SIP requirements of section 110(a)(2)(E)(ii) for the 1997 ozone, 1997 $PM_{2.5}$, 2006 $PM_{2.5}$, 2008 Pb, 2008 ozone, 2010 NO_2, and 2010 SO_2 NAAQS.

[FR Doc. 2016–01015 Filed 1–20–16; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

46 CFR Part 15

[Docket No. USCG–2015–0758]

RIN 1625–AC25

Offshore Supply Vessels, Towing Vessel, and Barge Engine Rating Watches

AGENCY: Coast Guard, DHS.

ACTION: Direct final rule; confirmation of effective date.

SUMMARY: On October 26, 2015, the Coast Guard published a direct final rule, which notified the public of our intent to amend merchant mariner manning regulations to align them with statutory changes made by the Howard Coble Coast Guard and Maritime Transportation Act of 2014. The Act allows oilers serving on certain offshore support vessels, towing vessels, and barges to be divided into at least two watches. The change would increase the sea service credit affected mariners are permitted to earn for each 12-hour period of work from one day to one and a half days. The rule will go into effect as scheduled.

DATES: The effective date of the direct final rule published at 80 FR 65165 on October 26, 2015 is confirmed as January 25, 2016.

FOR FURTHER INFORMATION CONTACT: Mr. Davis Breyer, Marine Personnel Qualifications Division (CG–OES–1), Coast Guard; email *Davis.J.Breyer@uscg.mil,* telephone (202) 372–1445.

SUPPLEMENTARY INFORMATION: We received two comments in response to the direct final rule (DFR). The two comments we received were either not adverse or separable from and not within the scope of the rulemaking.

One commenter supported the rule and thanked the Coast Guard for its prompt action. Another commenter titled its comment as ''adverse'' and requested that the Coast Guard withdraw the DFR. The commenter agreed that ''the Coast Guard is obliged to align Coast Guard regulations with the statutes'' and did not oppose the changes to the regulation. The commenter argued, rather, that the Coast Guard should delay the rulemaking indefinitely and seek new legislation from Congress that limits every merchant mariner to serving a uniform maximum of 12 hours in a 24 hour period, except in an emergency.

The DFR conforms Coast Guard regulations to existing law, under which affected mariners may earn one and a half days sea service credit for each 12-hour period of work. The commenter did not oppose granting such mariners such credit for time worked. Instead, the commenter took issue with the absence of *statutory* restrictions on *the length of time certain mariners may be required to work.* The commenter advocated that the Coast Guard delay updating the regulations and request that Congress amend the statute further.

The DFR stated that ''we may adopt, as final, those parts of this rule on which no adverse comment was received.'' 80 FR 65166. The commenter's requests are separable from the rule and raises issues well outside the scope of the rule. The rule will therefore go into effect as scheduled.

Dated: January 14, 2016.

J.G. Lantz,

Director, Commercial Regulations and Standards, U.S. Coast Guard.

[FR Doc. 2016–01101 Filed 1–20–16; 8:45 am]

BILLING CODE P

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
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February 8, 2016

Mr. Robert Kaplan
Acting Regional Administrator
USEPA-Region V (R-19J)
77 West Jackson Boulevard
Chicago IL 60604-3507

Subject: Wisconsin State Implementation Plan (SIP) Revision – PM2.5 Increment and Various PSD Program Changes

Dear Mr. Kaplan:

The information contained in this SIP Revision request serves to address several issues for which Wisconsin's 1997 and 2006 $PM_{2.5}$ Infrastructure SIPs, 1997 ozone Infrastructure SIP, and Wisconsin's Prevention of Significant Deterioration (PSD) program were partially disapproved. Changes in this rule package address the following disapprovals and findings of failure:

1. June 15, 2012 Federal Register (77 FR 35870) Final disapproved of narrow portions of Wisconsin's SIP related to identification of NOx as a precursor to ozone under the PSD permit program. This notice also covered narrow disapproval of 1997 8-hour ozone NAAQS and 1997 24-hour $PM_{2.5}$ NAAQS infrastructure SIPs for identification of NOx as a precursor to ozone (EPA Docket ID EPA-R05-OAR-2007-1179)

2. August 11, 2014 Federal Register (79 FR 46704) Final Finding of Failure to Submit a PSD State Implementation Plan Revision for $PM_{2.5}$ (EPA Docket ID EPA-R05-OAR-2014-0517)

3. December 10 2015 Federal Register (80 FR 76637) Final Disapproval of Infrastructure SIP With Respect to Oxides of Nitrogen as a Precursor to Ozone Provisions for the 2006 $PM_{2.5}$ NAAQS (EPA Docket ID EPA-R05-OAR-2009-0805)

This submittal also serves to supplement infrastructure SIPs previously submitted for which the PSD portions have not yet been acted on, including the 2008 lead, 2008 ozone, 2010 Nitrogen Dioxide, 2010 Sulfur Dioxide, and 2012 $PM_{2.5}$ NAAQS. This supplement is necessary to show that Wisconsin's PSD permitting program incorporates all federal requirements including the requirement to properly regulate NOx as a precursor to ozone.

The WDNR in DNR Board Order AM-15-14 is completing rulemaking to address these deficiencies including identifying NOx as a precursor to ozone, adding $PM_{2.5}$ increment values, modifying select definitions in ch. NR 405, and changing the $PM_{2.5}$ significant monitoring concentration. The sections of AM-15-14 that address the deficiencies noted above include:

Board Order Section	Deficiency
Section 3, amending NR 404.05(2) (intro),	$PM_{2.5}$ increment
Section 4, creating NR 404.05(2)(am)	$PM_{2.5}$ increment
Section 5, amending NR 404.05(3)(intro),	$PM_{2.5}$ increment
Section 6, creating NR 404.05(3)(am)	$PM_{2.5}$ increment
Section 7, amending NR 404.05(4) (intro),	$PM_{2.5}$ increment

Section 8, creating NR 404.05(4)(am),	$PM_{2.5}$ increment
Section 9, amending NR 405.02(3),(21)(a), and (21m)(a)	Changes to "Baseline area", "major modification", and "Major source baseline date" definitions
Section 10, creating NR 405.02(21m)(c)	Changes to "Major source baseline date" definition
Section 11, amending NR 405.02(22)(b) and (22m)(a)1. and (b)1.,	Changes to address NOx as a precursor to ozone and changes to "Minor source baseline date"
Section 12, creating NR 405.02(22m)(a)3	Changes to "Minor source baseline date"
Section 13, creating NR 405.02(27)(a)6.,	Changes to address NOx as a precursor to ozone
Section 14, amending NR 405.07(8)(a)3m.,	$PM_{2.5}$ Significant Monitoring Concentration
Section 15, creating NR 405.07(8)(a)3m. (Note)	$PM_{2.5}$ Significant Monitoring Concentration
Section 16, amending NR 405.07(8)(a)5.(Note)	Changes to address NOx as a precursor to ozone

Wisconsin requests a SIP revision for only these sections of Board Order AM-15-14. AM-15-14 also contains amendments to the definition of volatile organic compounds in NR 400, changes to the rule language in NR 420, and repeal of several outdated code sections related to the vapor recovery program. Wisconsin is not requesting a SIP revision for these additional proposed rule changes at this time.

Because the changes to chs. NR 404 and NR 405, Wis. Adm. Code, have not been published in the Wisconsin Register and are not yet official, we are requesting that EPA begin parallel processing of this SIP revision so that EPA can be ready for rulemaking when the changes to chs. NR 404 and NR 405, Wis. Adm. Code are finalized. We also believe that the parallel processing will assist Wisconsin in meeting the 2-year timeframe to rectify the noted deficiencies. We are submitting attachments to this letter to assist EPA staff, which includes a promulgation schedule for the final rules. In accordance with EPA's final rule on CAA Section 110 submission requirements effective March 16, 2015 [80 FR 7336], this SIP is being submitted using EPA's electronic SIP (eSIP) submission system. We will supply EPA additional information when AM-15-14 is finalized.

We appreciate the willingness of your staff to address this issue through the parallel processing procedure. Please contact Ralph Patterson at 608-267-7546 if you have any questions.

Sincerely,

Gail Good,
Air Management Program Director

Cc: Doug Aburano, USEPA-Region V (AR-18J), 77 West Jackson Boulevard, Chicago, IL 60604-3507
Ralph Patterson, WDNR
Kristin Hart, WDNR

Attachments

1. The January 2016 Natural Resources Rule Package (also known as the Green Sheet Package) containing a background memo, fiscal estimate and economic impact analysis, and rule AM-15-14

2. Rule AM-15-14
3. SIP Checklist
4. AM-15-14 Public Hearing notice – DNR did not receive any comments on AM-15-14 at the November 5, 2015 public hearing
5. Newspaper tare sheet showing Class 1 public hearing notice
6. SIP certification
7. Schedule for Final Adoption of AM-15-14

See 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. EPA is determining that the prong 4 portion of the aforementioned SIP submission does not meet federal requirements. Therefore, this action does not impose additional requirements on the state beyond those imposed by state law. For that reason, this action:

- Is not a ''significant regulatory action'' subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

The SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will it impose substantial direct costs on tribal governments or preempt tribal law.

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by April 10, 2017. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. *See* section 307(b)(2).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate Matter, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: January 5, 2017.

Heather McTeer Toney,

Regional Administrator, Region 4.

40 CFR part 52 is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart B—Alabama

■ 2. Section 52.53 is amended by adding a reserved paragraph (d) and paragraph (e) to read as follows:

§ 52.53 Approval status.

* * * * *

(e) *Disapproval.* Portion of the state implementation plan (SIP) revision submitted by the State of Alabama, through the Alabama Department of Environmental Management (ADEM) on August 20, 2012, that addresses the visibility protection (prong 4) element of Clean Air Act section 110(a)(2)(D)(i) for the 2008 8-hour Ozone National Ambient Air Quality Standards (NAAQS). EPA is disapproving the prong 4 portion of ADEM's SIP submittal because it relies solely on the State having a fully approved regional haze SIP to satisfy the prong 4 requirements for the 2008 8-hour Ozone NAAQS.

[FR Doc. 2017–02303 Filed 2–6–17; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R05–OAR–2016–0134; FRL–9957–58–Region 5]

Air Plan Approval; Wisconsin; NO_X as a Precursor to Ozone, $PM_{2.5}$ Increment Rules and PSD Infrastructure SIP Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is approving a revision to Wisconsin's state implementation plan (SIP), revising portions of the State's Prevention of Significant Deterioration (PSD) and ambient air quality programs to address deficiencies identified in EPA's previous narrow infrastructure SIP disapprovals and Finding of Failure to Submit (FFS). This SIP revision request is consistent with the Federal PSD rules and addresses the required elements of the fine particulate matter ($PM_{2.5}$) PSD Increments, Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC) Rule. EPA is also approving elements of SIP submissions from Wisconsin regarding PSD infrastructure requirements of section 110 of the Clean Air Act (CAA) for the 1997 $PM_{2.5}$, 1997 ozone, 2006 $PM_{2.5}$, 2008 lead, 2008 ozone, 2010 nitrogen dioxide (NO_2), 2010 sulfur dioxide (SO_2), and 2012 $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS). The infrastructure requirements are designed to ensure that the structural components of each state's air quality management program are adequate to meet the state's responsibilities under the CAA.

DATES: This final rule is effective on March 9, 2017.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–R05–OAR–2016–0134. All documents in the docket are listed on

the *www.regulations.gov* Web site. Although listed in the index, some information is not publicly available, *i.e.,* Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either through *www.regulations.gov* or at the Environmental Protection Agency, Region 5, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. This facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding Federal holidays. We recommend that you telephone Andrea Morgan, Environmental Engineer, at (312) 353–6058, before visiting the Region 5 office.

FOR FURTHER INFORMATION CONTACT: Andrea Morgan, Environmental Engineer, Air Permitting Section, Air Programs Branch (AR–18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353–6058, *morgan.andrea@epa.gov.*

SUPPLEMENTARY INFORMATION: Throughout this document whenever ''we,'' ''us,'' or ''our'' is used, we mean EPA. This supplementary information section is arranged as follows:

I. What is the background of these SIP submissions?

On August 8, 2016, the Wisconsin Department of Natural Resources (WDNR) submitted a SIP revision request to EPA to revise portions of its PSD and ambient air quality programs to address deficiencies identified in EPA's previous narrow infrastructure SIP disapprovals and FFS. Final approval of this SIP revision request will be consistent with the Federal PSD requirements and will address the required elements of the $PM_{2.5}$ PSD Increments, SILs and SMC Rule. Wisconsin submitted revisions to its rules NR 404 and 405 of the Wisconsin Administrative Code. The submittal requests that EPA approve the following revisions to Wisconsin's SIP: (1) Amend NR 404.05(2)(intro); (2) create NR 404.05(2)(am); (3) amend NR 404.05(3)(intro); (4) create NR 404.05(3)(am); (5) amend NR 404.05(4)(intro); (6) create NR 404.05(4)(am); (7) amend NR 405.02(3), (21)(a), and (21m)(a); (8) create NR 405.02(21m)(c); (9) amend NR 405.02(22)(b) and (22m)(a)1. and (b)1.; (10) create NR 405.02(22m)(a)3.; (11) amend NR 405.02(27)(a)6.; (12) amend NR 405.07(8)(a)3m; (13) create NR 405.07(8)(a)3m (Note); and (14) amend NR 405.07(8)(a)5.(Note).

WDNR also requested that this SIP revision supplement the PSD portions of its previously submitted infrastructure submittals, including 1997 $PM_{2.5}$, 1997 ozone, 2006 $PM_{2.5}$, 2008 lead, 2008 ozone, 2010 NO_2, 2010 SO_2, and 2012 $PM_{2.5}$.

A. PSD Rule Revisions

1. $PM_{2.5}$ Increments

To implement the $PM_{2.5}$ NAAQS, EPA issued two separate final rules that establish the New Source Review (NSR) permitting requirements for $PM_{2.5}$: The NSR $PM_{2.5}$ Implementation Rule promulgated on May 16, 2008 (73 FR 28321), and the $PM_{2.5}$ PSD Increments, SILs and SMC Rule promulgated on October 20, 2010 (75 FR 64864). EPA's 2008 NSR $PM_{2.5}$ Implementation Rule required states to submit applicable SIP revisions to EPA no later than May 16, 2011, to address this rule's PSD and nonattainment NSR SIP requirements. This rule requires that the state submit revisions to its SIP, including the identification of precursors for $PM_{2.5}$, the significant emissions rates for $PM_{2.5}$ and the requirement to include emissions which may condense to form particulate matter at ambient temperatures, known as condensables, in permitting decisions. EPA published a final approval of a revision to Wisconsin's SIP on October 16, 2014, (79 FR 62008), which included all of the required elements of the 2008 NSR Implementation Rule.

The $PM_{2.5}$ PSD Increments, SILs and SMC Rule required states to submit SIP revisions to EPA by July 20, 2012, adopting provisions equivalent to or at least as stringent as the $PM_{2.5}$ PSD increments and associated implementing regulations. On August 11, 2014, EPA published a finding that Wisconsin had failed to submit the required elements of the $PM_{2.5}$ PSD Increments, SILs and SMC Rule (79 FR 46703).

The $PM_{2.5}$ PSD Increments, SILs and SMC Rule also allows states to discretionarily adopt and submit for EPA approval: (1) SILs, which are used as a screening tool to evaluate the impact a proposed new major source or major modification may have on the NAAQS or PSD increment; and (2) a SMC (also a screening tool), which is used to determine the subsequent level of data gathering required for a PSD permit application for emissions of $PM_{2.5}$. However, on January 22, 2013, the United States Court of Appeals for the District of Columbia (Court) granted a request from EPA to vacate and remand to EPA the portions of the $PM_{2.5}$ PSD Increments, SILs and SMC Rule $PM_{2.5}$ addressing the SILs for $PM_{2.5}$ so that EPA could voluntarily correct an error in these provisions. The Court also vacated parts of the $PM_{2.5}$ PSD Increments, SILs and SMC Rule establishing a $PM_{2.5}$ SMC, finding that EPA was precluded from using the $PM_{2.5}$ SMCs to exempt permit applicants from the statutory requirement to compile preconstruction monitoring data. *Sierra Club* v. *EPA,* 705 F.3d 458, 463–69. On December 9, 2013, EPA issued a good cause final rule formally removing the affected SILs and replacing the SMC with a numeric value of 0 micrograms per cubic meter ($\mu g/m^3$) and a note that no exemption is available with regard to $PM_{2.5}$. *See* 78 FR 73698. As a result, SIP submittals could no longer include the vacated $PM_{2.5}$ SILs at 40 CFR 51.166(k)(2) and 52.21(k)(2) and the $PM_{2.5}$ SMC must be revised to 0 $\mu g/m^3$, consistent with 40 CFR 51.166(i)(5)(i)(c) and 52.21(i)(5)(i)(c).

2. Ozone

On November 29, 2005, EPA published (70 FR 71612) in the **Federal Register** the ''Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard—Phase 2''. Part of this rule established, among other requirements, oxides of nitrogen (NO_X) as a precursor to ozone. The final rule became effective on January 30, 2006.

On October 6, 2014, EPA finalized approval of revisions to Wisconsin's SIP that included the identification of NO_X as a precursor to ozone in the definition of regulated NSR pollutant. *See* 79 FR 60064.

B. Infrastructure SIP Submittals

The requirement for states to make a SIP submission of this type arises out of CAA section 110(a)(1). Pursuant to section 110(a)(1), states must make SIP submissions ''within 3 years (or such shorter period as the Administrator may prescribe) after the promulgation of a national primary ambient air quality standard (or any revision thereof),'' and these SIP submissions are to provide for the ''implementation, maintenance, and enforcement'' of such NAAQS. The statute directly imposes on states the duty to make these SIP submissions,

and the requirement to make the submissions is not conditioned upon EPA's taking any action other than promulgating a new or revised NAAQS. Section 110(a)(2) includes a list of specific elements that ''[e]ach such plan'' submission must address.

This specific rulemaking is only taking action on the PSD elements of the Wisconsin infrastructure submittals. Separate action has been or will be taken on the non-PSD infrastructure elements in separate rulemakings. The infrastructure elements for PSD are found in CAA 110(a)(2)(C), 110(a)(2)(D), and 110(a)(2)(J) and will be discussed in detail below. For further discussion on the background of infrastructure submittals, *see* 77 FR 45992, August 2, 2012.

II. What action did EPA propose on the SIP submissions?

On September 30, 2016 (81 FR 67261), EPA proposed approval of a SIP revision from WDNR requesting EPA to revise portions of its PSD and ambient air quality programs to address $PM_{2.5}$ increment requirements and incorporating NO_X as an ozone precursor. EPA proposed that these revisions were made to meet EPA's requirements for Wisconsin's PSD and NSR program and are consistent with Federal regulations.

EPA proposed that the revisions pertaining to $PM_{2.5}$ increments are consistent with Federal regulations and fully address the requirements of the $PM_{2.5}$ PSD Increments, SILs, and SMC Rule. EPA also proposed that revisions pertaining to NO_X as a precursor to ozone, in conjunction with EPA's October 6, 2014 approval (79 FR 60064), will address all of the PSD requirements of the ''Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard—Phase 2''.

WDNR also requested that this SIP revision supplement the PSD portions of its previously submitted infrastructure submittals. EPA proposed that based on the approval of the PSD related SIP revisions mentioned above and previously approved SIP revisions (*see* 79 FR 62008, October 16, 2014), EPA is able to fully approve the PSD related infrastructure requirements found in CAA sections 110(a)(2)(C), (D)(i)(II), and (J) for Wisconsin's 1997 $PM_{2.5,}$ 1997 ozone, 2006 $PM_{2.5}$, 2008 lead, 2008 ozone, 2010 NO_2, 2010 SO_2, and 2012 $PM_{2.5}$ NAAQS submittals.

III. What comments were received on the proposed rulemaking?

The comment period for the proposed action associated with today's rulemaking (81 FR 67261) closed on October 31, 2016. EPA received two supportive comments.

IV. What action is EPA taking?

EPA is approving revisions to Wisconsin's SIP that implement the $PM_{2.5}$ increment requirements and also incorporate NO_X as an ozone precursor. These revisions were made to meet EPA's requirements for Wisconsin's PSD and NSR program and are consistent with Federal regulations. Specifically, EPA is approving the following:

(i) NR 404.05(2)(intro) and (am)
(ii) NR 404.05(3)(intro) and (am)
(iii) NR 404.05(4)(intro) and (am)
(iv) NR 405.02(3) and (21)(a)
(v) NR 405.02(21m)(a) and (c)
(vi) NR 405.02(22)(b)
(vii) NR 405.02(22m)(a)1. and 3., and (b)1.
(viii) NR 405.02(27)(a)6.
(ix) NR 405.07(8)(a)3m and 3m(Note)
(x) NR 405.07(8)(a)5.(Note)

The revisions pertaining to $PM_{2.5}$ increments will fully address the requirements of the $PM_{2.5}$ PSD Increments, SILs, and SMC Rule and the deficiencies identified in EPA's August 11, 2014, Finding of Failure to Submit. The revisions pertaining to NO_X as a precursor to ozone will, in conjunction with EPA's October 6, 2014 approval, address all of the PSD requirements of the ''Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard—Phase 2'' and stops the Federal Implementation Plan (FIP) clock triggered by the FFS mentioned above (79 FR 46704, August 11, 2014).

EPA is also approving the PSD related infrastructure requirements found in CAA sections 110(a)(2)(C), (D)(i)(II), and (J) for Wisconsin's 1997 $PM_{2.5}$, 1997 ozone, 2006 $PM_{2.5}$, 2008 lead, 2008 ozone, 2010 NO_2, 2010 SO_2, and 2012 $PM_{2.5}$ NAAQS submittals. This action stops the FIP clock triggered by the disapproval of NO_X as a precursor to ozone for the PSD provisions for the 1997 ozone and $PM_{2.5}$ infrastructure SIPs (77 FR 35870, June 15, 2012). This action requires significant revisions to existing portions of 40 CFR 52.2591. Because there will already be substantial revisions, EPA will also be revising additional portions of 40 CFR 52.2591 that are not related to PSD for clarification or consolidation purposes only. These additional edits will not change the meaning or intent of the original language.

V. Incorporation by Reference

In this rule, EPA is finalizing regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is finalizing the incorporation by reference of the Wisconsin Regulations described in the amendments to 40 CFR part 52 set forth below. EPA has made, and will continue to make, these documents generally available through *www.regulations.gov* and at the EPA Region 5 Office (please contact the person identified in the ''For Further Information Contact'' section of this preamble for more information).

VI. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible

methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by April 10, 2017. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (*See* section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: December 13, 2016.

Robert A. Kaplan,

Acting Regional Administrator, Region 5.

40 CFR part 52 is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 2. Section 52.2570 is amended by adding paragraph (c)(135) to read as follows:

§ 52.2570 Identification of plan.

* * * * *

(c) * * *

(135) On August 8, 2016, WDNR submitted a request to revise portions of its Prevention of Significant Deterioration (PSD)and ambient air quality programs to address the required elements of the fine particulate matter ($PM_{2.5}$) PSD Increments, Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC) Rule and the Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard—Phase 2. Wisconsin submitted revisions to its rules NR 404 and 405 of the Wisconsin Administrative Code.

(i) Incorporation by reference.

(A) Wisconsin Administrative Code, NR 404.05 Ambient Air Increments. NR 404.05(2) introductory text; NR 404.05(2)(am); NR 404.05(3) introductory text; NR 404.05(3)(am); NR 404.05(4) introductory text; and NR 404.05(4)(am), as published in the Register, July 2016, No. 727, effective August 1, 2016.

(B) Wisconsin Administrative Code, NR 405.02 Definitions. NR 405.02(3); NR 405.02(21)(a); NR 405.02(21m), except (b); NR 405.02(22)(b); NR 405.02(22m)(a)1. and 3. and (b)1.; and NR 405.02(27)(a)6., as published in the Register, July 2016, No. 727, effective August 1, 2016.

(C) Wisconsin Administrative Code, NR 405.07 Review of major stationary sources and major modifications — source applicability and exemptions. NR 405.07(8)(a)3m; 405.07(8)(a)3m. Note; and NR 405.07(8)(a)5. Note, as published in the Register, July 2016, No. 727, effective August 1, 2016.

■ 3. Section 52.2591 is revised to read as follows:

§ 52.2591 Section 110(a)(2) infrastructure requirements.

(a) *Approval.* In a December 12, 2007 submittal, supplemented on January 24, 2011, March 28, 2011, July 2, 2015, and August 8, 2016, Wisconsin certified that the State has satisfied the infrastructure SIP requirements of section 110(a)(2)(A) through (C), (D)(ii), (E) through (H), and (J) through (M) for the 1997 8-hour ozone NAAQS.

(b) *Approval.* In a December 12, 2007 submittal, supplemented on January 24, 2011, March 28, 2011, July 2, 2015, and August 8, 2016, Wisconsin certified that the State has satisfied the infrastructure SIP requirements of section 110(a)(2)(A) through (C), (D)(ii), (E) through (H), and (J) through (M) for the 1997 $PM_{2.5}$ NAAQS.

(c) *Approval.* In a January 24, 2011, submittal, supplemented on March 28, 2011, June 29, 2012, July 2, 2015, and August 8, 2016, Wisconsin certified that the State has satisfied the infrastructure SIP requirements of section 110(a)(2)(A) through (H), and (J) through (M) for the 2006 24-hour $PM_{2.5}$ NAAQS. We are not finalizing action on (D)(i)(I) and will address these requirements in a separate action.

(d) *Approval.* In a July 26, 2012, submittal, supplemented July 2, 2015, and August 8, 2016, Wisconsin certified that the State has satisfied the infrastructure SIP requirements of section 110(a)(2)(A) through (H), and (J) through (M) for the 2008 lead (Pb) NAAQS.

(e) *Approval and Disapproval.* In a June 20, 2013, submittal with a January 28, 2015, clarification, supplemented July 2, 2015, and August 8, 2016, Wisconsin certified that the state has satisfied the infrastructure SIP requirements of section 110(a)(2)(A) through (H), and (J) through (M) for the 2008 ozone NAAQS. For 110(a)(2)(D)(i)(I), we are approving prong one and disapproving prong two.

(f) *Approval.* In a June 20, 2013, submission with a January 28, 2015, clarification, supplemented July 2, 2015, and August 8, 2016, Wisconsin certified that the state has satisfied the infrastructure SIP requirements of section 110(a)(2)(A) through (H), and (J) through (M) for the 2010 nitrogen dioxide (NO_2) NAAQS.

(g) *Approval.* In a June 20, 2013, submission with a January 28, 2015, clarification, supplemented July 2, 2015, and August 8, 2016, Wisconsin certified that the state has satisfied the infrastructure SIP requirements of section 110(a)(2)(A) through (H), and (J) through (M) for the 2010 sulfur dioxide (SO_2) NAAQS. We are not taking action on the transport provisions in section 110(a)(2)(D)(i)(I), and will address these requirements in a separate action.

(h) *Approval.* In a July 13, 2015, submission, supplemented August 8, 2016, WDNR certified that the state has satisfied the infrastructure SIP requirements of section 110(a)(2)(A) through (H), and (J) through (M) for the 2012 $PM_{2.5}$ NAAQS. We are not taking action on the transport provisions in section 110(a)(2)(D)(i)(I), and the

stationary source monitoring and reporting requirements of section 110(a)(2)(F). We will address these requirements in a separate action.

[FR Doc. 2017–02530 Filed 2–6–17; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[EPA–HQ–OPP–2016–0083; FRL–9957–68]

Propamocarb; Pesticide Tolerance

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation establishes a tolerance for residues of propamocarb in or on potato. Bayer CropScience requested these tolerances under the Federal Food, Drug, and Cosmetic Act (FFDCA).

DATES: This regulation is effective February 7, 2017. Objections and requests for hearings must be received on or before April 10, 2017, and must be filed in accordance with the instructions provided in 40 CFR part 178 (see also Unit I.C. of the **SUPPLEMENTARY INFORMATION**).

ADDRESSES: The docket for this action, identified by docket identification (ID) number EPA–HQ–OPP–2016–0083, is available at *http://www.regulations.gov* or at the Office of Pesticide Programs Regulatory Public Docket (OPP Docket) in the Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW., Washington, DC 20460–0001. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the OPP Docket is (703) 305–5805. Please review the visitor instructions and additional information about the docket available at *http://www.epa.gov/dockets.*

FOR FURTHER INFORMATION CONTACT: Registration Division (7505P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001; main telephone number: (703) 305–7090; email address: *RDFRNotices@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

You may be potentially affected by this action if you are an agricultural producer, food manufacturer, or pesticide manufacturer. The following list of North American Industrial Classification System (NAICS) codes is not intended to be exhaustive, but rather provides a guide to help readers determine whether this document applies to them. Potentially affected entities may include:

- Crop production (NAICS code 111).
- Animal production (NAICS code 112).
- Food manufacturing (NAICS code 311).
- Pesticide manufacturing (NAICS code 32532).

B. How can I get electronic access to other related information?

You may access a frequently updated electronic version of EPA's tolerance regulations at 40 CFR part 180 through the Government Printing Office's e-CFR site at *http://www.ecfr.gov/cgi-bin/text-idx?&c=ecfr&tpl=/ecfrbrowse/Title40/40tab_02.tpl.*

C. How can I file an objection or hearing request?

Under FFDCA section 408(g), 21 U.S.C. 346a, any person may file an objection to any aspect of this regulation and may also request a hearing on those objections. You must file your objection or request a hearing on this regulation in accordance with the instructions provided in 40 CFR part 178. To ensure proper receipt by EPA, you must identify docket ID number EPA–HQ–OPP–2016–0083 in the subject line on the first page of your submission. All objections and requests for a hearing must be in writing, and must be received by the Hearing Clerk on or before April 10, 2017. Addresses for mail and hand delivery of objections and hearing requests are provided in 40 CFR 178.25(b).

In addition to filing an objection or hearing request with the Hearing Clerk as described in 40 CFR part 178, please submit a copy of the filing (excluding any Confidential Business Information (CBI)) for inclusion in the public docket. Information not marked confidential pursuant to 40 CFR part 2 may be disclosed publicly by EPA without prior notice. Submit the non-CBI copy of your objection or hearing request, identified by docket ID number EPA–HQ–OPP–2016–0083, by one of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the online instructions for submitting comments. Do not submit electronically any information you consider to be CBI or other information whose disclosure is restricted by statute.
- *Mail:* OPP Docket, Environmental Protection Agency Docket Center (EPA/DC), (28221T), 1200 Pennsylvania Ave. NW., Washington, DC 20460–0001.
- *Hand Delivery:* To make special arrangements for hand delivery or delivery of boxed information, please follow the instructions at *http://www.epa.gov/dockets/contacts.html.*

Additional instructions on commenting or visiting the docket, along with more information about dockets generally, is available at *http://www.epa.gov/dockets.*

II. Summary of Petitioned-For Tolerance

In the **Federal Register** of October 27, 2016 (81 FR 74753) (FRL–9954–27), EPA issued a document pursuant to FFDCA section 408(d)(3), 21 U.S.C. 346a(d)(3), announcing the filing of a pesticide petition (PP 5F8430) by Bayer CropScience, 2 T.W. Alexander Drive, P.O. Box 12014, Research Triangle Park, NC 27709. The petition requested that 40 CFR 180.499 be amended by increasing the tolerance for residues of the fungicide propamocarb hydrochloride, in or on potato from 0.06 to 0.30 parts per million (ppm). That document referenced a summary of the petition prepared by Bayer CropScience, the registrant, which is available in the docket, *http://www.regulations.gov.* There were no comments received concerning this action for propamocarb in response to the notice of filing.

III. Aggregate Risk Assessment and Determination of Safety

Section 408(b)(2)(A)(i) of FFDCA allows EPA to establish a tolerance (the legal limit for a pesticide chemical residue in or on a food) only if EPA determines that the tolerance is ''safe.'' Section 408(b)(2)(A)(ii) of FFDCA defines ''safe'' to mean that ''there is a reasonable certainty that no harm will result from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposures and all other exposures for which there is reliable information.'' This includes exposure through drinking water and in residential settings, but does not include occupational exposure. Section 408(b)(2)(C) of FFDCA requires EPA to give special consideration to exposure of infants and children to the pesticide chemical residue in establishing a tolerance and to ''ensure that there is a reasonable certainty that no harm will result to infants and children from aggregate exposure to the pesticide chemical residue. . . .''

Consistent with FFDCA section 408(b)(2)(D), and the factors specified in FFDCA section 408(b)(2)(D), EPA has

APPENDIX 2

2011 and 2014 Wisconsin Emission Inventories Documentation

Table of Contents

ABBREVIATIONS

AEI	Air Emissions Inventory
CAMD	Clean Air Markets Division
DOE	Department of Energy
EGU	Electric Generating Unit
EIA	Energy Information Administration
EIs	Emission Inventories
EPA	Environmental Protection Agency
FID	Facility Identification Number
FIRE	Factor Information Retrieval
HPMS	Highway Performance Monitoring System
LADCO	Lake Michigan Air Directors Consortium
MAR	Commercial Marine Aircraft and Rail Locomotive
MOVES	Motor Vehicle Emission Simulator
NAICS	North American Industrial Classification System
NEC	Not Elsewhere Classified
NOx	Nitrogen Oxides
OBD	On-Board Diagnostics
SCC	Source Classification Code
SED	State Energy Data
SIP	State Implementation Plan
tpsd	Tons per Summer Day
TSD	Technical Support Document
VHT	Vehicle-Hours of Travel
VMT	Vehicle-Miles of Travel
VOC	Volatile Organic Compounds
WDNR	Wisconsin Department of Natural Resources
WDOT	Wisconsin Department of Transportation

1. Introduction

This appendix provides additional information for the sector-specific nitrogen oxides (NOx) and volatile organic compounds (VOC) tons per summer day (tpsd) emission estimates in section 4.2 (Nonattainment Year (2011) and Attainment Year (2014) Inventories) of the Wisconsin Department of Natural Resources' (WDNR) Redesignation Request and Maintenance Plan for the Inland Sheboygan County, Wisconsin 1997 and 2008 8-hour Ozone Nonattainment Area (redesignation request from hereon). For U.S. EPA to redesignate an area from nonattainment to attainment for ozone, a state must show that improvement in air quality is due to permanent and enforceable reductions in emissions. This is accomplished in part by developing and comparing a nonattainment year (2011) emissions inventory and attainment year (2014) emissions inventory.

2. Emissions Calculation Methodologies

2.1 Point Sources

Point sources are industrial, commercial or institutional stationary facilities which are normally located in permanent sites, and which emit specific air pollutants in great enough quantities to warrant individual quantification. To better enable detailed control evaluations, the point source emission inventories (EIs) include all reporting sources at that facility regardless of the magnitude of reported emissions. For this attainment demonstration, portable point sources, such as asphalt plants and rock crushers, were reported under nonpoint sources to be consistent with other states. The 2011 point source emission inventory was created using annually reported point source emissions, the EPA's Clean Air Markets Division (CAMD) database and approved EPA techniques for emissions calculation (e.g., emission factors).

Whenever feasible, federal, state and local controls were factored into the emission calculations. Emissions were estimated by collecting process-level information from each facility that qualifies for inclusion into the state's point source database. In Wisconsin, this information is normally collected via an internet or a computer diskette submittal, and subsequently loaded into the point source database. Process, boiler, fugitive and tank emissions are typically calculated using throughput information multiplied by an emission factor for that process. Emission factor sources included mass balance, stack testing, continuous emissions monitors, engineering judgment and EPA's Factor Information Retrieval (FIRE) database. Missing data elements such as Source Classification Codes (SCC), North American Industrial Classification System (NAICS) codes and seasonal throughput percentages were added into the state's point source database. Process level confidential data were removed while retaining any associated emissions.

There is one electric generating unit (EGU) point source facility located in the Inland Sheboygan County area: the Sheboygan Falls natural gas fired power plant. For this facility, WDNR used the maximum daily heat input reported in EPA's CAMD database as a conservative estimate of summer day heat input during the 2011 and 2014 ozone seasons. The summer day emissions were then calculated by multiplying the maximum daily heat input by an average NOx and VOC

emission rate. Appendix 4 provides the detailed methodology used to calculate EGU summer day emissions.

The 2011 and 2014 emissions inventories for non-EGU point sources were tabulated using the emissions data reported annually by each facility operator to the WDNR air emissions inventory (AEI). The AEI calculates emissions for each individual emissions unit or process line by multiplying fuel or process throughput by the appropriate emission factor that is derived from mass balance analysis, stack testing, continuous emissions monitoring, engineering analysis, or EPA's Factor Information Retrieval database. The emission calculations in the AEI also account for any operating control equipment. Appendix 5 provides a list of non-EGU point source emissions by facility identification number (FID) and facility name for 2011 and 2014. These non-EGU point source facilities are assumed to operate steadily over 365 days each year. Therefore, summer day emissions are derived by dividing each facility's annual reported emissions by 365 days.

2.2 Nonpoint (Area) Sources

Nonpoint sources are stationary sources that are too small and/or too numerous to be tracked individually in the point source inventory, and the nonpoint inventory quantifies emissions collectively. These sources include commercial/institutional, industrial and residential sources such as gasoline stations, dry cleaners, consumer and commercial products, industrial solvent use, auto refinishing and wood combustion.

For the 2011 nonattainment year, nonpoint source emissions inventory estimates were based on the 2011 NEI version 2, except for the residential and commercial portable fuel containers and Stage II refueling categories as described below. Emission calculation methodologies used in developing 2011 nonpoint emissions inventory are available in the EPA's 2011 NEI, version 2 Technical Support Document (TSD).[1]

For the 2014 attainment year, nonpoint source emissions inventory estimates were based on the data interpolation between 2011NEI version 2 and the EPA's 2017 emissions modeling inventory, except for the category "Gasoline Service Stations, Stage II: Total Refueling" as described below. Methodologies used to develop 2017 emissions modeling inventory are available in the EPA's 2011 version 6.3 emissions modeling platform.[2]

The WDNR updated EPA nonpoint emissions estimates for stationary nonpoint sources for the following sectors: fuel combustion at the industrial, commercial and institutional (ICI) sectors; degreasing; dry-cleaning; graphic arts; and most of the solvent utilization for industrial surface coating categories except industrial maintenance, traffic markings and other special purpose categories. The WDNR adopted EPA nonpoint estimates for commercial cooking, solvent utilization for non-industrial surface coating, miscellaneous non-industrial consumer and

[1] https://www.epa.gov/sites/production/files/2015-10/documents/nei2011v2_tsd_14aug2015.pdf

[2] https://www.epa.gov/air-emissions-modeling/2011-version-63-platform

commercial solvent utilization, residential and commercial portable fuel containers, bulk gasoline terminals and gas stations, waste disposal categories, and miscellaneous non-industrial not elsewhere classified (NEC) categories.

For the WDNR updated nonpoint fuel combustion sectors, the EPA provided Source Classification Code (SCC) cross-walk between nonpoint and their corresponding point source SCCs was used for point source subtraction. These adjustments were made by subtracting the activity assigned for point sources from the total activity to estimate the adjusted nonpoint source activity. Energy consumption of these sectors for the State of Wisconsin is obtained from the U.S. Department of Energy (DOE)'s Energy Information Administration (EIA). This survey data is the source of activity data for the ICI fuel combustion. EIA's annual publication titled the State Energy Data (SED) report provided total consumption for most of the fuel oil and kerosene.[3]

In updating emission estimates for most of the solvent utilization for industrial surface coating categories, U.S. Census Bureau's employment and County business pattern data were used as activity data. [4]

In order to obtain the area source emissions for the Inland Sheboygan County area, the whole county emission estimates were allocated to the partial county based on population data. The Sheboygan County population for 2014 was estimated by interpolating the population between 2013 and 2015 population data from the Wisconsin Department of Administration. The partial-county population was identified based on the relative population of the Minor Civil Divisions in the Inland Sheboygan County area compared with the entire county. For 2011 and 2014, 48% of the county's population was estimated to live in the Inland Sheboygan County area. Appendix 6 includes table of area source emissions by source category.

Residential and Commercial Portable Fuel Containers

For the 2011 NEI, WDNR adopted EPA estimated emissions for commercial portable fuel containers. However, for this redesignation request, WDNR staff back-calculated VOC emissions for these categories from WDNR's 2014 emission estimates and EPA's 2017 emission estimates. This was done due to a suspected methodology change by EPA (which led to significantly lower VOC emission estimates) for VOC emission estimates for these categories after 2011. Back-calculating 2011 emissions from EPA's 2017 estimates is assumed to more accurately reflect EPA's updated methodology after 2011.

[3] U.S. Energy Information Administration, http://www.eia.gov

[4] https://www.census.gov/programs-surveys/cbp/data.html

Gasoline Service Stations, Stage II: Total Refueling

The WDNR estimated emissions from vehicle refueling at gasoline stations (Stage II refueling) using EPA's MOVES2014a model with the same activity inputs used for the onroad modeling.

During 2011, a Stage II vapor recovery program (vapor recovery nozzles at gas pumps) was in effect in nine eastern Wisconsin counties, including Sheboygan County. This program, started during the 1990s, was effective in reducing refueling emissions in older vehicles, but was redundant or even counter-productive in reducing emissions for newer vehicles, because the newer vehicles controlled refueling emissions through onboard refueling vapor recovery (ORVR) systems.[5] Wisconsin submitted a SIP revision removing Stage II requirements, and EPA approved the revision in November 2013. By 2014, many gasoline stations in the nine eastern Wisconsin counties had removed or decommissioned their Stage II vapor recovery systems. Because of a significant decrease in Stage II systems from 2011 to 2014, WDNR used different Stage II-related inputs to MOVES2014a for those two years.

To model the effects of a Stage II program, MOVES2014a provides the following two inputs: (1) vapor displacement reductions and (2) spillage reductions.

WDNR used a vapor displacement reduction of 56% for 2011. This value is specified in EPA guidance for programs with minimal inspection frequency (less than annual).[6] Because of a significant decrease in Stage II systems by the summer of 2014, WDNR estimated a value of 28% for 2014 (one-half of the 2011 value).

WDNR used a spillage reduction percentage of 50% for 2011. This percentage is the standard percentage used in the MOVES2014a model for all areas in the United States having a Stage II vapor recovery program. Again, WDNR used one-half of the 2011 value for 2014 (25%).

[5] The federally-required phase in for ORVR systems started with model year 1998 and was required for all light-duty vehicles by model year 2006.

[6] "Procedures for Emission Inventory Preparation; Volume IV: Mobile Sources", Section 3.3.6.1, U.S. EPA, EPA-420-R-92-009, December 1992. (The reduction percentages in this document and section are specified for use in the EPA's current technical guidance for the MOVES model: "MOVES2014, MOVES2014a, and MOVES2014b Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity", EPA-420-B-18-039, August 2018.)

2.3 Onroad Mobile Sources

Onroad mobile sources are motorized mobile equipment that are primarily used on public roadways. Examples of onroad mobile sources include cars, trucks, buses and road motorcycles. The emissions reported in this document were estimated by the Motor Vehicle Emission Simulator (MOVES), the EPA's recommended mobile source model. The version used was MOVES2014a. All estimates were made in accordance with the following EPA technical guidance:

- MOVES2014a User's Guide (U.S. EPA, Office of Transportation and Air Quality, Assessment and Standards Division, November 2015, EPA 420-B-15-095).
- MOVES2014, MOVES2014a, and MOVES2014b Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity (U.S. EPA, Office of Transportation and Air Quality, Assessment and Standards Division, August 2018, EPA-420-B-18-039).

The onroad mobile NOx and VOC emissions for the Inland Sheboygan County area for 2011 and 2014 (as well as the 2020 and 2030 projections) are presented in Appendix 8, broken down by source type (vehicle class), fuel type and road type. A Table summarizing vehicle activity data is presented in Appendix 8 after the emissions tables.

2.3.1 Transportation Data

The modeling inputs to MOVES include detailed transportation data (e.g., vehicle-miles of travel by vehicle class, road class and hour of day, and average speed distributions), requiring support from the state agency conducting transportation modeling in Sheboygan County, the Wisconsin Department of Transportation (WDOT). WDOT maintains transportation network inventory data for the state. WDOT has developed and validated travel simulation models to estimate and forecast vehicle-miles of travel (VMT) and average speed distributions for the state, including detailed data for Sheboygan County.

WDOT provided to WDNR their most recent transportation modeling data for the Inland Sheboygan County area on August 22, 2018. The data cover the five years 2010, 2015, 2025, 2035 and 2045. For each of these years, the data include average weekday vehicle-miles of travel (VMT), vehicle-hours of travel (VHT) and average speed; all broken down by 14 5-mph speed bins within 13 roadway classes within two general vehicle classes. For these data "weekday" includes only the three middle weekdays (Tuesday, Wednesday and Thursday).

The 14 speed bins are: 0-5 mph, 5-10 mph, …, 60-65 mph and 65+ mph.

The 13 roadway classes are:

- Interstate
- Freeway
- Ramp
- Expressway

- Urban Principal Arterial
- Urban Minor Arterial
- Urban Collector
- Urban Local
- Rural Principal Arterial
- Rural Minor Arterial
- Rural Major Collector
- Rural Minor Collector
- Rural Local

The two general vehicle classes are: Auto and Truck

Besides WDOT transportation modeling data, WDNR utilized the following additional WDOT transportation data in developing inputs to MOVES:

- WDOT official VMT estimates posted at the WDOT webpage.[7] In addition, WDOT provided WDNR spreadsheets which expand these posted estimates by breaking down each of the official county VMT estimates by roadway class.
- Statewide day-of-week and month-of-year VMT adjustment factors developed by WDOT for the year 2016.

2.3.2 Descriptions of MOVES Modeling Inputs

2.3.2.1 Vehicle-Miles of Travel (VMT)

As specified in the EPA technical guidance, the onroad inventories for ozone SIPs should be based on *summer weekday* VMT, where "weekday" includes all five of the weekdays. A summary of the procedures WDNR used to obtain summer weekday VMT estimates for input to MOVES follows. WDOT agreed with these procedures.

- **2011 Summer Weekday VMT:** The WDOT-modeled VMT for an average weekday (Tuesday – Thursday) for the year 2011 is 1,262,664 for the Inland Sheboygan County area (interpolated between 2010 and 2015). After adjusting to official WDOT VMT estimates (about +12.43%) and to summer weekday (about +10.62%), this value becomes 1,262,664 * 1.1243 * 1.1062 = **1,570,368**.

- **2014 Summer Weekday VMT:** The WDOT-modeled VMT for an average weekday (Tuesday – Thursday) for the year 2014 is 1,280,852 for the Inland Sheboygan County area (interpolated between 2010 and 2015). After adjusting to official WDOT VMT estimates (about +7.72%) and to summer weekday (about +11.10%), this value becomes 1,280,852 * 1.0772 * 1.1110 = **1,532,836**. It should be noted that the decrease in VMT from 2011 to 2014 is consistent with the 2011 to 2014 VMT change for Sheboygan County in the WDOT official VMT estimates.

[7] http://wisconsindot.gov/Pages/projects/data-plan/veh-miles/default.aspx

• **Two vehicle classes to 13 classes:** WDOT provided VMT data for two general vehicle classes (Auto and Truck). The MOVES model requires that VMT be broken down further. WDNR broke down the VMT to the 13 MOVES vehicle classes of:

- 11 - Motorcycles
- 21 – Passenger Cars
- 31 – Passenger Trucks
- 32 – Light Commercial Trucks
- 41 – Intercity Buses
- 42 – Transit Buses
- 43 – School Buses
- 51 – Refuse Trucks
- 52 – Single Unit Short-haul Trucks
- 53 – Single Unit Long-haul Trucks
- 54 – Motorhomes
- 61 – Combination Short-haul Trucks
- 62 – Combination Long-haul Trucks

WDOT verified to WDNR that their class of "Auto" corresponds to the MOVES classes of 11 through 32 and their class of "Truck" corresponds to the MOVES classes of 41 through 62. WDNR then allocated the VMT in the two WDOT classes to the 13 MOVES classes by utilizing the MOVES2014a default VMT distribution for Sheboygan County for those 13 classes.

2.3.2.2 VMT by Hour of Day

WDNR used the MOVES2014a default hourly VMT distributions.

2.3.2.3 Vehicle Population

WDNR estimated vehicle populations for each vehicle class by dividing annual VMT by the MOVES defaults for average annual mileage accumulation.

2.3.2.4 Average Speed Distribution

WDNR adjusted the 14-bin speed distribution provided by WDOT to the 16-bin speed distribution required by the MOVES model.

2.3.2.5 Vehicle Age Distribution

For the year 2014 WDNR developed local vehicle age distributions for five source types: passenger cars, passenger trucks, light commercial trucks, intercity buses and school buses. The EPA default distributions were used for the other eight source types: motorcycles, transit buses and six medium to heavy truck classes. WDNR calculated the local distributions from a file of select fields from the state's registration database as of March 2014, provided by the WDOT.

WDNR calculated a 2014 distribution for a seven county region including Sheboygan County. WDNR adjusted the 2014 distributions back to 2011 based on differences between the EPA default age distributions for those two years.

2.3.2.6 Road Type Distribution

MOVES requires that VMT for each of the 13 MOVES vehicle classes (see section 2.3.2.1) be allocated to the following four roadway classes:

- Rural – Restricted Access
- Rural – Unrestricted Access
- Urban – Restricted Access
- Urban – Unrestricted Access

For each of the two WDOT vehicle classes (Auto and Truck), WDNR allocated VMT from the 13 WDOT roadway classes to the 4 MOVES roadway classes as follows:

Table A2.4. Allocation of VMT in the Inland Sheboygan County Area to the Four MOVES Roadway Classes.

WDOT Roadway Class	MOVES Roadway Class			
	Rural Restricted	**Rural Unrestricted**	**Urban Restricted**	**Urban Unrestricted**
Interstate	No Interstate VMT in the Inland Sheboygan County area			
Freeway	No Freeway VMT in the Inland Sheboygan County area			
Ramp	18.91% (2011) 36.55% (2014) 36.60% (2016+)		81.09% (2011) 63.45% (2014) 63.40% (2016+)	
Expressway	18.91% (2011) 36.55% (2014) 36.60% (2016+)		81.09% (2011) 63.45% (2014) 63.40% (2016+)	
Urban Principal Arterial				100%
Urban Minor Arterial				100%
Urban Collector				100%
Urban Local				100%
Rural Principal Arterial		100%		
Rural Minor Arterial		100%		
Rural Major Collector		100%		
Rural Minor Collector		100%		
Rural Local		100%		

Since the WDOT's four restricted access classes (Interstate, Freeway, Ramp and Expressway) do not have a rural/urban breakdown, WDNR calculated the rural/urban splits from WDOT VMT summaries for Sheboygan County for the years 2011, 2014 and 2016, which did have VMT broken down by rural and urban for all roadway classes.

The resulting road type distributions for the two vehicle classes of Auto and Truck were then allocated to distributions for each of the 13 MOVES source types by utilizing the MOVES2014a default road type distributions for Sheboygan County for those 13 source types.

2.3.2.7 Ramp Fraction

The WDOT transportation modeling data included VHT values for ramp travel, allowing WDNR to calculate the ramp fractions.

2.3.2.8 Fuel Formulation and Supply

The MOVES defaults currently provide the best available fuel data and therefore were used.

2.3.2.9 Vehicle Inspection and Maintenance Program

Sheboygan County is within the seven-county southeastern Wisconsin vehicle inspection program region. On-Board Diagnostic (OBD) checks were assumed for most model year 1996 and newer passenger cars, passenger trucks and light commercial trucks.

2.3.2.10 Meteorology Data

Temperatures conducive to peak ozone formation were assumed for the summer weekday modeling. The WDNR has consistently used the same minimum and maximum temperatures for onroad modeling for ozone state implementation plans (SIP's) since the early 1990's. The temperatures were developed from an analysis of peak ozone days and have minimum/maximum values of 65/93 degrees Fahrenheit for Sheboygan County.

2.4 Nonroad Mobile Sources

Nonroad mobile sources are motorized mobile equipment and other small and large engines that are primarily used off public roadways. Examples of nonroad mobile sources include commercial marine, construction, lawn and garden, locomotive and agricultural equipment.

For purposes of inventory calculation, nonroad mobile sources are divided into two major groups:

- Commercial Marine, Aircraft and Rail Locomotive (MAR)
- All other nonroad categories

Nonroad categories other than MAR include:

- Recreational vehicles
- Construction equipment
- Industrial equipment
- Lawn and garden equipment
- Agricultural equipment
- Commercial equipment
- Logging equipment
- Underground mining equipment
- Oil field equipment
- Pleasure craft
- Railway maintenance equipment

A detailed listing of the nonroad emissions for each of the over 200 nonroad source subcategories, which include both the MAR and non-MAR subcategories, is presented in Appendix 7.

2.4.1 Non-MAR Sources

The 2011 and 2014 nonroad emissions for the non-MAR categories were developed using the EPA's MOVES2014a model, using hot summer day temperatures. The model was run for Sheboygan County for the months of June, July and August. Hot summer day emissions were calculated by dividing the total emissions over these three months by 92 (the number of days in the three months). Emissions were then allocated from the full county to the Inland Sheboygan County area based on surrogates such as population, land area and water area, depending on the category, as described below in section 2.4.4

2.4.2 MAR Sources – Aircraft and Rail Locomotive

The methodology to estimate countywide aircraft and rail locomotive emissions was consistent with the methodology used for nonpoint (area) sources, as described in section 2.2.

For the 2011 nonattainment year, annual emissions estimates for Sheboygan County were based on the 2011 NEI version 2. Emission calculation methodologies used in developing 2011 nonpoint emissions inventory are available in the EPA's 2011 NEI, version 2 Technical Support Document (TSD).[8]

For the 2014 attainment year, annual emissions estimates for Sheboygan County were based on the data interpolation between 2011 NEI version 2 and the EPA's 2017 emissions modeling inventory. Methodologies used to develop 2017 emissions modeling inventory are available in the EPA's 2011 version 6.3 emissions modeling platform.[9]

Summer day emissions for these two MAR categories were estimated by dividing the annual emissions by 365. This same value was used in the EPA's 2011 version 6.3 emissions modeling platform.

The allocation of the full county emissions to the Inland Sheboygan County area is described in section 2.4.4.

2.4.3 MAR Sources – Commercial Marine Vessels

All commercial marine activity attributed to Sheboygan County occurs on Lake Michigan. Thus, no commercial marine emissions occur in the Inland Sheboygan County area. The remainder of this section describe the commercial marine emissions in the full Sheboygan County area.

For this category, the emissions from the EPA's 2011 Emissions Modeling Platform, Version 6.3 were not directly used since more current data, with a much more refined geographical allocation[10], were available for the year 2014 from the Lake Michigan Air Directors Consortium (LADCO). These data were incorporated into EPA's 2014 NEI.

For year 2014, WDNR used the LADCO/2014NEI annual emissions for Sheboygan County. For the other years (2011 and the projection years of 2020 and 2030) WDNR adjusted the LADCO/2014NEI annual values based on the proportional changes in commercial marine emissions over time for state of Wisconsin, as shown in EPA's 2011 Emissions Modeling Platform, Version 6.3, for the years 2011, 2017, 2023 and 2028.

Summer day emissions were estimated by dividing the annual emissions by 365 for category 1 and 2 engines and by 340.74 for the larger category 3 engines. These same values were used in EPA's 2011 version 6.3 emissions modeling platform.

[8] https://www.epa.gov/sites/production/files/2015-10/documents/nei2011v2_tsd_14aug2015.pdf

[9] https://www.epa.gov/air-emissions-modeling/2011-version-63-platform

[10] The EPA's modeling platform has zero commercial marine emissions for Sheboygan County. Instead the platform allocated the commercial marine emissions in Lake Michigan east of Sheboygan County to the Michigan side of the lake, reflecting a single general shipping lane on the lake.

2.4.4 Allocation of Emissions to Inland Sheboygan County

Given the vast variety of nonroad mobile sources, several surrogates were employed to estimate the proportion of countywide emissions in the Inland Sheboygan County area. The surrogates used are as follows:

2.4.4.1 Land Area

The land area of the Inland Sheboygan County area comprises 88% of the total county land area.

The nonroad categories allocated to the Inland Sheboygan County area based on this 88% land area proportion are: **Agriculture, Logging, Oilfields, Recreational, and Underground Mining**.

2.4.4.2 Population

As described in section 2.2 (nonpoint (area) sources), for 2011 and 2014, 48% of the county's population was estimated to live in the Inland Sheboygan County area.

The nonroad categories allocated to the Inland Sheboygan County area based on this 48% population proportion are: **Commercial, Construction, Industrial, and Lawn & Garden**.

2.4.4.3 Water Area

Data were obtained from the database for the EPA's National Mobile Inventory Model (NMIM), version dated May 4, 2009, the EPA's nonroad emissions estimation model prior to MOVES. Based on the external file WI_WIB.ALO in that database, there are 145 square kilometers of water area in Sheboygan County for motor boats having inboard engines. And, based on the external file WI_WOB.ALO in that database, there are 28 square kilometers of water area in Sheboygan County for motor boats having outboard engines. The 145 square kilometer value for inboard engines contains Lake Michigan waters (117 square kilometers) and 28 square kilometers of water from several inland lakes (all in the Inland Sheboygan County area). The 28 square kilometer value for outboard engines contains only the water from the inland lakes. This indicates that motor boats with outboard engines are not assumed to travel on Lake Michigan whereas motor boats with inboard engines are assumed to travel on Lake Michigan, as well as on the inland lakes. Thus, for motor boats with inboard engines 28/145 = 19% of the associated water area is in the Inland Sheboygan County area and for motor boats with outboard engines 28/28 = 100% of the associated water area is in the Inland Sheboygan County area.

The nonroad category allocated to the Inland Sheboygan County area based on water area is: **Pleasure Craft**. For pleasure craft with inboard engines, 19% of the full county emissions were allocated to the Inland Sheboygan County area and for pleasure craft with outboard engines, 100% of the full county emissions were allocated to the Inland Sheboygan County area.

2.4.4.4 Lake Michigan Shoreline

None (0%) of the Lake Michigan shoreline is in the Inland Sheboygan County area. The nonroad category allocated to the Inland Sheboygan County area based on Lake Michigan shoreline is: **Commercial Marine**, since all commercial marine emissions attributable to Sheboygan County come from vessels traveling on Lake Michigan past the county. Sheboygan County does not have any ports, inland lakes or inland rivers with commercial marine activity. Thus, no commercial marine emissions are allocated to the Inland Sheboygan County area.

2.4.4.5 Airport Location

The EPA's 2011 Modeling Platform, version 6.3, provides the emissions and geographical location (longitude and latitude) for each airport in the United States for each of the platform years (2011, 2017 and 2023).

Thus, **Aircraft** emissions in the Inland Sheboygan County area were calculated by adding the emissions for those airports located in the Inland Sheboygan County area. Since the major airport in Sheboygan County, Sheboygan County Memorial Airport, is located in the Inland Sheboygan County area, most of the full county aircraft emissions were allocated to the Inland Sheboygan County area.

The percentages of Sheboygan County aircraft emissions located in the Inland Sheboygan County area vary by source type and are as follows:

- Military aircraft: 100% for both NOx and VOC
- General aviation: 99% for both NOx and VOC
- Air taxi: 100% for both NOx and VOC
- Aircraft Auxiliary Power Units: 100% for both NOx and VOC

Sheboygan County does not have any emissions for the source type: Commercial Aviation.

2.4.4.6 Railroad Link Location

The EPA's 2011 NEI, version 2, and 2011 Modeling Platform, version 6.3, provides the emissions and location for each link of railway in the United States.

Thus, **Railroad** emissions for the Inland Sheboygan County area were calculated by adding the emissions for those rail links located in the Inland Sheboygan County area. The percentages of the full county railroad emissions located in the Inland Sheboygan County area are as follows:

- Diesel Line Haul Locomotives, Class I Operations: 48% for both VOC and NOx
- Diesel Line Haul Locomotives, Class II/III Operations: 100% for both VOC and NOx

APPENDIX 3

2020 and 2030 Wisconsin Emissions Projections Documentation – Methodology

This appendix provides information for the sector-specific NOx and VOC tons per summer day (tpsd) emission estimates in section 4.3 (Maintenance Year Inventories) of the Wisconsin Department of Natural Resources' (WDNR) Redesignation Request and Maintenance Plan for the Inland Sheboygan County, Wisconsin 1997 and 2008 8-hour Ozone Nonattainment Area (redesignation request from hereon). For the U.S. Environmental Protection Agency (EPA) to redesignate a nonattainment area to attainment, a state is required to demonstrate continued maintenance of the NAAQS for ten years after redesignation. As part of this demonstration, the WDNR is providing a projection of emissions for 2020 as the interim projection year and 2030 as the maintenance year. The emission projections through 2030 are relied upon in the maintenance demonstration presented in Section 7 of the redesignation request.

This appendix includes:

1. EGU Inventory Methodology for 2020 and 2030

See Appendix 4 for the projection methodology related to electric generating units (EGUs).

2. Point Non-EGU Inventory Methodology for 2020 and 2030

Non-EGU point source emissions are projected for 2020 and 2030 by applying growth factors to the 2014 base year inventory, as well as considering new and modified sources. A detailed description of the methodology is provided below, and a list of sources with the applied growth rates and calculated emissions is provided in Appendix 5.

2.1. Growth Factors from AEO 2014/2016 for Existing Sources

Non-EGU point source projected 2020 and 2030 emissions were derived by first applying growth factors to the 2011 base year inventory. These growth factors were developed from Annual Energy Outlook (AEO) 2014 and AEO 2016 industry-specific energy consumption data, summarized in Table A3.1. Growth in energy consumption was assumed to correspond linearly with growth in emissions. A second step in projecting emissions – accounting for potential emissions increases resulting from the modification of existing sources or the installation of new sources – is described in section 3.2.2 below.

Table A3.1. Growth Factors from AEO 2016/2018 Used for Projecting Wisconsin Non-EGU Point Source Emissions in the Inland Sheboygan County Area.

NAICS	NAICS Description	AEO 2016/2018 Industrial or Commercial Sub-sector [1]	AEO 2016/2018 Energy Consumption (trillion Btu) [1,2]			Growth Factor (from 2014) [3]	
			2014	2020	2030	2020 GF	2030 GF
21232	Sand, Gravel, Clay, and Ceramic and Refractory Minerals Mining and Quarrying	Non-manufacturing Industry - Mining	2,982	3,178	3,424	1.07	1.15
32192	Wood Container and Pallet Manufacturing	Other Manufacturing - Wood Products	319	403	491	1.26	1.54
32199	All Other Wood Product Manufacturing	Other Manufacturing - Wood Products	319	403	491	1.26	1.54
32311	Printing	Paper Industry	1,897	1,512	1,696	0.80	0.89
32612	Plastics Pipe, Pipe Fitting, and Unlaminated Profile Shape Manufacturing	Other Manufacturing - Plastics	292	262	302	0.90	1.03

NAICS	NAICS Description	AEO 2016/2018 Industrial or Commercial Sub-sector [1]	AEO 2016/2018 Energy Consumption (trillion Btu) [1,2]			Growth Factor (from 2014) [3]	
			2014	2020	2030	2020 GF	2030 GF
32619	Other Plastics Product Manufacturing	Other Manufacturing - Plastics	292	262	302	0.90	1.03
33299	All Other Fabricated Metal Product Manufacturing	Metal Based Durables Industry - Fabricated Metal Products	326	318	347	0.97	1.06
33639	Other Motor Vehicle Parts Manufacturing	Metal Based Durables Industry - Transportation	354	316	343	0.89	0.97
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	Food Industry	1,228	1,240	1,450	1.01	1.18
311612	Meat Processed from Carcasses	Food Industry	1,228	1,240	1,450	1.01	1.18
325188	Other Basic Inorganic Chemical Manufacturing	Bulk Chemical Industry	2,528	3,700	4,289	1.46	1.70
326140	Polystyrene Foam Product Manufacturing	Other Manufacturing - Plastics	292	262	230	0.90	0.79
331524	Aluminum Foundries (except Die-Casting)	Aluminum Industry	341	208	230	0.61	0.67
333291	Metal Valve Manufacturing	Metal Based Durables Industry - Machinery	176	156	177	0.89	1.01
333618	Other Engine Equipment Manufacturing	Metal Based Durables Industry - Machinery	176	156	177	0.89	1.01
611310	Colleges, Universities, and Professional Schools	Commercial sector energy consumption (natural gas and distillate fuel oil) for East North Central U.S.	0.88	0.77	0.76	0.88	0.87

[1] Source: http://www.eia.gov/forecasts/aeo/index.cfm

[2] 2014 energy consumption values are from AEO 2016; 2020 and 2030 projected energy consumption values are from AEO 2018.

[3] Growth factors for the entire 2014-2020 and 2014-2030 periods were calculated by dividing the 2020 or 2030 energy consumption values by the 2014 energy consumption value. If energy consumption values were not available from AEO for a NAICS category, a growth factor of 1.00 (i.e., no growth) was applied.

2.2. Modified and New Source Emissions

Section 172(c)(4) of the Clean Air Act (CAA) requires identification and quantification of potential emissions from new or modified sources when developing emission inventories for attainment and maintenance purposes. The point source emissions inventory described in section 2.1 above includes projections of emissions growth determined by applying general regional growth factors. However, this methodology alone does not distinguish emissions associated with modified and new sources. Therefore, as a second step the WDNR reviewed permitting actions for sources in the Inland Sheboygan County area from 2013 to 2017 (five years). A summary of the permitting activity and associated potential emissions is shown in Table A3.2. The resulting emissions from this exercise are added to the projected emissions for *existing* point source non-EGU, to yield the *total* projected point source non-EGU emissions for 2020 and 2030 found in section 4.3 of the redesignation request (see also Appendix 5, Table A5.2 for the addition of new/modified sources to existing sources). This approach may add emissions which overlap with existing source grown emissions, but it provides a more conservative estimate of future emissions. It should be noted that this future projection of emissions does not limit the amount of future emissions allowed from modified and new sources. This is consistent with the CAA which allows for the installation of new or modification of sources subject to requirements of the New Source Review (NSR) or Prevention of Significant Deterioration (PSD) programs.

Table A3.2. Permitting Actions for Existing Source and New Emission Sources in the Inland Sheboygan County Area – 2013 to 2017.

Construction Permit Class	Year	Potential Emissions Increase (TPY)		Estimated Daily Average (TPD) [1]		Project Description
		NOx	VOC	NOx	VOC	
Minor action [2]	2013	5.39	31.87	0.015	0.087	Replacement of the existing presses P36, P37, and P38; and installation of 2 new presses and one boiler.
Minor action [2]	2015	---	0.29	---	0.001	Installation of 3 new presses.
Minor action [2]	2016	2.98	45.8	0.008	0.125	Installation of a new molding line, a new autosink line; and the modification of two existing spray booths.
Minor action [2]	2016	15.75	9.17	0.043	0.025	Replacement of the existing 20 test stands, installation of 4 dynamometers, and relocation of 26 test stands.
Minor action [2]	2016	24	4.86	0.066	0.013	Installation of 18 no-load engine test stands, 7 application center test stations, 2 dynamometer engine test stands, 2 production audit dynamometer test stands, 1 diesel dynamometer engine stand, 2 boilers, a touch-up paint

Construction Permit Class	Year	Potential Emissions Increase (TPY)		Estimated Daily Average (TPD) [1]		Project Description
		NOx	VOC	NOx	VOC	
						station, and a regenerative thermal oxidizer; replacement of 20 end-of-line engine test stands; and modification of 15 regenerative endurance stands and 7 forty Hp dynamometer test stands.
Total	---	**48.12**	**91.99**	**0.132**	**0.252**	---

[1] The tons per day (TPD) daily emissions are calculated by dividing annual potential emissions by 365 days. These are also assumed to be equivalent to tons per summer day (tpsd) emissions.
[2] A minor action is a permitting action that falls below the major source threshold of 100 tons per year (TPY) or significant emissions increase threshold of 40 TPY.

3. Area Source Inventory Methodology for 2020 and 2030

EPA's 2011 Emissions Modeling Platform, Version 6.3 includes projections for the years 2017, 2023 and 2028.[1] Wisconsin's 2020 area source emissions were estimated primarily by interpolating between EPA's 2017 and 2028 modeling inventories, while 2030 area source emissions were estimated primarily by extrapolating EPA's 2023 and 2028 modeling inventories. The exception is that WDNR staff projected emissions from vehicle refueling at gasoline stations (Stage II refueling) using EPA's MOVES2014a model with the same activity inputs used for the onroad modeling. Unlike 2011 and 2014, no Stage II vapor recovery program was modeled for 2020 and 2030. Owing to most vehicles now having their own vapor recovery system, called onboard refueling vapor recovery or ORVR, Stage II controls at the pump are largely redundant or even counter-productive. Wisconsin submitted a SIP revision removing Stage II requirements, and EPA approved the revision in November 2013. Even without a Stage II program in the projection years, emissions from Stage II refueling are less in 2020 and 2030 than in 2011 and 2014, owing to the larger percentage of vehicles having ORVR.

In order to obtain the areas source emissions for the Inland Sheboygan County area, the whole county emission estimates were allocated to the partial county are based on population data. The Sheboygan County population data projections for 2020 and 2030 from the Wisconsin Department of Administration was used to calculate the emission estimates. The partial-county population was identified based on the relative population of the Minor Civil Divisions in the inland Sheboygan area compared with the entire county. For 2020 and 2030, the county's population, estimated to live in the inland Sheboygan was 49% and 50% respectively. Appendix 6 includes tables of projected area source emissions for inland Sheboygan by source category.

[1] ftp://newftp.epa.gov/air/emismod/2011/v3platform/

4. Onroad Inventory Methodology for 2020 and 2030

The 2020 and 2030 projected onroad emissions were developed using the MOVES2014a model, as was the case for the 2011 and 2014 emissions. Unless otherwise stated in this appendix, the methodology WDNR used for 2020 and 2030 is the same methodology WDNR used for years 2011 and 2014, as described in Appendix 2.

WDNR calculated a new local vehicle age distribution for the base year of 2017 for all vehicle classes except the two long-haul truck classes (MOVES classes 53 and 62). These distributions were then projected to 2020 and 2030 using the Age Distribution Projection Tool developed by the EPA.[2] This macro-based excel file projects a base year age distribution by source type to a future distribution using a similar algorithm to what EPA used to generate the national projected age distributions in MOVES2014a.

The Wisconsin Department of Transportation (WDOT) provided WDNR modeled transportation data for the years 2010, 2015, 2025, 2035 and 2045 for an average annual weekday (where "weekday" consists of the middle three days of the work week: Tuesday, Wednesday and Thursday). These datasets show a VMT growth rate for the Inland Sheboygan County area of about 0.48% per year from 2010 to 2015, about0.46% per year from 2015 to 2025, about 0.44% per year from 2025 to 2035 and about 0.42% per year from 2035 to 2045. WDNR calculated VMTs for 2011, 2014, 2020 and 2030 by linearly interpolating between the VMTs for 2010, 2015, 2025 and 2035. As described in Appendix 2, WDNR adjusted the modeled average weekday (Tu-Th) VMTs to both match official WDOT VMT estimates posted on their webpage[3] and to obtain summer weekday (Mo-Fr) VMT. Table A3.3 shows the average weekday (Tu-Th) VMT values provided by WDOT (or, for 2011, 2014, 2020 and 2030, calculated by WDNR) and the summer weekday (Mo-Fr) VMT values input into MOVES2014a.

[2] https://www.epa.gov/moves/tools-develop-or-convert-moves-inputs
[3] http://wisconsindot.gov/Pages/projects/data-plan/veh-miles/default.aspx

Table A3.3. Vehicle-Miles of Travel for the Inland Sheboygan County Area

Year	Vehicle-Miles of Travel	
	Average Weekday (Tu-Th) (From WDOT model – not official estimates)	Summer Weekday (Mo-Fr) (Also adjusted to match WDOT official estimates)
2010	1,256,601	Not Calculated
2011	1,262,664	1,570,368
2014	1,280,852	1,532,836
2015	1,286,915	Not Calculated
2020	1,317,333	1,705,278
2025	1,347,752	Not Calculated
2030	1,378,170	1,783,863
2035	1,408,588	Not Calculated
2045	1,469,425	Not Calculated

Emissions were increased by a 15% safety margin, as agreed through the transportation conformity consultative process.

The motor vehicle I/M program was assumed to remain in effect for 2020 and 2030.

Detailed listing of the projected onroad emissions and activity data are provided in Appendix 8.

5. Nonroad Inventory Methodology for 2020 and 2030

The methodology for the 2020 and 2030 projected nonroad emissions is parallel to the methodology used for the 2011 and 2014 estimates, as described in Appendix 2.

For all source categories except commercial marine, aircraft and rail locomotive (MAR), the MOVES2014a model was run for Sheboygan County at hot summer day temperatures, assuming the model's default growth projections.

For the two MAR categories of aircraft and rail locomotive, the 2020 and 2030 emissions were calculated by linearly interpolating or extrapolating from the 2017, 2023 and, where available, 2028 values from EPA's 2011 Emissions Modeling Platform, Version 6.3. To avoid underestimating 2030 emissions, if the extrapolated emissions for 2030 were less than those for the latest inventory year (2023 or 2028), the 2030 emissions were set equal to those for the latest year.

As for the years 2011 and 2014, the 2020 and 2030 commercial marine emissions were zero for the Inland Sheboygan County area.

In allocating the full Sheboygan County emissions to the Inland Sheboygan County area, the only adjustment factor that was changed from those used for 2011 and 2014 was that for population. In 2011 and 2014, 48% of the county's population was estimated to live in the Inland Sheboygan County area. However, as described in section 3 (area sources), for 2020 and 2030, the county's population estimated to live in Inland Sheboygan was 49% and 50% respectively

Detailed listings of the projected nonroad emissions for over 200 subcategories are provided in Appendix 7.

APPENDIX 4

EGU Inventory Methodology and Emissions for 2011, 2014, 2020 and 2030

This appendix provides the methodology for electric generating unit (EGU) sector NOx and VOC tons per summer day (tpsd) emission estimates in sections 4.2 (Nonattainment Year and Attainment Year Inventories) and 4.3 (Maintenance Year Inventories) of the Wisconsin Department of Natural Resources' (WDNR) Redesignation Request and Maintenance Plan for the Inland Sheboygan County, Wisconsin 1997 and 2008 8-hour Ozone Nonattainment Area.

1. EGU 2011 and 2014 Base Year Emissions

The Sheboygan Falls natural gas fired power plant is the only EGU point source facility located in the Inland Sheboygan County area. The 2011 and 2014 NOx emissions, emission rates and fuel consumption for the generating units at this facility were derived from data reported by the utility to EPA's Clean Air Markets Division (CAMD) database. DNR used the ozone season day with the 99th percentile highest heat input for the facility during the ozone season to represent summer day operations during the 2011 and 2014 ozone seasons. Using this 99th percentile value provides a conservative but reasonable representation of maximum summer day operation.

The summer day emissions were then calculated by multiplying the maximum summer day heat inputs in 2011 and 2014 by the average emission rates for the 2011 and 2014 ozone seasons. The NOx emission rates were derived from the CAMD emissions data for the 2011 and 2014 ozone seasons. This base data and the tons per summer day emissions calculated from this data are provided in Table A4.1. The total NOx emissions for Sheboygan Falls were 0.48 tpsd in 2011 and 0.53 tpsd in 2014.

The 2011 and 2014 VOC summer day emissions are also derived by multiplying the maximum day heat inputs by average VOC emission rates. The base data used in the calculation and the resulting emissions are provided in Table A4.1. In this case, however, VOC emissions are not monitored by continuous emissions monitors and reported to the CAMD database as is done for NOx. Therefore, the VOC emission rates was derived by dividing the annual VOC emissions reported to the WDNR Air Emissions Inventory (AEI) by the annual heat input reported to the CAMD database for 2011 and 2014. The data applied in deriving the VOC emission rates are shown in Table A4.2. Multiplying these VOC emission rates for each year by the maximum heat input resulted in 0.04 tpsd for Sheboygan Falls in 2011 and 2014.

Note: emissions from non-electric generating emission units at the plant (i.e., units other the two natural gas turbines at Sheboygan Falls) are not included because they are insignificant (less than 0.1% of the total plant emissions on a tons per year basis) compared to the turbine emissions.

Table A4.1. Summer Day Operation and Emissions in 2011 and 2014 for Sheboygan Falls Power Plant.

Variable	2011	2014
Summer Day Heat Input (mmBtu) [1]	34,927	35,650
NOx Rate (lbs/mmBtu) [2]	0.027	0.030
NOx (tpsd)	0.48	0.53
VOC Rate (lbs/mmBtu) [3]	0.0025	0.0023
VOC (tpsd)	0.044	0.040

[1] Heat input is for the day with the 99th percentile highest heat input during the 2011 and 2014 ozone seasons.
[2] Emission rate derived from EPA CAMD ozone season NOx emissions and heat input.
[3] Calculated in Table A4.3.

Table A4.2. VOC Annual Emissions and Emission Rates in 2011 and 2014 for Sheboygan Falls Power Plant.

Variable	2011	2014
Annual VOC (tons) [1]	0.305	0.172
Annual Heat Input (mmBtu) [2]	243,850	151,580
VOC Rate (lbs/mmBtu) [3]	0.0025	0.0023

[1] Emissions reported to the WDNR Air Emissions Inventory.
[2] Heat input reported to the CAMD database.
[3] Calculated by the equation (annual VOC tons x 2000 lbs/ton) / annual heat input (mmBtu).

2. EGU 2020 and 2030 Projected Emissions

The Sheboygan Falls power plant is anticipated to continue operation at close to its current levels through 2030. Following the same methodology as used in calculating 2011 and 2014 emissions, WDNR projected summer day emissions for the power plant by multiplying a projected maximum daily heat input by a projected average ozone season emission rate. The data used in this calculation and resulting emissions are summarized in Table A4.3.

To determine the appropriate projected maximum heat input, the WDNR first evaluated historical maximum day ozone season values for 2011 through 2017 as listed in Table A4.4. WDNR determined the maximum summer day heat inputs representative of recent operation to be the highest 99th percentile daily value over the 2011-2017 period.

The WDNR evaluated historical data and planned operational changes in determining an appropriate NOx emission rate for calculating projected emissions. The projected ozone season

NOx emission rates in Table A4.3 were determined by averaging the ozone season NOx emission rates for the 2011-2017 period for Sheboygan Falls. These rates reflect controls as of 2017 and are reasonable, conservative representations of the future expected emission rates.

Based on this information, NOx emissions projected for 2020 and 2030 are calculated to be 0.62 tpsd for Sheboygan Falls. It should be noted that this NOx tpsd value is not intended to constitute a daily enforceable emission limitation on the power plant. The value represents the best reasonable approximation of the controls in place, a compliance margin, and projected maximum actual summer day emissions that could be expected going into the future.

The projected VOC emissions for Sheboygan Falls were determined by averaging the annual VOC emissions for the 2011-2017 period. There is no action anticipated that would significantly reduce these values. Multiplying the maximum day heat input values by these emission rates yields 0.036 tpsd of VOC for Sheboygan Falls. The base information used in these calculations and the resulting VOC emissions are shown in Table A4.3.

Table A4.3. 2020 and 2030 Emissions (tpsd) for Sheboygan Falls Power Plant.

Variable	2020 and 2030
Summer Day Heat Input (mmBtu) [1]	44,626
NOx Rate (lbs/mmBtu) [2]	0.028
NOx (tpsd)	0.62
VOC Rate (lbs/mmBtu) [3]	0.0016
VOC (tpsd)	0.036

[1] Heat input is the highest 99th percentile daily value over the 2011-2017 ozone seasons for the entire facility.
[2] Ozone season NOx emission rates derived from EPA CAMD ozone season NOx emissions and heat input and the project NOx emission rate is based on the averaged emission rate from 2011 to 2017.
[3] The VOC emission rates derived from EPA CAMD annual NOx emissions and heat input and the project VOC emission rate is based on the averaged emission rate from 2011 to 2017.

Table A4.4. Ozone Season Maximum Daily Heat Input and NOx Emissions for Sheboygan Falls Power Plant.

Year	Ozone Season Average NOx Emission Rate – Units 1 & 2 (lbs/mmBtu) [1]	Ozone Season Maximum Daily Heat Input – Units 1 & 2 (mmBtu/day) [2]	Calculated NOx Emissions – Units 1 & 2 (tpsd) [3]
2011	0.027	34,927	0.48
2012	0.026	43,423	0.57
2013	0.029	39,541	0.57
2014	0.030	35,650	0.53
2015	0.028	38,083	0.54
2016	0.028	40,479	0.56
2017	0.027	44,626	0.59

[1] Derived from ozone season heat input and NOx emissions reported to the CAMD database for each year.
[2] The heat input for the ozone season day with the 99th percentile highest daily heat input.
[3] Calculated by multiplying the ozone season average emission rate by the ozone season maximum daily heat input.

APPENDIX 5

Point Non-EGU Emissions for 2011, 2014, 2020 and 2030

This appendix provides a list of the Inland Sheboygan County area point source non-EGU tons per summer day (tpsd) emissions by facility identification number (FID) and facility name for 2011, 2014, 2020 and 2030. The sums of NOx and VOC emissions from these facilities were used for the non-EGU sector NOx and VOC tpsd emission estimates in sections 4.2 (Nonattainment Year and Attainment Year Inventories) and 4.3 (Maintenance Year Inventories) of the Wisconsin Department of Natural Resources' (WDNR) Redesignation Request and Maintenance Plan for the Inland Sheboygan County, Wisconsin 1997 and 2008 8-hour Ozone Nonattainment Area.

Table A5.1. 2011 and 2014 Point Non-EGU Emissions for the Inland Sheboygan County Area[1]

FID	FACILITY NAME	COUNTY	POLLUTANT	2011 (tpsd)	2011 (tons)	2014 (tpsd)	2014 (tons)
460013510	Curt G. Joa, Incorporated	Sheboygan	NOX	1.10E-03	0.40	1.74E-03	0.64
460027810	Aldrich Chemical Company	Sheboygan	NOX	2.15E-05	0.01	2.73E-02	9.97
460029460	Nemschoff Chairs, Inc.	Sheboygan	NOX	2.07E-04	0.08	Shut down	Shut down
460032760	Milk Specialties Global Adell	Sheboygan	NOX	3.23E-02	11.79	3.42E-02	12.49
460032870	Kohler Co-Metals Processing Complex	Sheboygan	NOX	6.34E-01	231.39	5.87E-01	214.43
460033420	Johnsonville Foods	Sheboygan	NOX	2.17E-02	7.90	2.47E-02	9.01
460034410	Bemis Mfg. Co. - Plant D	Sheboygan	NOX	3.34E-03	1.22	4.21E-03	1.54
460034630	Bemis Mfg. Co. Plant B	Sheboygan	NOX	1.04E-02	3.78	1.38E-02	5.04
460037820	Sheboygan Co Highway Commission	Sheboygan	NOX	1.77E-02	6.46	5.70E-03	2.08
460040460	ANR Pipeline Co.(Kewaskum Comp. Station)	Sheboygan	NOX	4.80E-02	17.52	1.20E-01	43.85
460061250	Richardson Yacht Interiors	Sheboygan	NOX	9.90E-04	0.36	8.71E-04	0.32
460086990	Times Printing Co Inc	Sheboygan	NOX	3.46E-03	1.26	3.62E-03	1.32
460094470	Bremer Manufacturing	Sheboygan	NOX	2.07E-03	0.75	0.00E+00	0.00
460098760	Plymouth Foam Incorporated	Sheboygan	NOX	6.60E-03	2.41	8.32E-03	3.04
460119330	Bemis Wood Flour Mill	Sheboygan	NOX	2.40E-04	0.09	0.00E+00	0.00
460141660	Lakeland College	Sheboygan	NOX	5.17E-03	1.89	5.43E-03	1.98
460147820	Kohler Company - Vitreous Plant	Sheboygan	NOX	1.84E-02	6.73	1.62E-02	5.90
460147930	Kohler Co-Engine Plant	Sheboygan	NOX	8.10E-03	2.96	1.04E-02	3.80
999872390	Sheboygan County Highway Department	Sheboygan	NOX	7.40E-03	2.70	0.00E+00	0.00
460013510	Curt G. Joa, Incorporated	Sheboygan	VOC	9.15E-03	3.34	8.09E-03	2.95
460027810	Aldrich Chemical Company	Sheboygan	VOC	6.52E-02	23.80	1.68E-02	6.12
460029460	Nemschoff Chairs, Inc.	Sheboygan	VOC	3.22E-02	11.74	Shut down	Shut down
460032760	Milk Specialties Global Adell	Sheboygan	VOC	1.98E-03	0.72	1.71E-03	0.62
460032870	Kohler Co-Metals Processing Complex	Sheboygan	VOC	1.56E-01	56.78	1.78E-01	65.03
460033420	Johnsonville Foods	Sheboygan	VOC	1.44E-02	5.24	6.55E-03	2.39
460034410	Bemis Mfg. Co. - Plant D	Sheboygan	VOC	1.54E-02	5.61	9.47E-03	3.46
460034630	Bemis Mfg. Co. Plant B	Sheboygan	VOC	4.69E-01	171.05	5.04E-01	183.89
460037820	Sheboygan Co Highway Commission	Sheboygan	VOC	1.20E-03	0.44	2.91E-04	0.11
460039470	Poly Vinyl Company Inc	Sheboygan	VOC	8.89E-03	3.24	9.78E-03	3.57

460040460	ANR Pipeline Co.(Kewaskum Comp. Station)	Sheboygan	VOC	9.41E-04	0.34	3.09E-03	1.13
460061250	Richardson Yacht Interiors	Sheboygan	VOC	1.20E-02	4.39	1.56E-02	5.70
460086990	Times Printing Co Inc	Sheboygan	VOC	3.36E-02	12.26	6.76E-02	24.67
460094470	Bremer Manufacturing	Sheboygan	VOC	4.13E-05	0.02	0.00E+00	0.00
460098760	Plymouth Foam Incorporated	Sheboygan	VOC	1.48E-01	54.17	1.56E-01	56.95
460100080	AJS & Associates, Inc	Sheboygan	VOC	6.57E-03	2.40	1.94E-02	7.09
460119330	Bemis Wood Flour Mill	Sheboygan	VOC	1.27E-05	0.00	0.00E+00	0.00
460120760	Lakeland Sports Center	Sheboygan	VOC	5.88E-03	2.15	0.00E+00	0.00
460141660	Lakeland College	Sheboygan	VOC	2.85E-04	0.10	2.97E-04	0.11
460145730	Westshore Industries	Sheboygan	VOC	1.76E-02	6.43	5.72E-03	2.09
460147820	Kohler Company - Vitreous Plant	Sheboygan	VOC	1.17E-03	0.43	9.09E-04	0.33
460147930	Kohler Co-Engine Plant	Sheboygan	VOC	6.32E-02	23.07	6.36E-02	23.21
460157500	Certain Teed	Sheboygan	VOC	9.04E-03	3.30	8.05E-03	2.94
460169600	Franzen Lithoscreen Inc.	Sheboygan	VOC	3.07E-02	11.19	2.44E-02	8.91
999872390	Sheboygan County Highway Department	Sheboygan	VOC	6.04E-04	0.22	0.00E+00	0.00
TOTAL			**NOx**	**0.82**	**300**	**0.86**	**315**
			VOC	**1.10**	**402**	**1.10**	**401**

[1] Tons per summer day (tpsd) emissions were calculated by dividing annual emissions by 365 days.

Table A5.2. 2020 and 2030 Point Non-EGU Emissions for the Inland Sheboygan County Area

FID	FACILITY NAME	NAICS	POLLUTANT	2014 (tpsd)	2020 GF [1]	2030 GF [1]	2020 (tpsd)	2030 (tpsd)
999872390	Sheboygan County Highway Department	21232	NOX	0.00E+00	1.07	1.15	0.00E+00	0.00E+00
460119330	Bemis Wood Flour Mill	32199	NOX	0.00E+00	1.26	1.54	0.00E+00	0.00E+00
460086990	Times Printing Co Inc	32311	NOX	3.62E-03	0.80	0.89	2.88E-03	3.23E-03
460037820	Sheboygan Co Highway Commission[2]	32412	NOX	5.70E-03	N/A	N/A	5.70E-03	5.70E-03
460034410	Bemis Mfg. Co. - Plant D	32612	NOX	4.21E-03	0.90	1.03	3.78E-03	4.35E-03
460034630	Bemis Mfg. Co. Plant B	32619	NOX	1.38E-02	0.90	1.03	1.24E-02	1.42E-02
460147820	Kohler Company - Vitreous Plant[2]	32711	NOX	1.62E-02	N/A	N/A	1.62E-02	1.62E-02
460032870	Kohler Co-Metals Processing Complex	33299	NOX	5.87E-01	0.97	1.06	5.72E-01	6.25E-01
460029460	Nemschoff Chairs, Inc.	33712	NOX	Shut down	N/A	N/A	Shut down	Shut down
460040460	ANR Pipeline Co. (Kewaskum Comp. Station) [2]	48621	NOX	1.20E-01	N/A	N/A	1.20E-01	1.20E-01
460032760	Milk Specialties Global Adell	311514	NOX	3.42E-02	1.01	1.18	3.45E-02	4.04E-02
460033420	Johnsonville Foods	311612	NOX	2.47E-02	1.01	1.18	2.49E-02	2.92E-02
460027810	Aldrich Chemical Company	325188	NOX	2.73E-02	1.46	1.70	4.00E-02	4.63E-02
460098760	Plymouth Foam Incorporated	326140	NOX	8.32E-03	0.90	0.79	7.47E-03	6.55E-03
460094470	Bremer Manufacturing	331524	NOX	0.00E+00	0.61	0.67	0.00E+00	0.00E+00
460013510	Curt G. Joa, Incorporated	333291	NOX	1.74E-03	0.89	1.01	1.54E-03	1.76E-03
460147930	Kohler Co-Engine Plant	333618	NOX	1.04E-02	0.89	1.01	9.23E-03	1.05E-02
460061250	Richardson Yacht Interiors[2]	337122	NOX	8.71E-04	N/A	N/A	8.71E-04	8.71E-04
460141660	Lakeland College	611310	NOX	5.43E-03	0.88	0.87	4.79E-03	4.70E-03
999872390	Sheboygan County Highway Department	21232	ROG	0.00E+00	1.07	1.15	0.00E+00	0.00E+00
460100080	AJS & Associates, Inc	32192	ROG	1.94E-02	1.26	1.54	2.45E-02	2.98E-02
460119330	Bemis Wood Flour Mill	32199	ROG	0.00E+00	1.26	1.54	0.00E+00	0.00E+00
460086990	Times Printing Co Inc	32311	ROG	6.76E-02	0.80	0.89	5.39E-02	6.04E-02
460169600	Franzen Lithoscreen Inc.	32311	ROG	2.44E-02	0.80	0.89	1.95E-02	2.18E-02
460037820	Sheboygan Co Highway Commission[2]	32412	ROG	2.91E-04	N/A	N/A	2.91E-04	2.91E-04
460034410	Bemis Mfg. Co. - Plant D	32612	ROG	9.47E-03	0.90	1.03	8.49E-03	9.77E-03
460039470	Poly Vinyl Company Inc	32612	ROG	9.78E-03	0.90	1.03	8.77E-03	1.01E-02
460034630	Bemis Mfg. Co. Plant B	32619	ROG	5.04E-01	0.90	1.03	4.52E-01	5.20E-01

460147820	Kohler Company - Vitreous Plant[2]	32711	ROG	9.09E-04	N/A	N/A	9.09E-04	9.09E-04
460157500	Certain Teed[2]	32799	ROG	8.05E-03	N/A	N/A	8.05E-03	8.05E-03
460032870	Kohler Co-Metals Processing Complex	33299	ROG	1.78E-01	0.97	1.06	1.74E-01	1.89E-01
460120760	Lakeland Sports Center	33639	ROG	0.00E+00	0.89	0.97	0.00E+00	0.00E+00
460029460	Nemschoff Chairs, Inc.	33712	ROG	Shut down	N/A	N/A	Shut down	Shut down
460145730	Westshore Industries[2]	33712	ROG	5.72E-03	N/A	N/A	5.72E-03	5.72E-03
460040460	ANR Pipeline Co.(Kewaskum Comp. Station)[2]	48621	ROG	3.09E-03	N/A	N/A	3.09E-03	3.09E-03
460032760	Milk Specialties Global Adell	311514	ROG	1.71E-03	1.01	1.18	1.72E-03	2.02E-03
460033420	Johnsonville Foods	311612	ROG	6.55E-03	1.01	1.18	6.62E-03	7.74E-03
460027810	Aldrich Chemical Company	325188	ROG	1.68E-02	1.46	1.70	2.45E-02	2.85E-02
460098760	Plymouth Foam Incorporated	326140	ROG	1.56E-01	0.90	0.79	1.40E-01	1.23E-01
460094470	Bremer Manufacturing	331524	ROG	0.00E+00	0.61	0.67	0.00E+00	0.00E+00
460013510	Curt G. Joa, Incorporated	333291	ROG	8.09E-03	0.89	1.01	7.17E-03	8.15E-03
460147930	Kohler Co-Engine Plant	333618	ROG	6.36E-02	0.89	1.01	5.64E-02	6.41E-02
460061250	Richardson Yacht Interiors[2]	337122	ROG	1.56E-02	N/A	N/A	1.56E-02	1.56E-02
460141660	Lakeland College	611310	ROG	2.97E-04	0.88	0.87	2.62E-04	2.57E-04
Sub-total – Existing Sources			**NOx**	**0.864**	**---**	**---**	**0.857**	**0.929**
			ROG	**1.099**	**---**	**---**	**1.011**	**1.108**
New & Modified Sources [3]								
N/A	N/A	N/A	NOx	N/A	N/A	N/A	**0.132**	**0.132**
N/A	N/A	N/A	VOC	N/A	N/A	N/A	**0.252**	**0.252**
TOTAL (Existing + New/Modified Sources)			**NOx**	**0.864**	**---**	**---**	**0.989**	**1.060**
			VOC	**1.099**	**---**	**---**	**1.263**	**1.360**

[1] GF = Growth factor (see Appendix 3 for how the growth factors were derived).

[2] For the facilities without available growth factors, the projected projected 2020 and 2030 emissions are assumed to be the same as the actual 2014 emissions.

[3] See Appendix 3 for how projected emissions were derived for new and modified sources.

APPENDIX 6

Area Source Emissions for 2011, 2014, 2020 and 2030

This appendix provides a list of the Inland Sheboygan County area's area source tons per summer day (tpsd) emissions by source classification code (SCC) for 2011, 2014, 2020 and 2030. The sums of NOx and VOC emissions from the different SCCs were used for the area source sector NOx and VOC tpsd emission estimates in sections 4.2 (Nonattainment Year and Attainment Year Inventories) and 4.3 (Maintenance Year Inventories) of the Wisconsin Department of Natural Resources' (WDNR) Redesignation Request and Maintenance Plan for the Inland Sheboygan County, Wisconsin 1997 and 2008 8-hour Ozone Nonattainment Area.

Table A6.1. Area Source 2011 and Projected 2014, 2020 and 2030 Emissions for the Inland Sheboygan County Area

FIPS	SCC	POLLUTANT	2011(tpsd)	2014(tpsd)	2020(tpsd)	2030(tpsd)
55117	2102002000	NOX	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2102004001	NOX	1.06E-03	8.92E-04	7.37E-04	7.59E-04
55117	2102004002	NOX	5.89E-03	6.24E-03	6.70E-03	6.91E-03
55117	2102005000	NOX	6.13E-04	3.79E-04	1.41E-04	1.42E-04
55117	2102006000	NOX	6.37E-02	6.87E-02	7.53E-02	7.79E-02
55117	2102007000	NOX	1.68E-04	1.79E-04	1.99E-04	2.10E-04
55117	2102008000	NOX	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2102011000	NOX	5.05E-05	5.34E-05	5.74E-05	5.93E-05
55117	2103002000	NOX	7.17E-03	4.61E-03	2.04E-03	2.08E-03
55117	2103004001	NOX	3.81E-03	3.04E-03	2.28E-03	2.32E-03
55117	2103004002	NOX	1.29E-01	1.27E-01	1.26E-01	1.28E-01
55117	2103005000	NOX	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2103006000	NOX	9.08E-02	8.97E-02	8.94E-02	9.14E-02
55117	2103007000	NOX	7.43E-03	7.46E-03	7.57E-03	7.73E-03
55117	2103008000	NOX	6.06E-05	6.85E-05	7.71E-05	7.88E-05
55117	2103011000	NOX	1.45E-08	1.45E-08	1.47E-08	1.51E-08
55117	2104001000	NOX	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2104002000	NOX	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2104004000	NOX	9.52E-03	9.56E-03	9.70E-03	9.90E-03
55117	2104006000	NOX	1.92E-01	1.93E-01	1.96E-01	2.00E-01
55117	2104007000	NOX	3.85E-02	3.87E-02	3.92E-02	4.01E-02
55117	2104008100	NOX	6.16E-03	6.38E-03	6.87E-03	7.74E-03
55117	2104008210	NOX	4.12E-03	3.94E-03	3.55E-03	2.78E-03
55117	2104008220	NOX	1.42E-03	1.55E-03	1.74E-03	1.93E-03
55117	2104008230	NOX	4.00E-04	4.37E-04	5.00E-04	5.87E-04
55117	2104008310	NOX	1.80E-02	1.75E-02	1.62E-02	1.31E-02
55117	2104008320	NOX	4.64E-03	5.07E-03	5.70E-03	6.32E-03
55117	2104008330	NOX	4.51E-03	4.92E-03	5.63E-03	6.61E-03
55117	2104008400	NOX	1.79E-03	2.30E-03	3.10E-03	4.10E-03
55117	2104008510	NOX	5.09E-03	4.47E-03	2.65E-03	1.08E-04
55117	2104008610	NOX	1.61E-03	1.67E-03	1.73E-03	1.71E-03
55117	2104008700	NOX	1.03E-02	1.07E-02	1.15E-02	1.30E-02
55117	2104009000	NOX	1.24E-04	1.29E-04	1.39E-04	1.56E-04
55117	2104011000	NOX	1.96E-04	1.97E-04	2.00E-04	2.04E-04
55117	2302002200	NOX	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2610000100	NOX	3.00E-04	3.02E-04	3.06E-04	3.12E-04
55117	2610000400	NOX	2.42E-04	2.43E-04	2.47E-04	2.52E-04

FIPS	SCC	POLLUTANT	2011(tpsd)	2014(tpsd)	2020(tpsd)	2030(tpsd)
55117	2610000500	NOX	7.61E-03	7.65E-03	7.76E-03	7.92E-03
55117	2610030000	NOX	1.27E-02	1.28E-02	1.29E-02	1.32E-02
55117	2810060100	NOX	4.89E-04	4.92E-04	4.99E-04	5.09E-04
55117	2102001000	VOC	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2102002000	VOC	0.00E+00	5.88E-09	5.96E-09	0.00E+00
55117	2102004001	VOC	1.06E-05	5.32E-06	6.91E-09	1.24E-08
55117	2102004002	VOC	0.00E+00	8.33E-10	8.45E-10	0.00E+00
55117	2102005000	VOC	3.12E-06	1.57E-06	1.67E-09	1.68E-09
55117	2102006000	VOC	3.51E-03	3.79E-03	4.18E-03	4.34E-03
55117	2102007000	VOC	6.12E-06	6.55E-06	7.28E-06	7.67E-06
55117	2102008000	VOC	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2102011000	VOC	4.98E-07	5.26E-07	5.66E-07	5.84E-07
55117	2103001000	VOC	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2103002000	VOC	3.26E-05	2.80E-05	2.35E-05	2.40E-05
55117	2103004001	VOC	6.48E-05	3.26E-05	6.32E-08	6.44E-08
55117	2103004002	VOC	0.00E+00	3.12E-08	3.16E-08	0.00E+00
55117	2103005000	VOC	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2103006000	VOC	4.99E-03	4.90E-03	4.90E-03	5.05E-03
55117	2103007000	VOC	2.71E-04	2.73E-04	2.77E-04	2.82E-04
55117	2103008000	VOC	4.68E-06	5.29E-06	5.96E-06	6.09E-06
55117	2103011000	VOC	2.48E-10	2.49E-10	2.52E-10	2.58E-10
55117	2104001000	VOC	0.00E+00	1.24E-10	2.52E-10	0.00E+00
55117	2104002000	VOC	0.00E+00	1.24E-10	2.52E-10	0.00E+00
55117	2104004000	VOC	3.70E-04	3.72E-04	3.77E-04	3.85E-04
55117	2104006000	VOC	1.12E-02	1.13E-02	1.14E-02	1.17E-02
55117	2104007000	VOC	1.41E-03	1.42E-03	1.44E-03	1.47E-03
55117	2104008100	VOC	4.48E-02	4.64E-02	4.99E-02	5.62E-02
55117	2104008210	VOC	7.79E-02	7.45E-02	6.72E-02	5.27E-02
55117	2104008220	VOC	7.46E-03	8.14E-03	9.16E-03	1.02E-02
55117	2104008230	VOC	3.00E-03	3.28E-03	3.75E-03	4.40E-03
55117	2104008310	VOC	3.42E-01	3.33E-01	3.10E-01	2.55E-01
55117	2104008320	VOC	2.44E-02	2.67E-02	3.00E-02	3.33E-02
55117	2104008330	VOC	3.38E-02	3.69E-02	4.22E-02	4.96E-02
55117	2104008400	VOC	1.93E-05	2.48E-05	3.35E-05	4.42E-05
55117	2104008510	VOC	3.26E-02	2.86E-02	1.70E-02	6.80E-04
55117	2104008610	VOC	5.89E-02	6.10E-02	6.32E-02	6.25E-02
55117	2104008700	VOC	7.50E-02	7.77E-02	8.36E-02	9.42E-02
55117	2104009000	VOC	6.40E-04	6.63E-04	7.13E-04	8.04E-04
55117	2104011000	VOC	7.64E-06	7.67E-06	7.78E-06	7.95E-06

FIPS	SCC	POLLUTANT	2011(tpsd)	2014(tpsd)	2020(tpsd)	2030(tpsd)
55117	2302002100	VOC	1.18E-03	1.19E-03	1.21E-03	1.23E-03
55117	2302002200	VOC	3.26E-03	3.27E-03	3.32E-03	3.39E-03
55117	2302003000	VOC	5.64E-04	5.67E-04	5.75E-04	5.87E-04
55117	2302003100	VOC	4.37E-04	4.39E-04	4.45E-04	4.55E-04
55117	2302003200	VOC	1.41E-05	1.42E-05	1.44E-05	1.47E-05
55117	2401001000	VOC	1.76E-01	1.77E-01	1.80E-01	1.83E-01
55117	2401005000	VOC	4.66E-02	4.68E-02	4.74E-02	4.85E-02
55117	2401008000	VOC	2.97E-04	2.98E-04	3.03E-04	3.09E-04
55117	2401015000	VOC	5.30E-03	5.32E-03	5.40E-03	5.51E-03
55117	2401020000	VOC	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2401025000	VOC	2.26E-01	2.28E-01	2.31E-01	2.36E-01
55117	2401055000	VOC	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2401065000	VOC	1.28E-03	1.29E-03	1.31E-03	1.34E-03
55117	2401070000	VOC	7.89E-03	7.93E-03	8.04E-03	8.22E-03
55117	2401075000	VOC	6.39E-05	6.42E-05	6.51E-05	6.65E-05
55117	2401090000	VOC	3.85E-02	3.87E-02	3.92E-02	4.01E-02
55117	2401100000	VOC	4.54E-02	4.57E-02	4.63E-02	4.73E-02
55117	2401200000	VOC	4.82E-03	4.85E-03	4.91E-03	5.02E-03
55117	2415000000	VOC	2.04E-01	2.05E-01	2.08E-01	2.13E-01
55117	2420000000	VOC	1.54E-07	1.54E-07	1.56E-07	1.60E-07
55117	2425000000	VOC	5.00E-02	5.02E-02	5.09E-02	5.20E-02
55117	2460100000	VOC	1.43E-01	1.44E-01	1.46E-01	1.49E-01
55117	2460200000	VOC	1.36E-01	1.36E-01	1.38E-01	1.41E-01
55117	2460400000	VOC	1.02E-01	1.03E-01	1.04E-01	1.07E-01
55117	2460500000	VOC	7.16E-02	7.19E-02	7.29E-02	7.45E-02
55117	2460600000	VOC	4.29E-02	4.32E-02	4.37E-02	4.47E-02
55117	2460800000	VOC	1.34E-01	1.35E-01	1.37E-01	1.40E-01
55117	2460900000	VOC	5.27E-03	5.30E-03	5.37E-03	5.49E-03
55117	2461021000	VOC	5.31E-02	5.34E-02	5.41E-02	5.53E-02
55117	2461022000	VOC	1.28E-02	1.29E-02	1.31E-02	1.34E-02
55117	2461850000	VOC	1.06E-01	1.05E-01	1.06E-01	1.08E-01
55117	2501011011	VOC	1.82E-03	2.88E-03	4.50E-03	5.14E-03
55117	2501011012	VOC	3.43E-03	3.92E-03	4.70E-03	5.05E-03
55117	2501011013	VOC	5.58E-03	5.60E-03	5.68E-03	5.80E-03
55117	2501011014	VOC	3.47E-04	5.84E-04	9.48E-04	1.09E-03
55117	2501011015	VOC	1.54E-04	7.75E-05	7.85E-05	1.60E-04
55117	2501012011	VOC	1.09E-04	1.40E-04	1.89E-04	2.09E-04
55117	2501012012	VOC	1.09E-04	1.25E-04	1.50E-04	1.61E-04
55117	2501012013	VOC	7.61E-03	7.64E-03	7.75E-03	7.92E-03

FIPS	SCC	POLLUTANT	2011(tpsd)	2014(tpsd)	2020(tpsd)	2030(tpsd)
55117	2501012014	VOC	1.75E-03	2.06E-03	2.54E-03	2.75E-03
55117	2501012015	VOC	2.96E-04	1.49E-04	1.51E-04	3.08E-04
55117	2501050120	VOC	2.33E-01	2.33E-01	2.14E-01	1.97E-01
55117	2501055120	VOC	7.30E-02	7.18E-02	6.48E-02	5.97E-02
55117	2501060051	VOC	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2501060052	VOC	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2501060053	VOC	2.78E-02	2.74E-02	2.47E-02	2.27E-02
55117	2501060100	VOC	8.18E-02	8.32E-02	5.95E-02	3.57E-02
55117	2501060201	VOC	3.19E-02	3.14E-02	2.83E-02	2.61E-02
55117	2501080050	VOC	2.08E-02	2.09E-02	2.12E-02	2.16E-02
55117	2501080100	VOC	1.08E-03	1.08E-03	1.10E-03	1.12E-03
55117	2505030120	VOC	2.09E-03	2.05E-03	1.85E-03	1.71E-03
55117	2505040120	VOC	7.97E-02	7.99E-02	7.34E-02	6.76E-02
55117	2610000100	VOC	1.36E-03	1.36E-03	1.38E-03	1.41E-03
55117	2610000400	VOC	9.20E-04	9.24E-04	9.37E-04	9.57E-04
55117	2610000500	VOC	1.77E-02	1.78E-02	1.80E-02	1.84E-02
55117	2610030000	VOC	1.81E-02	1.82E-02	1.85E-02	1.89E-02
55117	2630020000	VOC	2.83E-03	2.85E-03	2.89E-03	2.95E-03
55117	2680003000	VOC	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2810025000	VOC	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55117	2810060100	VOC	1.71E-06	1.72E-06	1.74E-06	1.78E-06
TOTAL		**NOx**	**0.63**	**0.63**	**0.64**	**0.65**
		VOC	**2.95**	**2.96**	**2.90**	**2.83**

*Values marked in red font indicate WDNR staff estimates.

APPENDIX 7

Nonroad Emissions for 2011, 2014, 2020 and 2030

This appendix provides detailed listings of the estimated nonroad emissions data for over 200 subcategories for the Inland Sheboygan County area, as well as the entire county, for 2011, 2014, 2020 and 2030. The sums of NOx and VOC emissions from the different nonroad source types were used for the nonroad sector NOx and VOC tons per summer day (tpsd) emission estimates in sections 4.2 (Nonattainment Year and Attainment Year Inventories) and 4.3 (Maintenance Year Inventories) of the Wisconsin Department of Natural Resources' (WDNR) Redesignation Request and Maintenance Plan for the Inland Sheboygan County 1997 and 2008 8-hour Ozone Nonattainment Area.

These inventories are based on three primary sources of data:

MOVES: The U.S. EPA's MOVES2014a model. This model was used for most source categories. The exceptions are cited below.

EPA: Emissions inventories prepared by EPA were used for aircraft and rail locomotives. Emissions for 2011 were obtained from the EPA's 2011 National Emissions Inventory (NEI), version 2, and emissions for 2014, 2020 and 2030 were obtained from emission projections in the EPA's 2011 Emissions Modeling Platform, version 6.3.

LADCO: The Lake Michigan Air Directors Consortium (LADCO) estimated commercial marine vessel emissions for the year 2014. EPA incorporated these emissions into their 2014 NEI. For the other three years (2011, 2020 and 2030), the 2014 emissions were proportionally adjusted based on the trend of baseline and projected statewide commercial marine emissions in the U.S. EPA's 2011 Emissions Modeling Platform, version 6.3. It should be noted that commercial emissions occurred only on Lake Michigan waters. Thus, no commercial marine emissions occurred in the Inland Sheboygan County area. The following tables, therefore, show non-zero commercial marine emissions only in the columns for the entire Sheboygan County area.

Table A7.1. 2011 Nonroad NO_X and VOC Emissions: tons per summer day (tpsd) Sheboygan County and the Inland Sheboygan County Area

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2011 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2011 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2260001010	Recreational	2-Stroke Motorcycles: Off-Road	MOVES	0.0028	0.4234	88%	88%	land area	0.0025	0.3726
2260001020	Recreational	2-Stroke Snowmobiles	MOVES	0.0000	0.0441	88%	88%	land area	0.0000	0.0388
2260001030	Recreational	2-Stroke All Terrain Vehicles	MOVES	0.0040	0.4936	88%	88%	land area	0.0035	0.4344
2260001060	Recreational	2-Stroke Specialty Vehicle Carts	MOVES	0.0011	0.0048	88%	88%	land area	0.0009	0.0043
2260002006	Construction	2-Stroke Tampers/Rammers	MOVES	0.0001	0.0046	48%	48%	population	0.0001	0.0022
2260002009	Construction	2-Stroke Plate Compactors	MOVES	0.0000	0.0002	48%	48%	population	0.0000	0.0001
2260002021	Construction	2-Stroke Paving Equipment	MOVES	0.0000	0.0002	48%	48%	population	0.0000	0.0001
2260002027	Construction	2-Stroke Signal Boards	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2260002039	Construction	2-Stroke Concrete/Industrial Saws	MOVES	0.0003	0.0115	48%	48%	population	0.0001	0.0055
2260002054	Construction	2-Stroke Crushing/Proc. Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2260003030	Industrial	2-Stroke Sweepers/Scrubbers	MOVES	0.0000	0.0002	48%	48%	population	0.0000	0.0001
2260003040	Industrial	2-Stroke Other General Industrial Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2260004015	Lawn/Garden	2-Stroke Rotary Tillers < 6 HP (Residential)	MOVES	0.0001	0.0017	48%	48%	population	0.0000	0.0008
2260004016	Lawn/Garden	2-Stroke Rotary Tillers < 6 HP (Commercial)	MOVES	0.0001	0.0026	48%	48%	population	0.0001	0.0012
2260004020	Lawn/Garden	2-Stroke Chain Saws < 6 HP (Residential)	MOVES	0.0004	0.0134	48%	48%	population	0.0002	0.0064
2260004021	Lawn/Garden	2-Stroke Chain Saws < 6 HP (Commercial)	MOVES	0.0006	0.0292	48%	48%	population	0.0003	0.0140
2260004025	Lawn/Garden	2-Stroke Trimmers/Edgers/Brush Cutters (Res.)	MOVES	0.0010	0.0330	48%	48%	population	0.0005	0.0158
2260004026	Lawn/Garden	2-Stroke Trimmers/Edgers/Brush Cutters (Com.)	MOVES	0.0011	0.0296	48%	48%	population	0.0005	0.0142
2260004030	Lawn/Garden	2-Stroke Leafblowers/Vacuums (Residential)	MOVES	0.0007	0.0235	48%	48%	population	0.0003	0.0113
2260004031	Lawn/Garden	2-Stroke Leafblowers/Vacuums (Commercial)	MOVES	0.0010	0.0295	48%	48%	population	0.0005	0.0142
2260004035	Lawn/Garden	2-Stroke Snowblowers (Residential)	MOVES	0.0000	0.0046	48%	48%	population	0.0000	0.0022
2260004036	Lawn/Garden	2-Stroke Snowblowers (Commercial)	MOVES	0.0000	0.0003	48%	48%	population	0.0000	0.0001
2260004071	Lawn/Garden	2-Stroke Commercial Turf Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2260005035	Agriculture	2-Stroke Sprayers	MOVES	0.0000	0.0007	88%	88%	land area	0.0000	0.0006
2260006005	Commercial	2-Stroke Light Commercial Generator Set	MOVES	0.0000	0.0011	48%	48%	population	0.0000	0.0005
2260006010	Commercial	2-Stroke Light Commercial Pumps	MOVES	0.0003	0.0076	48%	48%	population	0.0001	0.0036
2260006015	Commercial	2-Stroke Light Commercial Air Compressors	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2260006035	Commercial	2-Stroke Hydro Power Units	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2260007005	Logging	2-Stroke Logging Equipment Chain Saws > 6 HP	MOVES	0.0000	0.0009	88%	88%	land area	0.0000	0.0008
2265001010	Recreational	4-Stroke Motorcycles: Off-Road	MOVES	0.0021	0.0189	88%	88%	land area	0.0018	0.0166
2265001030	Recreational	4-Stroke All Terrain Vehicles	MOVES	0.0185	0.2153	88%	88%	land area	0.0163	0.1895
2265001050	Recreational	4-Stroke Golf Carts	MOVES	0.0103	0.0323	88%	88%	land area	0.0090	0.0284
2265001060	Recreational	4-Stroke Specialty Vehicle Carts	MOVES	0.0010	0.0045	88%	88%	land area	0.0009	0.0039
2265002003	Construction	4-Stroke Asphalt Pavers	MOVES	0.0002	0.0003	48%	48%	population	0.0001	0.0002

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2011 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2011 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2265002006	Construction	4-Stroke Tampers/Rammers	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2265002009	Construction	4-Stroke Plate Compactors	MOVES	0.0002	0.0012	48%	48%	population	0.0001	0.0006
2265002015	Construction	4-Stroke Rollers	MOVES	0.0002	0.0005	48%	48%	population	0.0001	0.0003
2265002021	Construction	4-Stroke Paving Equipment	MOVES	0.0005	0.0021	48%	48%	population	0.0002	0.0010
2265002024	Construction	4-Stroke Surfacing Equipment	MOVES	0.0002	0.0007	48%	48%	population	0.0001	0.0003
2265002027	Construction	4-Stroke Signal Boards	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2265002030	Construction	4-Stroke Trenchers	MOVES	0.0005	0.0013	48%	48%	population	0.0002	0.0006
2265002033	Construction	4-Stroke Bore/Drill Rigs	MOVES	0.0002	0.0009	48%	48%	population	0.0001	0.0004
2265002039	Construction	4-Stroke Concrete/Industrial Saws	MOVES	0.0007	0.0019	48%	48%	population	0.0003	0.0009
2265002042	Construction	4-Stroke Cement & Mortar Mixers	MOVES	0.0005	0.0030	48%	48%	population	0.0002	0.0014
2265002045	Construction	4-Stroke Cranes	MOVES	0.0001	0.0001	48%	48%	population	0.0000	0.0000
2265002054	Construction	4-Stroke Crushing/Proc. Equipment	MOVES	0.0001	0.0002	48%	48%	population	0.0000	0.0001
2265002057	Construction	4-Stroke Rough Terrain Forklifts	MOVES	0.0001	0.0001	48%	48%	population	0.0001	0.0000
2265002060	Construction	4-Stroke Rubber Tire Loaders	MOVES	0.0002	0.0001	48%	48%	population	0.0001	0.0001
2265002066	Construction	4-Stroke Tractors/Loaders/Backhoes	MOVES	0.0003	0.0007	48%	48%	population	0.0001	0.0003
2265002072	Construction	4-Stroke Skid Steer Loaders	MOVES	0.0004	0.0005	48%	48%	population	0.0002	0.0003
2265002078	Construction	4-Stroke Dumpers/Tenders	MOVES	0.0001	0.0004	48%	48%	population	0.0000	0.0002
2265002081	Construction	4-Stroke Other Construction Equipment	MOVES	0.0001	0.0001	48%	48%	population	0.0001	0.0001
2265003010	Industrial	4-Stroke Aerial Lifts	MOVES	0.0039	0.0042	48%	48%	population	0.0019	0.0020
2265003020	Industrial	4-Stroke Forklifts	MOVES	0.0085	0.0053	48%	48%	population	0.0041	0.0025
2265003030	Industrial	4-Stroke Sweepers/Scrubbers	MOVES	0.0012	0.0019	48%	48%	population	0.0006	0.0009
2265003040	Industrial	4-Stroke Other General Industrial Equipment	MOVES	0.0019	0.0084	48%	48%	population	0.0009	0.0040
2265003050	Industrial	4-Stroke Other Material Handling Equipment	MOVES	0.0002	0.0003	48%	48%	population	0.0001	0.0001
2265003060	Industrial	4-Stroke Industrial AC/Refrigeration	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2265003070	Industrial	4-Stroke Terminal Tractors	MOVES	0.0003	0.0002	48%	48%	population	0.0001	0.0001
2265004010	Lawn/Garden	4-Stroke Lawn mowers (Residential)	MOVES	0.0125	0.1515	48%	48%	population	0.0060	0.0727
2265004011	Lawn/Garden	4-Stroke Lawn mowers (Commercial)	MOVES	0.0039	0.0297	48%	48%	population	0.0019	0.0142
2265004015	Lawn/Garden	4-Stroke Rotary Tillers < 6 HP (Residential)	MOVES	0.0010	0.0126	48%	48%	population	0.0005	0.0060
2265004016	Lawn/Garden	4-Stroke Rotary Tillers < 6 HP (Commercial)	MOVES	0.0021	0.0176	48%	48%	population	0.0010	0.0085
2265004025	Lawn/Garden	4-Stroke Trimmers/Edgers/Brush Cutters (Res.)	MOVES	0.0001	0.0008	48%	48%	population	0.0000	0.0004
2265004026	Lawn/Garden	4-Stroke Trimmers/Edgers/Brush Cutters (Com.)	MOVES	0.0001	0.0006	48%	48%	population	0.0000	0.0003
2265004030	Lawn/Garden	4-Stroke Leafblowers/Vacuums (Residential)	MOVES	0.0001	0.0015	48%	48%	population	0.0001	0.0007
2265004031	Lawn/Garden	4-Stroke Leafblowers/Vacuums (Commercial)	MOVES	0.0051	0.0131	48%	48%	population	0.0024	0.0063
2265004035	Lawn/Garden	4-Stroke Snowblowers (Residential)	MOVES	0.0000	0.0093	48%	48%	population	0.0000	0.0044
2265004036	Lawn/Garden	4-Stroke Snowblowers (Commercial)	MOVES	0.0000	0.0006	48%	48%	population	0.0000	0.0003
2265004040	Lawn/Garden	4-Stroke Rear Engine Riding Mowers (Res.)	MOVES	0.0027	0.0173	48%	48%	population	0.0013	0.0083
2265004041	Lawn/Garden	4-Stroke Rear Engine Riding Mowers (Comm.)	MOVES	0.0005	0.0013	48%	48%	population	0.0002	0.0006
2265004046	Lawn/Garden	4-Stroke Front Mowers (Commercial)	MOVES	0.0006	0.0022	48%	48%	population	0.0003	0.0010

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2011 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2011 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2265004051	Lawn/Garden	4-Stroke Shredders < 6 HP (Commercial)	MOVES	0.0003	0.0022	48%	48%	population	0.0001	0.0010
2265004055	Lawn/Garden	4-Stroke Lawn & Garden Tractors (Residential)	MOVES	0.0361	0.1692	48%	48%	population	0.0173	0.0812
2265004056	Lawn/Garden	4-Stroke Lawn & Garden Tractors (Commercial)	MOVES	0.0065	0.0168	48%	48%	population	0.0031	0.0081
2265004066	Lawn/Garden	4-Stroke Chippers/Stump Grinders (Comm.)	MOVES	0.0012	0.0020	48%	48%	population	0.0006	0.0010
2265004071	Lawn/Garden	4-Stroke Commercial Turf Equipment (Comm.)	MOVES	0.0197	0.0588	48%	48%	population	0.0094	0.0282
2265004075	Lawn/Garden	4-Stroke Other Lawn & Garden Equip. (Res.)	MOVES	0.0013	0.0100	48%	48%	population	0.0006	0.0048
2265004076	Lawn/Garden	4-Stroke Other Lawn & Garden Equip. (Com.)	MOVES	0.0007	0.0054	48%	48%	population	0.0003	0.0026
2265005010	Agriculture	4-Stroke 2-Wheel Tractors	MOVES	0.0001	0.0003	88%	88%	land area	0.0001	0.0002
2265005015	Agriculture	4-Stroke Agricultural Tractors	MOVES	0.0006	0.0005	88%	88%	land area	0.0006	0.0005
2265005020	Agriculture	4-Stroke Combines	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2265005025	Agriculture	4-Stroke Balers	MOVES	0.0010	0.0013	88%	88%	land area	0.0008	0.0011
2265005030	Agriculture	4-Stroke Agricultural Mowers	MOVES	0.0001	0.0003	88%	88%	land area	0.0001	0.0002
2265005035	Agriculture	4-Stroke Sprayers	MOVES	0.0017	0.0048	88%	88%	land area	0.0015	0.0042
2265005040	Agriculture	4-Stroke Tillers > 5 HP	MOVES	0.0022	0.0106	88%	88%	land area	0.0020	0.0093
2265005045	Agriculture	4-Stroke Swathers	MOVES	0.0015	0.0016	88%	88%	land area	0.0013	0.0014
2265005055	Agriculture	4-Stroke Other Agricultural Equipment	MOVES	0.0018	0.0019	88%	88%	land area	0.0016	0.0017
2265005060	Agriculture	4-Stroke Irrigation Sets	MOVES	0.0008	0.0007	88%	88%	land area	0.0007	0.0006
2265006005	Commercial	4-Stroke Light Commercial Generator Set	MOVES	0.0114	0.0622	48%	48%	population	0.0055	0.0299
2265006010	Commercial	4-Stroke Light Commercial Pumps	MOVES	0.0030	0.0132	48%	48%	population	0.0014	0.0063
2265006015	Commercial	4-Stroke Light Commercial Air Compressors	MOVES	0.0017	0.0051	48%	48%	population	0.0008	0.0025
2265006025	Commercial	4-Stroke Light Commercial Welders	MOVES	0.0033	0.0086	48%	48%	population	0.0016	0.0041
2265006030	Commercial	4-Stroke Light Commercial Pressure Wash	MOVES	0.0047	0.0257	48%	48%	population	0.0023	0.0123
2265006035	Commercial	4-Stroke Hydro Power Units	MOVES	0.0002	0.0008	48%	48%	population	0.0001	0.0004
2265007010	Logging	4-Stroke Logging Equipment Shredders > 6 HP	MOVES	0.0001	0.0003	88%	88%	land area	0.0001	0.0003
2265007015	Logging	4-Stroke Logging Equipment Skidders	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2265008005	Airport Support	4-Stroke Airport Support Equipment	EPA	0.0000	0.0000	99%	99%	airport location (1)	0.0000	0.0000
2265010010	Oil Field	4-Stroke Other Oil Field Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2267001060	Recreational	LPG Specialty Vehicle Carts	MOVES	0.0003	0.0001	88%	88%	land area	0.0002	0.0000
2267002003	Construction	LPG Asphalt Pavers	MOVES	0.0001	0.0000	48%	48%	population	0.0000	0.0000
2267002015	Construction	LPG Rollers	MOVES	0.0001	0.0000	48%	48%	population	0.0000	0.0000
2267002021	Construction	LPG Paving Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267002024	Construction	LPG Surfacing Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267002030	Construction	LPG Trenchers	MOVES	0.0002	0.0000	48%	48%	population	0.0001	0.0000
2267002033	Construction	LPG Bore/Drill Rigs	MOVES	0.0001	0.0000	48%	48%	population	0.0001	0.0000
2267002039	Construction	LPG Concrete/Industrial Saws	MOVES	0.0001	0.0000	48%	48%	population	0.0000	0.0000
2267002045	Construction	LPG Cranes	MOVES	0.0001	0.0000	48%	48%	population	0.0001	0.0000
2267002054	Construction	LPG Crushing/Proc. Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267002057	Construction	LPG Rough Terrain Forklifts	MOVES	0.0002	0.0000	48%	48%	population	0.0001	0.0000

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2011 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2011 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2267002060	Construction	LPG Rubber Tire Loaders	MOVES	0.0002	0.0001	48%	48%	population	0.0001	0.0000
2267002066	Construction	LPG Tractors/Loaders/Backhoes	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267002072	Construction	LPG Skid Steer Loaders	MOVES	0.0004	0.0001	48%	48%	population	0.0002	0.0000
2267002081	Construction	LPG Other Construction Equipment	MOVES	0.0002	0.0000	48%	48%	population	0.0001	0.0000
2267003010	Industrial	LPG Aerial Lifts	MOVES	0.0084	0.0018	48%	48%	population	0.0040	0.0009
2267003020	Industrial	LPG Forklifts	MOVES	0.4146	0.0909	48%	48%	population	0.1990	0.0436
2267003030	Industrial	LPG Sweepers/Scrubbers	MOVES	0.0020	0.0004	48%	48%	population	0.0010	0.0002
2267003040	Industrial	LPG Other General Industrial Equipment	MOVES	0.0008	0.0002	48%	48%	population	0.0004	0.0001
2267003050	Industrial	LPG Other Material Handling Equipment	MOVES	0.0004	0.0001	48%	48%	population	0.0002	0.0000
2267003070	Industrial	LPG Terminal Tractors	MOVES	0.0007	0.0001	48%	48%	population	0.0004	0.0001
2267004066	Lawn/Garden	LPG Chippers/Stump Grinders (Commercial)	MOVES	0.0007	0.0001	48%	48%	population	0.0003	0.0001
2267005055	Agriculture	LPG Other Agricultural Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2267005060	Agriculture	LPG Irrigation Sets	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2267006005	Commercial	LPG Light Commercial Generator Sets	MOVES	0.0054	0.0009	48%	48%	population	0.0026	0.0004
2267006010	Commercial	LPG Light Commercial Pumps	MOVES	0.0010	0.0002	48%	48%	population	0.0005	0.0001
2267006015	Commercial	LPG Light Commercial Air Compressors	MOVES	0.0009	0.0002	48%	48%	population	0.0004	0.0001
2267006025	Commercial	LPG Light Commercial Welders	MOVES	0.0012	0.0003	48%	48%	population	0.0006	0.0001
2267006030	Commercial	LPG Light Commercial Pressure Washers	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267006035	Commercial	LPG Hydro Power Units	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267008005	Airport Support	LPG Airport Support Equipment	EPA	0.0000	0.0000	99%	99%	airport location (1)	0.0000	0.0000
2268002081	Construction	CNG Other Construction Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2268003020	Industrial	CNG Forklifts	MOVES	0.0296	0.0232	48%	48%	population	0.0142	0.0111
2268003030	Industrial	CNG Sweepers/Scrubbers	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2268003040	Industrial	CNG Other General Industrial Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2268003060	Industrial	CNG AC/Refrigeration	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2268003070	Industrial	CNG Terminal Tractors	MOVES	0.0001	0.0000	48%	48%	population	0.0000	0.0000
2268005055	Agriculture	CNG Other Agricultural Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2268005060	Agriculture	CNG Irrigation Sets	MOVES	0.0001	0.0001	88%	88%	land area	0.0001	0.0000
2268006005	Commercial	CNG Light Commercial Generator Sets	MOVES	0.0017	0.0010	48%	48%	population	0.0008	0.0005
2268006010	Commercial	CNG Light Commercial Pumps	MOVES	0.0001	0.0000	48%	48%	population	0.0000	0.0000
2268006015	Commercial	CNG Light Commercial Air Compressors	MOVES	0.0001	0.0000	48%	48%	population	0.0000	0.0000
2268006020	Commercial	CNG Light Commercial Gas Compressors	MOVES	0.0006	0.0003	48%	48%	population	0.0003	0.0001
2268008005	Airport Support	CNG Airport Support Equipment	EPA	0.0000	0.0000	99%	99%	airport location (1)	0.0000	0.0000
2268010010	Oil Field	CNG Other Oil Field Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2270001060	Recreational	Diesel Specialty Vehicle Carts	MOVES	0.0033	0.0009	88%	88%	land area	0.0029	0.0008
2270002003	Construction	Diesel Pavers	MOVES	0.0091	0.0008	48%	48%	population	0.0044	0.0004
2270002006	Construction	Diesel Tampers/Rammers (unused)	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2270002009	Construction	Diesel Plate Compactors	MOVES	0.0003	0.0001	48%	48%	population	0.0002	0.0000

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2011 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2011 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2270002015	Construction	Diesel Rollers	MOVES	0.0241	0.0021	48%	48%	population	0.0116	0.0010
2270002018	Construction	Diesel Scrapers	MOVES	0.0253	0.0016	48%	48%	population	0.0122	0.0008
2270002021	Construction	Diesel Paving Equipment	MOVES	0.0015	0.0001	48%	48%	population	0.0007	0.0001
2270002024	Construction	Diesel Surfacing Equipment	MOVES	0.0011	0.0001	48%	48%	population	0.0005	0.0000
2270002027	Construction	Diesel Signal Boards	MOVES	0.0032	0.0004	48%	48%	population	0.0015	0.0002
2270002030	Construction	Diesel Trenchers	MOVES	0.0125	0.0012	48%	48%	population	0.0060	0.0006
2270002033	Construction	Diesel Bore/Drill Rigs	MOVES	0.0146	0.0012	48%	48%	population	0.0070	0.0006
2270002036	Construction	Diesel Excavators	MOVES	0.0837	0.0067	48%	48%	population	0.0402	0.0032
2270002039	Construction	Diesel Concrete/Industrial Saws	MOVES	0.0009	0.0001	48%	48%	population	0.0004	0.0000
2270002042	Construction	Diesel Cement & Mortar Mixers	MOVES	0.0006	0.0001	48%	48%	population	0.0003	0.0000
2270002045	Construction	Diesel Cranes	MOVES	0.0241	0.0017	48%	48%	population	0.0116	0.0008
2270002048	Construction	Diesel Graders	MOVES	0.0208	0.0017	48%	48%	population	0.0100	0.0008
2270002051	Construction	Diesel Off-highway Trucks	MOVES	0.0826	0.0052	48%	48%	population	0.0397	0.0025
2270002054	Construction	Diesel Crushing/Proc. Equipment	MOVES	0.0045	0.0003	48%	48%	population	0.0022	0.0002
2270002057	Construction	Diesel Rough Terrain Forklifts	MOVES	0.0328	0.0031	48%	48%	population	0.0158	0.0015
2270002060	Construction	Diesel Rubber Tire Loaders	MOVES	0.1133	0.0083	48%	48%	population	0.0544	0.0040
2270002066	Construction	Diesel Tractors/Loaders/Backhoes	MOVES	0.0805	0.0167	48%	48%	population	0.0387	0.0080
2270002069	Construction	Diesel Crawler Tractors	MOVES	0.0950	0.0069	48%	48%	population	0.0456	0.0033
2270002072	Construction	Diesel Skid Steer Loaders	MOVES	0.0557	0.0147	48%	48%	population	0.0267	0.0071
2270002075	Construction	Diesel Off-Highway Tractors	MOVES	0.0125	0.0008	48%	48%	population	0.0060	0.0004
2270002078	Construction	Diesel Dumpers/Tenders	MOVES	0.0002	0.0001	48%	48%	population	0.0001	0.0000
2270002081	Construction	Diesel Other Construction Equipment	MOVES	0.0122	0.0009	48%	48%	population	0.0059	0.0004
2270003010	Industrial	Diesel Aerial Lifts	MOVES	0.0119	0.0032	48%	48%	population	0.0057	0.0015
2270003020	Industrial	Diesel Forklifts	MOVES	0.1020	0.0083	48%	48%	population	0.0489	0.0040
2270003030	Industrial	Diesel Sweepers/Scrubbers	MOVES	0.0538	0.0045	48%	48%	population	0.0258	0.0022
2270003040	Industrial	Diesel Other General Industrial Equipment	MOVES	0.0619	0.0051	48%	48%	population	0.0297	0.0025
2270003050	Industrial	Diesel Other Material Handling Equipment	MOVES	0.0032	0.0006	48%	48%	population	0.0015	0.0003
2270003060	Industrial	Diesel AC/Refrigeration	MOVES	0.0474	0.0041	48%	48%	population	0.0227	0.0020
2270003070	Industrial	Diesel Terminal Tractors	MOVES	0.0628	0.0054	48%	48%	population	0.0301	0.0026
2270004031	Lawn/Garden	Diesel Leafblowers/Vacuums (Commercial)	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2270004036	Lawn/Garden	Diesel Snowblowers (Commercial)	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2270004046	Lawn/Garden	Diesel Front Mowers (Commercial)	MOVES	0.0112	0.0014	48%	48%	population	0.0054	0.0007
2270004056	Lawn/Garden	Diesel Lawn & Garden Tractors (Commercial)	MOVES	0.0022	0.0003	48%	48%	population	0.0011	0.0001
2270004066	Lawn/Garden	Diesel Chippers/Stump Grinders (Commercial)	MOVES	0.0167	0.0016	48%	48%	population	0.0080	0.0008
2270004071	Lawn/Garden	Diesel Commercial Turf Equipment (Comm.)	MOVES	0.0016	0.0001	48%	48%	population	0.0008	0.0001
2270004076	Lawn/Garden	Diesel Other Lawn & Garden Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2270005010	Agriculture	Diesel 2-Wheel Tractors	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2270005015	Agriculture	Diesel Agricultural Tractors	MOVES	1.0035	0.0950	88%	88%	land area	0.8831	0.0836

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2011 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2011 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2270005020	Agriculture	Diesel Combines	MOVES	0.1056	0.0093	88%	88%	land area	0.0929	0.0082
2270005025	Agriculture	Diesel Balers	MOVES	0.0005	0.0001	88%	88%	land area	0.0005	0.0001
2270005030	Agriculture	Diesel Agricultural Mowers	MOVES	0.0001	0.0000	88%	88%	land area	0.0001	0.0000
2270005035	Agriculture	Diesel Sprayers	MOVES	0.0083	0.0011	88%	88%	land area	0.0073	0.0009
2270005040	Agriculture	Diesel Tillers > 6 HP	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2270005045	Agriculture	Diesel Swathers	MOVES	0.0078	0.0009	88%	88%	land area	0.0069	0.0008
2270005055	Agriculture	Diesel Other Agricultural Equipment	MOVES	0.0213	0.0022	88%	88%	land area	0.0187	0.0019
2270005060	Agriculture	Diesel Irrigation Sets	MOVES	0.0134	0.0013	88%	88%	land area	0.0118	0.0011
2270006005	Commercial	Diesel Light Commercial Generator Sets	MOVES	0.0267	0.0032	48%	48%	population	0.0128	0.0015
2270006010	Commercial	Diesel Light Commercial Pumps	MOVES	0.0063	0.0007	48%	48%	population	0.0030	0.0003
2270006015	Commercial	Diesel Light Commercial Air Compressors	MOVES	0.0145	0.0013	48%	48%	population	0.0069	0.0006
2270006025	Commercial	Diesel Light Commercial Welders	MOVES	0.0080	0.0023	48%	48%	population	0.0039	0.0011
2270006030	Commercial	Diesel Light Commercial Pressure Washer	MOVES	0.0009	0.0001	48%	48%	population	0.0004	0.0001
2270006035	Commercial	Diesel Hydro Power Units	MOVES	0.0006	0.0001	48%	48%	population	0.0003	0.0000
2270007015	Logging	Diesel Logging Equip Fell/Bunch/Skidders	MOVES	0.0017	0.0001	88%	88%	land area	0.0015	0.0001
2270008005	Airport Support	Diesel Airport Support Equipment	EPA	0.0000	0.0000	99%	99%	airport location (1)	0.0000	0.0000
2270010010	Oil Field	Diesel Other Oil Field Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2275001000	Aircraft	Military Aircraft	EPA	0.0038	0.0031	100%	100%	airport location (1)	0.0038	0.0031
2275020000	Aircraft	Commercial Aviation	EPA	0.0000	0.0000	0%	0%	airport location (1)	0.0000	0.0000
2275050000	Aircraft	General Aviation	EPA	0.0027	0.0098	99%	99%	airport location (1)	0.0027	0.0096
2275060000	Aircraft	Air Taxi	EPA	0.0011	0.0023	100%	100%	airport location (1)	0.0011	0.0023
2275070000	Aircraft	Aircraft Auxiliary Power Units	EPA	0.0000	0.0000	100%	100%	airport location (1)	0.0000	0.0000
2280002100	Comm. Mar.	Commercial Marine Vessels, Diesel (c1&c2),	LADCO	0.0000	0.0000	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2280002200	Comm. Mar.	Comm. Mar. Vessels, Diesel (c1&c2), Underway	LADCO	0.5601	0.0054	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2280003100	Comm. Mar.	Comm. Mar. Vessels, Residual (c3), Port	LADCO	0.0000	0.0000	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2280003200	Comm. Mar.	Comm. Mar. Vessels, Residual (c3), Underway	LADCO	0.0000	0.0000	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2282005010	Pleasure	2-Stroke Outboards	MOVES	0.0378	0.4761	100%	100%	water area (2)	0.0378	0.4761
2282005015	Pleasure	2-Stroke Personal Watercraft	MOVES	0.0152	0.1206	19%	19%	water area (2)	0.0029	0.0229
2282010005	Pleasure	4-Stroke Inboards	MOVES	0.1708	0.1842	19%	19%	water area (2)	0.0325	0.0350
2282020005	Pleasure	Diesel Inboards	MOVES	0.1718	0.0079	19%	19%	water area (2)	0.0326	0.0015
2282020010	Pleasure	Diesel Outboards	MOVES	0.0001	0.0000	100%	100%	water area (2)	0.0001	0.0000
2285002006	Railroad	Diesel Line Haul Locomotives, Class I	EPA	0.0347	0.0018	48%	48%	rail links (1)	0.0166	0.0009
2285002007	Railroad	Diesel Line Haul Locomotives, Class II/III Ops.	EPA	0.0540	0.0021	100%	100%	rail links (1)	0.0540	0.0021
2285002015	Railroad	Diesel Railway Maintenance	MOVES	0.0005	0.0001	48%	48%	rail links (1)	0.0002	0.0000
2285004015	Railroad	4-Stroke Gasoline Railway Maintenance	MOVES	0.0000	0.0000	48%	48%	rail links (1)	0.0000	0.0000
2285006015	Railroad	LPG Railway Maintenance	MOVES	0.0000	0.0000	48%	48%	rail links (1)	0.0000	0.0000
ALL (Total)	**ALL (Total)**	**ALL (Total)**		**4.0262**	**3.2874**				**2.0979**	**2.2897**

(1) Allocation based on data from EPA 2011 National Emissions Inventory, ver. 2, for year 2011 and from EPA 2011 Modeling Platform, ver. 6.3, for years 2014, 2020 and 2030.
(2) Allocation based on surface water area from the NMIM2009 files WI_WIB.ALO and WI_WOB.ALO.

Table A7.2. 2014 Nonroad NO_X and VOC Emissions: tons per summer day (tpsd) Sheboygan County and Inland Sheboygan County

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2014 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2014 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2260001010	Recreational	2-Stroke Motorcycles: Off-Road	MOVES	0.0034	0.3954	88%	88%	land area	0.0030	0.3480
2260001020	Recreational	2-Stroke Snowmobiles	MOVES	0.0000	0.0421	88%	88%	land area	0.0000	0.0371
2260001030	Recreational	2-Stroke All Terrain Vehicles	MOVES	0.0049	0.4034	88%	88%	land area	0.0043	0.3550
2260001060	Recreational	2-Stroke Specialty Vehicle Carts	MOVES	0.0008	0.0039	88%	88%	land area	0.0007	0.0034
2260002006	Construction	2-Stroke Tampers/Rammers	MOVES	0.0001	0.0046	48%	48%	population	0.0001	0.0022
2260002009	Construction	2-Stroke Plate Compactors	MOVES	0.0000	0.0002	48%	48%	population	0.0000	0.0001
2260002021	Construction	2-Stroke Paving Equipment	MOVES	0.0000	0.0002	48%	48%	population	0.0000	0.0001
2260002027	Construction	2-Stroke Signal Boards	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2260002039	Construction	2-Stroke Concrete/Industrial Saws	MOVES	0.0003	0.0116	48%	48%	population	0.0001	0.0056
2260002054	Construction	2-Stroke Crushing/Proc. Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2260003030	Industrial	2-Stroke Sweepers/Scrubbers	MOVES	0.0000	0.0001	48%	48%	population	0.0000	0.0001
2260003040	Industrial	2-Stroke Other General Industrial Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2260004015	Lawn/Garden	2-Stroke Rotary Tillers < 6 HP (Residential)	MOVES	0.0001	0.0015	48%	48%	population	0.0000	0.0007
2260004016	Lawn/Garden	2-Stroke Rotary Tillers < 6 HP (Commercial)	MOVES	0.0001	0.0026	48%	48%	population	0.0001	0.0013
2260004020	Lawn/Garden	2-Stroke Chain Saws < 6 HP (Residential)	MOVES	0.0004	0.0139	48%	48%	population	0.0002	0.0067
2260004021	Lawn/Garden	2-Stroke Chain Saws < 6 HP (Commercial)	MOVES	0.0007	0.0308	48%	48%	population	0.0003	0.0148
2260004025	Lawn/Garden	2-Stroke Trimmers/Edgers/Brush Cutters (Res.)	MOVES	0.0011	0.0308	48%	48%	population	0.0005	0.0148
2260004026	Lawn/Garden	2-Stroke Trimmers/Edgers/Brush Cutters (Com.)	MOVES	0.0012	0.0309	48%	48%	population	0.0006	0.0148
2260004030	Lawn/Garden	2-Stroke Leafblowers/Vacuums (Residential)	MOVES	0.0007	0.0212	48%	48%	population	0.0003	0.0102
2260004031	Lawn/Garden	2-Stroke Leafblowers/Vacuums (Commercial)	MOVES	0.0011	0.0310	48%	48%	population	0.0005	0.0149
2260004035	Lawn/Garden	2-Stroke Snowblowers (Residential)	MOVES	0.0000	0.0028	48%	48%	population	0.0000	0.0013
2260004036	Lawn/Garden	2-Stroke Snowblowers (Commercial)	MOVES	0.0000	0.0002	48%	48%	population	0.0000	0.0001
2260004071	Lawn/Garden	2-Stroke Commercial Turf Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2260005035	Agriculture	2-Stroke Sprayers	MOVES	0.0000	0.0007	88%	88%	land area	0.0000	0.0007
2260006005	Commercial	2-Stroke Light Commercial Generator Set	MOVES	0.0000	0.0012	48%	48%	population	0.0000	0.0006
2260006010	Commercial	2-Stroke Light Commercial Pumps	MOVES	0.0003	0.0080	48%	48%	population	0.0001	0.0038
2260006015	Commercial	2-Stroke Light Commercial Air Compressors	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2260006035	Commercial	2-Stroke Hydro Power Units	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2260007005	Logging	2-Stroke Logging Equipment Chain Saws > 6 HP	MOVES	0.0000	0.0010	88%	88%	land area	0.0000	0.0009
2265001010	Recreational	4-Stroke Motorcycles: Off-Road	MOVES	0.0022	0.0186	88%	88%	land area	0.0019	0.0164
2265001030	Recreational	4-Stroke All Terrain Vehicles	MOVES	0.0186	0.2170	88%	88%	land area	0.0164	0.1910
2265001050	Recreational	4-Stroke Golf Carts	MOVES	0.0087	0.0281	88%	88%	land area	0.0076	0.0248
2265001060	Recreational	4-Stroke Specialty Vehicle Carts	MOVES	0.0010	0.0039	88%	88%	land area	0.0008	0.0034
2265002003	Construction	4-Stroke Asphalt Pavers	MOVES	0.0001	0.0002	48%	48%	population	0.0000	0.0001

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2014 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2014 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2265002006	Construction	4-Stroke Tampers/Rammers	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2265002009	Construction	4-Stroke Plate Compactors	MOVES	0.0002	0.0007	48%	48%	population	0.0001	0.0003
2265002015	Construction	4-Stroke Rollers	MOVES	0.0001	0.0004	48%	48%	population	0.0001	0.0002
2265002021	Construction	4-Stroke Paving Equipment	MOVES	0.0003	0.0014	48%	48%	population	0.0002	0.0007
2265002024	Construction	4-Stroke Surfacing Equipment	MOVES	0.0001	0.0004	48%	48%	population	0.0001	0.0002
2265002027	Construction	4-Stroke Signal Boards	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2265002030	Construction	4-Stroke Trenchers	MOVES	0.0003	0.0008	48%	48%	population	0.0001	0.0004
2265002033	Construction	4-Stroke Bore/Drill Rigs	MOVES	0.0002	0.0005	48%	48%	population	0.0001	0.0002
2265002039	Construction	4-Stroke Concrete/Industrial Saws	MOVES	0.0005	0.0016	48%	48%	population	0.0003	0.0008
2265002042	Construction	4-Stroke Cement & Mortar Mixers	MOVES	0.0004	0.0023	48%	48%	population	0.0002	0.0011
2265002045	Construction	4-Stroke Cranes	MOVES	0.0001	0.0001	48%	48%	population	0.0000	0.0000
2265002054	Construction	4-Stroke Crushing/Proc. Equipment	MOVES	0.0000	0.0001	48%	48%	population	0.0000	0.0001
2265002057	Construction	4-Stroke Rough Terrain Forklifts	MOVES	0.0001	0.0001	48%	48%	population	0.0000	0.0000
2265002060	Construction	4-Stroke Rubber Tire Loaders	MOVES	0.0001	0.0001	48%	48%	population	0.0000	0.0000
2265002066	Construction	4-Stroke Tractors/Loaders/Backhoes	MOVES	0.0002	0.0005	48%	48%	population	0.0001	0.0003
2265002072	Construction	4-Stroke Skid Steer Loaders	MOVES	0.0003	0.0004	48%	48%	population	0.0001	0.0002
2265002078	Construction	4-Stroke Dumpers/Tenders	MOVES	0.0001	0.0004	48%	48%	population	0.0000	0.0002
2265002081	Construction	4-Stroke Other Construction Equipment	MOVES	0.0001	0.0001	48%	48%	population	0.0001	0.0000
2265003010	Industrial	4-Stroke Aerial Lifts	MOVES	0.0026	0.0027	48%	48%	population	0.0012	0.0013
2265003020	Industrial	4-Stroke Forklifts	MOVES	0.0035	0.0021	48%	48%	population	0.0017	0.0010
2265003030	Industrial	4-Stroke Sweepers/Scrubbers	MOVES	0.0005	0.0009	48%	48%	population	0.0003	0.0004
2265003040	Industrial	4-Stroke Other General Industrial Equipment	MOVES	0.0009	0.0031	48%	48%	population	0.0004	0.0015
2265003050	Industrial	4-Stroke Other Material Handling Equipment	MOVES	0.0002	0.0002	48%	48%	population	0.0001	0.0001
2265003060	Industrial	4-Stroke Industrial AC/Refrigeration	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2265003070	Industrial	4-Stroke Terminal Tractors	MOVES	0.0001	0.0001	48%	48%	population	0.0001	0.0000
2265004010	Lawn/Garden	4-Stroke Lawn mowers (Residential)	MOVES	0.0098	0.1070	48%	48%	population	0.0047	0.0514
2265004011	Lawn/Garden	4-Stroke Lawn mowers (Commercial)	MOVES	0.0027	0.0175	48%	48%	population	0.0013	0.0084
2265004015	Lawn/Garden	4-Stroke Rotary Tillers < 6 HP (Residential)	MOVES	0.0008	0.0089	48%	48%	population	0.0004	0.0043
2265004016	Lawn/Garden	4-Stroke Rotary Tillers < 6 HP (Commercial)	MOVES	0.0016	0.0128	48%	48%	population	0.0008	0.0061
2265004025	Lawn/Garden	4-Stroke Trimmers/Edgers/Brush Cutters (Res.)	MOVES	0.0001	0.0006	48%	48%	population	0.0000	0.0003
2265004026	Lawn/Garden	4-Stroke Trimmers/Edgers/Brush Cutters (Com.)	MOVES	0.0001	0.0005	48%	48%	population	0.0000	0.0002
2265004030	Lawn/Garden	4-Stroke Leafblowers/Vacuums (Residential)	MOVES	0.0001	0.0010	48%	48%	population	0.0000	0.0005
2265004031	Lawn/Garden	4-Stroke Leafblowers/Vacuums (Commercial)	MOVES	0.0033	0.0110	48%	48%	population	0.0016	0.0053
2265004035	Lawn/Garden	4-Stroke Snowblowers (Residential)	MOVES	0.0000	0.0061	48%	48%	population	0.0000	0.0029
2265004036	Lawn/Garden	4-Stroke Snowblowers (Commercial)	MOVES	0.0000	0.0004	48%	48%	population	0.0000	0.0002
2265004040	Lawn/Garden	4-Stroke Rear Engine Riding Mowers (Res.)	MOVES	0.0021	0.0141	48%	48%	population	0.0010	0.0068
2265004041	Lawn/Garden	4-Stroke Rear Engine Riding Mowers (Comm.)	MOVES	0.0003	0.0011	48%	48%	population	0.0002	0.0005
2265004046	Lawn/Garden	4-Stroke Front Mowers (Commercial)	MOVES	0.0005	0.0019	48%	48%	population	0.0003	0.0009

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				NOx	VOC	NOx	VOC		NOx	VOC
2265004051	Lawn/Garden	4-Stroke Shredders < 6 HP (Commercial)	MOVES	0.0002	0.0016	48%	48%	population	0.0001	0.0007
2265004055	Lawn/Garden	4-Stroke Lawn & Garden Tractors (Residential)	MOVES	0.0284	0.1379	48%	48%	population	0.0136	0.0662
2265004056	Lawn/Garden	4-Stroke Lawn & Garden Tractors (Commercial)	MOVES	0.0044	0.0140	48%	48%	population	0.0021	0.0067
2265004066	Lawn/Garden	4-Stroke Chippers/Stump Grinders (Comm.)	MOVES	0.0008	0.0016	48%	48%	population	0.0004	0.0008
2265004071	Lawn/Garden	4-Stroke Commercial Turf Equipment (Comm.)	MOVES	0.0135	0.0423	48%	48%	population	0.0065	0.0203
2265004075	Lawn/Garden	4-Stroke Other Lawn & Garden Equip. (Res.)	MOVES	0.0011	0.0078	48%	48%	population	0.0005	0.0037
2265004076	Lawn/Garden	4-Stroke Other Lawn & Garden Equip. (Com.)	MOVES	0.0006	0.0042	48%	48%	population	0.0003	0.0020
2265005010	Agriculture	4-Stroke 2-Wheel Tractors	MOVES	0.0001	0.0002	88%	88%	land area	0.0001	0.0002
2265005015	Agriculture	4-Stroke Agricultural Tractors	MOVES	0.0004	0.0003	88%	88%	land area	0.0003	0.0003
2265005020	Agriculture	4-Stroke Combines	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2265005025	Agriculture	4-Stroke Balers	MOVES	0.0009	0.0011	88%	88%	land area	0.0008	0.0010
2265005030	Agriculture	4-Stroke Agricultural Mowers	MOVES	0.0001	0.0002	88%	88%	land area	0.0001	0.0002
2265005035	Agriculture	4-Stroke Sprayers	MOVES	0.0014	0.0037	88%	88%	land area	0.0013	0.0033
2265005040	Agriculture	4-Stroke Tillers > 5 HP	MOVES	0.0022	0.0098	88%	88%	land area	0.0019	0.0087
2265005045	Agriculture	4-Stroke Swathers	MOVES	0.0014	0.0015	88%	88%	land area	0.0012	0.0013
2265005055	Agriculture	4-Stroke Other Agricultural Equipment	MOVES	0.0016	0.0017	88%	88%	land area	0.0014	0.0015
2265005060	Agriculture	4-Stroke Irrigation Sets	MOVES	0.0005	0.0003	88%	88%	land area	0.0004	0.0003
2265006005	Commercial	4-Stroke Light Commercial Generator Set	MOVES	0.0092	0.0501	48%	48%	population	0.0044	0.0240
2265006010	Commercial	4-Stroke Light Commercial Pumps	MOVES	0.0021	0.0079	48%	48%	population	0.0010	0.0038
2265006015	Commercial	4-Stroke Light Commercial Air Compressors	MOVES	0.0011	0.0031	48%	48%	population	0.0005	0.0015
2265006025	Commercial	4-Stroke Light Commercial Welders	MOVES	0.0022	0.0068	48%	48%	population	0.0011	0.0033
2265006030	Commercial	4-Stroke Light Commercial Pressure Wash	MOVES	0.0034	0.0172	48%	48%	population	0.0016	0.0083
2265006035	Commercial	4-Stroke Hydro Power Units	MOVES	0.0001	0.0005	48%	48%	population	0.0001	0.0002
2265007010	Logging	4-Stroke Logging Equipment Shredders > 6 HP	MOVES	0.0001	0.0003	88%	88%	land area	0.0001	0.0003
2265007015	Logging	4-Stroke Logging Equipment Skidders	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2265008005	Airport Support	4-Stroke Airport Support Equipment	EPA	0.0000	0.0000	100%	100%	airport location (1)	0.0000	0.0000
2265010010	Oil Field	4-Stroke Other Oil Field Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2267001060	Recreational	LPG Specialty Vehicle Carts	MOVES	0.0002	0.0000	88%	88%	land area	0.0002	0.0000
2267002003	Construction	LPG Asphalt Pavers	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267002015	Construction	LPG Rollers	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267002021	Construction	LPG Paving Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267002024	Construction	LPG Surfacing Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267002030	Construction	LPG Trenchers	MOVES	0.0001	0.0000	48%	48%	population	0.0001	0.0000
2267002033	Construction	LPG Bore/Drill Rigs	MOVES	0.0001	0.0000	48%	48%	population	0.0001	0.0000
2267002039	Construction	LPG Concrete/Industrial Saws	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267002045	Construction	LPG Cranes	MOVES	0.0001	0.0000	48%	48%	population	0.0000	0.0000
2267002054	Construction	LPG Crushing/Proc. Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267002057	Construction	LPG Rough Terrain Forklifts	MOVES	0.0001	0.0000	48%	48%	population	0.0000	0.0000

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2014 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2014 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2267002060	Construction	LPG Rubber Tire Loaders	MOVES	0.0001	0.0000	48%	48%	population	0.0001	0.0000
2267002066	Construction	LPG Tractors/Loaders/Backhoes	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267002072	Construction	LPG Skid Steer Loaders	MOVES	0.0003	0.0001	48%	48%	population	0.0001	0.0000
2267002081	Construction	LPG Other Construction Equipment	MOVES	0.0001	0.0000	48%	48%	population	0.0001	0.0000
2267003010	Industrial	LPG Aerial Lifts	MOVES	0.0067	0.0014	48%	48%	population	0.0032	0.0007
2267003020	Industrial	LPG Forklifts	MOVES	0.2244	0.0422	48%	48%	population	0.1077	0.0203
2267003030	Industrial	LPG Sweepers/Scrubbers	MOVES	0.0013	0.0002	48%	48%	population	0.0006	0.0001
2267003040	Industrial	LPG Other General Industrial Equipment	MOVES	0.0004	0.0001	48%	48%	population	0.0002	0.0000
2267003050	Industrial	LPG Other Material Handling Equipment	MOVES	0.0003	0.0001	48%	48%	population	0.0002	0.0000
2267003070	Industrial	LPG Terminal Tractors	MOVES	0.0006	0.0001	48%	48%	population	0.0003	0.0000
2267004066	Lawn/Garden	LPG Chippers/Stump Grinders (Commercial)	MOVES	0.0004	0.0001	48%	48%	population	0.0002	0.0000
2267005055	Agriculture	LPG Other Agricultural Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2267005060	Agriculture	LPG Irrigation Sets	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2267006005	Commercial	LPG Light Commercial Generator Sets	MOVES	0.0049	0.0008	48%	48%	population	0.0024	0.0004
2267006010	Commercial	LPG Light Commercial Pumps	MOVES	0.0007	0.0001	48%	48%	population	0.0004	0.0001
2267006015	Commercial	LPG Light Commercial Air Compressors	MOVES	0.0006	0.0001	48%	48%	population	0.0003	0.0000
2267006025	Commercial	LPG Light Commercial Welders	MOVES	0.0007	0.0002	48%	48%	population	0.0004	0.0001
2267006030	Commercial	LPG Light Commercial Pressure Washers	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267006035	Commercial	LPG Hydro Power Units	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2267008005	Airport Support	LPG Airport Support Equipment	EPA	0.0000	0.0000	100%	100%	airport location (1)	0.0000	0.0000
2268002081	Construction	CNG Other Construction Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2268003020	Industrial	CNG Forklifts	MOVES	0.0161	0.0108	48%	48%	population	0.0077	0.0052
2268003030	Industrial	CNG Sweepers/Scrubbers	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2268003040	Industrial	CNG Other General Industrial Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2268003060	Industrial	CNG AC/Refrigeration	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2268003070	Industrial	CNG Terminal Tractors	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2268005055	Agriculture	CNG Other Agricultural Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2268005060	Agriculture	CNG Irrigation Sets	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2268006005	Commercial	CNG Light Commercial Generator Sets	MOVES	0.0015	0.0009	48%	48%	population	0.0007	0.0004
2268006010	Commercial	CNG Light Commercial Pumps	MOVES	0.0001	0.0000	48%	48%	population	0.0000	0.0000
2268006015	Commercial	CNG Light Commercial Air Compressors	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2268006020	Commercial	CNG Light Commercial Gas Compressors	MOVES	0.0006	0.0003	48%	48%	population	0.0003	0.0001
2268008005	Airport Support	CNG Airport Support Equipment	EPA	0.0000	0.0000	100%	100%	airport location (1)	0.0000	0.0000
2268010010	Oil Field	CNG Other Oil Field Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2270001060	Recreational	Diesel Specialty Vehicle Carts	MOVES	0.0031	0.0008	88%	88%	land area	0.0028	0.0007
2270002003	Construction	Diesel Pavers	MOVES	0.0072	0.0006	48%	48%	population	0.0034	0.0003
2270002006	Construction	Diesel Tampers/Rammers (unused)	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2270002009	Construction	Diesel Plate Compactors	MOVES	0.0003	0.0000	48%	48%	population	0.0002	0.0000

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				NOx	VOC	NOx	VOC		NOx	VOC
2270002015	Construction	Diesel Rollers	MOVES	0.0195	0.0017	48%	48%	population	0.0094	0.0008
2270002018	Construction	Diesel Scrapers	MOVES	0.0199	0.0014	48%	48%	population	0.0095	0.0007
2270002021	Construction	Diesel Paving Equipment	MOVES	0.0013	0.0001	48%	48%	population	0.0006	0.0001
2270002024	Construction	Diesel Surfacing Equipment	MOVES	0.0010	0.0001	48%	48%	population	0.0005	0.0000
2270002027	Construction	Diesel Signal Boards	MOVES	0.0031	0.0003	48%	48%	population	0.0015	0.0002
2270002030	Construction	Diesel Trenchers	MOVES	0.0111	0.0010	48%	48%	population	0.0053	0.0005
2270002033	Construction	Diesel Bore/Drill Rigs	MOVES	0.0131	0.0011	48%	48%	population	0.0063	0.0005
2270002036	Construction	Diesel Excavators	MOVES	0.0615	0.0056	48%	48%	population	0.0295	0.0027
2270002039	Construction	Diesel Concrete/Industrial Saws	MOVES	0.0008	0.0001	48%	48%	population	0.0004	0.0000
2270002042	Construction	Diesel Cement & Mortar Mixers	MOVES	0.0005	0.0001	48%	48%	population	0.0003	0.0000
2270002045	Construction	Diesel Cranes	MOVES	0.0191	0.0015	48%	48%	population	0.0092	0.0007
2270002048	Construction	Diesel Graders	MOVES	0.0153	0.0014	48%	48%	population	0.0073	0.0007
2270002051	Construction	Diesel Off-highway Trucks	MOVES	0.0638	0.0055	48%	48%	population	0.0306	0.0027
2270002054	Construction	Diesel Crushing/Proc. Equipment	MOVES	0.0038	0.0003	48%	48%	population	0.0018	0.0001
2270002057	Construction	Diesel Rough Terrain Forklifts	MOVES	0.0269	0.0025	48%	48%	population	0.0129	0.0012
2270002060	Construction	Diesel Rubber Tire Loaders	MOVES	0.0919	0.0073	48%	48%	population	0.0441	0.0035
2270002066	Construction	Diesel Tractors/Loaders/Backhoes	MOVES	0.0705	0.0139	48%	48%	population	0.0339	0.0067
2270002069	Construction	Diesel Crawler Tractors	MOVES	0.0742	0.0060	48%	48%	population	0.0356	0.0029
2270002072	Construction	Diesel Skid Steer Loaders	MOVES	0.0519	0.0122	48%	48%	population	0.0249	0.0059
2270002075	Construction	Diesel Off-Highway Tractors	MOVES	0.0105	0.0008	48%	48%	population	0.0050	0.0004
2270002078	Construction	Diesel Dumpers/Tenders	MOVES	0.0002	0.0000	48%	48%	population	0.0001	0.0000
2270002081	Construction	Diesel Other Construction Equipment	MOVES	0.0103	0.0008	48%	48%	population	0.0050	0.0004
2270003010	Industrial	Diesel Aerial Lifts	MOVES	0.0112	0.0028	48%	48%	population	0.0054	0.0013
2270003020	Industrial	Diesel Forklifts	MOVES	0.0735	0.0062	48%	48%	population	0.0353	0.0030
2270003030	Industrial	Diesel Sweepers/Scrubbers	MOVES	0.0413	0.0036	48%	48%	population	0.0198	0.0017
2270003040	Industrial	Diesel Other General Industrial Equipment	MOVES	0.0503	0.0044	48%	48%	population	0.0241	0.0021
2270003050	Industrial	Diesel Other Material Handling Equipment	MOVES	0.0029	0.0005	48%	48%	population	0.0014	0.0002
2270003060	Industrial	Diesel AC/Refrigeration	MOVES	0.0434	0.0032	48%	48%	population	0.0209	0.0016
2270003070	Industrial	Diesel Terminal Tractors	MOVES	0.0441	0.0043	48%	48%	population	0.0212	0.0021
2270004031	Lawn/Garden	Diesel Leafblowers/Vacuums (Commercial)	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2270004036	Lawn/Garden	Diesel Snowblowers (Commercial)	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2270004046	Lawn/Garden	Diesel Front Mowers (Commercial)	MOVES	0.0113	0.0012	48%	48%	population	0.0054	0.0006
2270004056	Lawn/Garden	Diesel Lawn & Garden Tractors (Commercial)	MOVES	0.0023	0.0003	48%	48%	population	0.0011	0.0001
2270004066	Lawn/Garden	Diesel Chippers/Stump Grinders (Commercial)	MOVES	0.0156	0.0015	48%	48%	population	0.0075	0.0007
2270004071	Lawn/Garden	Diesel Commercial Turf Equipment (Comm.)	MOVES	0.0014	0.0001	48%	48%	population	0.0007	0.0001
2270004076	Lawn/Garden	Diesel Other Lawn & Garden Equipment	MOVES	0.0000	0.0000	48%	48%	population	0.0000	0.0000
2270005010	Agriculture	Diesel 2-Wheel Tractors	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2270005015	Agriculture	Diesel Agricultural Tractors	MOVES	0.8713	0.0792	88%	88%	land area	0.7667	0.0697

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2014 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2014 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2270005020	Agriculture	Diesel Combines	MOVES	0.0937	0.0084	88%	88%	land area	0.0824	0.0073
2270005025	Agriculture	Diesel Balers	MOVES	0.0005	0.0001	88%	88%	land area	0.0004	0.0001
2270005030	Agriculture	Diesel Agricultural Mowers	MOVES	0.0001	0.0000	88%	88%	land area	0.0001	0.0000
2270005035	Agriculture	Diesel Sprayers	MOVES	0.0075	0.0009	88%	88%	land area	0.0066	0.0008
2270005040	Agriculture	Diesel Tillers > 6 HP	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2270005045	Agriculture	Diesel Swathers	MOVES	0.0070	0.0008	88%	88%	land area	0.0062	0.0007
2270005055	Agriculture	Diesel Other Agricultural Equipment	MOVES	0.0187	0.0018	88%	88%	land area	0.0164	0.0016
2270005060	Agriculture	Diesel Irrigation Sets	MOVES	0.0113	0.0010	88%	88%	land area	0.0100	0.0009
2270006005	Commercial	Diesel Light Commercial Generator Sets	MOVES	0.0252	0.0028	48%	48%	population	0.0121	0.0014
2270006010	Commercial	Diesel Light Commercial Pumps	MOVES	0.0059	0.0006	48%	48%	population	0.0028	0.0003
2270006015	Commercial	Diesel Light Commercial Air Compressors	MOVES	0.0126	0.0011	48%	48%	population	0.0061	0.0005
2270006025	Commercial	Diesel Light Commercial Welders	MOVES	0.0077	0.0019	48%	48%	population	0.0037	0.0009
2270006030	Commercial	Diesel Light Commercial Pressure Washer	MOVES	0.0008	0.0001	48%	48%	population	0.0004	0.0000
2270006035	Commercial	Diesel Hydro Power Units	MOVES	0.0006	0.0001	48%	48%	population	0.0003	0.0000
2270007015	Logging	Diesel Logging Equip Fell/Bunch/Skidders	MOVES	0.0011	0.0001	88%	88%	land area	0.0010	0.0001
2270008005	Airport Support	Diesel Airport Support Equipment	EPA	0.0000	0.0000	100%	100%	airport location (1)	0.0000	0.0000
2270010010	Oil Field	Diesel Other Oil Field Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2275001000	Aircraft	Military Aircraft	EPA	0.0020	0.0018	100%	100%	airport location (1)	0.0020	0.0018
2275020000	Aircraft	Commercial Aviation	EPA	0.0000	0.0000	0%	0%	airport location (1)	0.0000	0.0000
2275050000	Aircraft	General Aviation	EPA	0.0041	0.0108	99%	99%	airport location (1)	0.0040	0.0107
2275060000	Aircraft	Air Taxi	EPA	0.0017	0.0026	100%	100%	airport location (1)	0.0017	0.0026
2275070000	Aircraft	Aircraft Auxiliary Power Units	EPA	0.0000	0.0000	100%	100%	airport location (1)	0.0000	0.0000
2280002100	Comm. Mar.	Commercial Marine Vessels, Diesel (c1&c2),	LADCO	0.0000	0.0000	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2280002200	Comm. Mar.	Comm. Mar. Vessels, Diesel (c1&c2), Underway	LADCO	0.5043	0.0049	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2280003100	Comm. Mar.	Comm. Mar. Vessels, Residual (c3), Port	LADCO	0.0000	0.0000	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2280003200	Comm. Mar.	Comm. Mar. Vessels, Residual (c3), Underway	LADCO	0.0000	0.0000	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2282005010	Pleasure	2-Stroke Outboards	MOVES	0.0416	0.3665	100%	100%	water area (2)	0.0416	0.3665
2282005015	Pleasure	2-Stroke Personal Watercraft	MOVES	0.0177	0.0771	19%	19%	water area (2)	0.0034	0.0146
2282010005	Pleasure	4-Stroke Inboards	MOVES	0.1563	0.1666	19%	19%	water area (2)	0.0297	0.0317
2282020005	Pleasure	Diesel Inboards	MOVES	0.1712	0.0086	19%	19%	water area (2)	0.0325	0.0016
2282020010	Pleasure	Diesel Outboards	MOVES	0.0001	0.0000	100%	100%	water area (2)	0.0001	0.0000
2285002006	Railroad	Diesel Line Haul Locomotives, Class I	EPA	0.0342	0.0017	48%	48%	rail links (1)	0.0163	0.0008
2285002007	Railroad	Diesel Line Haul Locomotives, Class II/III Ops.	EPA	0.0532	0.0020	100%	100%	rail links (1)	0.0532	0.0020
2285002015	Railroad	Diesel Railway Maintenance	MOVES	0.0004	0.0001	48%	48%	rail links (1)	0.0002	0.0000
2285004015	Railroad	4-Stroke Gasoline Railway Maintenance	MOVES	0.0000	0.0000	48%	48%	rail links (1)	0.0000	0.0000
2285006015	Railroad	LPG Railway Maintenance	MOVES	0.0000	0.0000	48%	48%	rail links (1)	0.0000	0.0000
ALL (Total)	**ALL (Total)**	**ALL (Total)**		**3.3436**	**2.7147**				**1.7411**	**1.9175**

(1) Allocation based on data from EPA 2011 National Emissions Inventory, ver. 2, for year 2011 and from EPA 2011 Modeling Platform, ver. 6.3, for years 2014, 2020 and 2030.
(2) Allocation based on surface water area from the NMIM2009 files WI_WIB.ALO and WI_WOB.ALO.

Table A7.3. 2020 Nonroad NO_X and VOC Emissions: tons per summer day (tpsd) Sheboygan County and the Inland Sheboygan County Area

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2020 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2020 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2260001010	Recreational	2-Stroke Motorcycles: Off-Road	MOVES	0.0041	0.3342	88%	88%	land area	0.0036	0.2941
2260001020	Recreational	2-Stroke Snowmobiles	MOVES	0.0000	0.0364	88%	88%	land area	0.0000	0.0320
2260001030	Recreational	2-Stroke All Terrain Vehicles	MOVES	0.0060	0.1549	88%	88%	land area	0.0053	0.1363
2260001060	Recreational	2-Stroke Specialty Vehicle Carts	MOVES	0.0006	0.0030	88%	88%	land area	0.0005	0.0027
2260002006	Construction	2-Stroke Tampers/Rammers	MOVES	0.0001	0.0047	49%	49%	population	0.0001	0.0023
2260002009	Construction	2-Stroke Plate Compactors	MOVES	0.0000	0.0002	49%	49%	population	0.0000	0.0001
2260002021	Construction	2-Stroke Paving Equipment	MOVES	0.0000	0.0002	49%	49%	population	0.0000	0.0001
2260002027	Construction	2-Stroke Signal Boards	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2260002039	Construction	2-Stroke Concrete/Industrial Saws	MOVES	0.0003	0.0118	49%	49%	population	0.0001	0.0058
2260002054	Construction	2-Stroke Crushing/Proc. Equipment	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2260003030	Industrial	2-Stroke Sweepers/Scrubbers	MOVES	0.0000	0.0001	49%	49%	population	0.0000	0.0000
2260003040	Industrial	2-Stroke Other General Industrial Equipment	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2260004015	Lawn/Garden	2-Stroke Rotary Tillers < 6 HP (Residential)	MOVES	0.0001	0.0016	49%	49%	population	0.0000	0.0008
2260004016	Lawn/Garden	2-Stroke Rotary Tillers < 6 HP (Commercial)	MOVES	0.0001	0.0029	49%	49%	population	0.0001	0.0014
2260004020	Lawn/Garden	2-Stroke Chain Saws < 6 HP (Residential)	MOVES	0.0004	0.0153	49%	49%	population	0.0002	0.0075
2260004021	Lawn/Garden	2-Stroke Chain Saws < 6 HP (Commercial)	MOVES	0.0008	0.0339	49%	49%	population	0.0004	0.0166
2260004025	Lawn/Garden	2-Stroke Trimmers/Edgers/Brush Cutters (Res.)	MOVES	0.0012	0.0322	49%	49%	population	0.0006	0.0158
2260004026	Lawn/Garden	2-Stroke Trimmers/Edgers/Brush Cutters (Com.)	MOVES	0.0013	0.0340	49%	49%	population	0.0006	0.0167
2260004030	Lawn/Garden	2-Stroke Leafblowers/Vacuums (Residential)	MOVES	0.0008	0.0221	49%	49%	population	0.0004	0.0108
2260004031	Lawn/Garden	2-Stroke Leafblowers/Vacuums (Commercial)	MOVES	0.0012	0.0341	49%	49%	population	0.0006	0.0167
2260004035	Lawn/Garden	2-Stroke Snowblowers (Residential)	MOVES	0.0000	0.0020	49%	49%	population	0.0000	0.0010
2260004036	Lawn/Garden	2-Stroke Snowblowers (Commercial)	MOVES	0.0000	0.0001	49%	49%	population	0.0000	0.0001
2260004071	Lawn/Garden	2-Stroke Commercial Turf Equipment	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2260005035	Agriculture	2-Stroke Sprayers	MOVES	0.0000	0.0008	88%	88%	land area	0.0000	0.0007
2260006005	Commercial	2-Stroke Light Commercial Generator Set	MOVES	0.0000	0.0013	49%	49%	population	0.0000	0.0007
2260006010	Commercial	2-Stroke Light Commercial Pumps	MOVES	0.0003	0.0091	49%	49%	population	0.0002	0.0045
2260006015	Commercial	2-Stroke Light Commercial Air Compressors	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2260006035	Commercial	2-Stroke Hydro Power Units	MOVES	0.0000	0.0001	49%	49%	population	0.0000	0.0000
2260007005	Logging	2-Stroke Logging Equipment Chain Saws > 6 HP	MOVES	0.0000	0.0011	88%	88%	land area	0.0000	0.0010
2265001010	Recreational	4-Stroke Motorcycles: Off-Road	MOVES	0.0022	0.0178	88%	88%	land area	0.0020	0.0156
2265001030	Recreational	4-Stroke All Terrain Vehicles	MOVES	0.0171	0.2025	88%	88%	land area	0.0151	0.1782
2265001050	Recreational	4-Stroke Golf Carts	MOVES	0.0084	0.0284	88%	88%	land area	0.0074	0.0250
2265001060	Recreational	4-Stroke Specialty Vehicle Carts	MOVES	0.0008	0.0029	88%	88%	land area	0.0007	0.0026
2265002003	Construction	4-Stroke Asphalt Pavers	MOVES	0.0001	0.0002	49%	49%	population	0.0000	0.0001

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2020 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2020 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2265002006	Construction	4-Stroke Tampers/Rammers	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2265002009	Construction	4-Stroke Plate Compactors	MOVES	0.0001	0.0006	49%	49%	population	0.0001	0.0003
2265002015	Construction	4-Stroke Rollers	MOVES	0.0001	0.0004	49%	49%	population	0.0001	0.0002
2265002021	Construction	4-Stroke Paving Equipment	MOVES	0.0003	0.0012	49%	49%	population	0.0001	0.0006
2265002024	Construction	4-Stroke Surfacing Equipment	MOVES	0.0001	0.0004	49%	49%	population	0.0001	0.0002
2265002027	Construction	4-Stroke Signal Boards	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2265002030	Construction	4-Stroke Trenchers	MOVES	0.0002	0.0007	49%	49%	population	0.0001	0.0004
2265002033	Construction	4-Stroke Bore/Drill Rigs	MOVES	0.0001	0.0004	49%	49%	population	0.0001	0.0002
2265002039	Construction	4-Stroke Concrete/Industrial Saws	MOVES	0.0005	0.0016	49%	49%	population	0.0002	0.0008
2265002042	Construction	4-Stroke Cement & Mortar Mixers	MOVES	0.0002	0.0016	49%	49%	population	0.0001	0.0008
2265002045	Construction	4-Stroke Cranes	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2265002054	Construction	4-Stroke Crushing/Proc. Equipment	MOVES	0.0000	0.0001	49%	49%	population	0.0000	0.0001
2265002057	Construction	4-Stroke Rough Terrain Forklifts	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2265002060	Construction	4-Stroke Rubber Tire Loaders	MOVES	0.0001	0.0000	49%	49%	population	0.0000	0.0000
2265002066	Construction	4-Stroke Tractors/Loaders/Backhoes	MOVES	0.0002	0.0005	49%	49%	population	0.0001	0.0002
2265002072	Construction	4-Stroke Skid Steer Loaders	MOVES	0.0002	0.0003	49%	49%	population	0.0001	0.0001
2265002078	Construction	4-Stroke Dumpers/Tenders	MOVES	0.0000	0.0003	49%	49%	population	0.0000	0.0001
2265002081	Construction	4-Stroke Other Construction Equipment	MOVES	0.0001	0.0000	49%	49%	population	0.0000	0.0000
2265003010	Industrial	4-Stroke Aerial Lifts	MOVES	0.0010	0.0010	49%	49%	population	0.0005	0.0005
2265003020	Industrial	4-Stroke Forklifts	MOVES	0.0006	0.0003	49%	49%	population	0.0003	0.0002
2265003030	Industrial	4-Stroke Sweepers/Scrubbers	MOVES	0.0002	0.0003	49%	49%	population	0.0001	0.0002
2265003040	Industrial	4-Stroke Other General Industrial Equipment	MOVES	0.0003	0.0013	49%	49%	population	0.0002	0.0006
2265003050	Industrial	4-Stroke Other Material Handling Equipment	MOVES	0.0000	0.0001	49%	49%	population	0.0000	0.0000
2265003060	Industrial	4-Stroke Industrial AC/Refrigeration	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2265003070	Industrial	4-Stroke Terminal Tractors	MOVES	0.0001	0.0000	49%	49%	population	0.0000	0.0000
2265004010	Lawn/Garden	4-Stroke Lawn mowers (Residential)	MOVES	0.0080	0.0746	49%	49%	population	0.0039	0.0366
2265004011	Lawn/Garden	4-Stroke Lawn mowers (Commercial)	MOVES	0.0028	0.0180	49%	49%	population	0.0014	0.0088
2265004015	Lawn/Garden	4-Stroke Rotary Tillers < 6 HP (Residential)	MOVES	0.0007	0.0064	49%	49%	population	0.0003	0.0031
2265004016	Lawn/Garden	4-Stroke Rotary Tillers < 6 HP (Commercial)	MOVES	0.0014	0.0102	49%	49%	population	0.0007	0.0050
2265004025	Lawn/Garden	4-Stroke Trimmers/Edgers/Brush Cutters (Res.)	MOVES	0.0000	0.0005	49%	49%	population	0.0000	0.0002
2265004026	Lawn/Garden	4-Stroke Trimmers/Edgers/Brush Cutters (Com.)	MOVES	0.0001	0.0005	49%	49%	population	0.0000	0.0002
2265004030	Lawn/Garden	4-Stroke Leafblowers/Vacuums (Residential)	MOVES	0.0001	0.0008	49%	49%	population	0.0000	0.0004
2265004031	Lawn/Garden	4-Stroke Leafblowers/Vacuums (Commercial)	MOVES	0.0027	0.0113	49%	49%	population	0.0013	0.0055
2265004035	Lawn/Garden	4-Stroke Snowblowers (Residential)	MOVES	0.0000	0.0048	49%	49%	population	0.0000	0.0023
2265004036	Lawn/Garden	4-Stroke Snowblowers (Commercial)	MOVES	0.0000	0.0003	49%	49%	population	0.0000	0.0001
2265004040	Lawn/Garden	4-Stroke Rear Engine Riding Mowers (Res.)	MOVES	0.0016	0.0119	49%	49%	population	0.0008	0.0058
2265004041	Lawn/Garden	4-Stroke Rear Engine Riding Mowers (Comm.)	MOVES	0.0003	0.0011	49%	49%	population	0.0001	0.0006
2265004046	Lawn/Garden	4-Stroke Front Mowers (Commercial)	MOVES	0.0004	0.0015	49%	49%	population	0.0002	0.0007

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2020 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2020 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2265004051	Lawn/Garden	4-Stroke Shredders < 6 HP (Commercial)	MOVES	0.0002	0.0012	49%	49%	population	0.0001	0.0006
2265004055	Lawn/Garden	4-Stroke Lawn & Garden Tractors (Residential)	MOVES	0.0209	0.1179	49%	49%	population	0.0102	0.0578
2265004056	Lawn/Garden	4-Stroke Lawn & Garden Tractors (Commercial)	MOVES	0.0041	0.0144	49%	49%	population	0.0020	0.0070
2265004066	Lawn/Garden	4-Stroke Chippers/Stump Grinders (Comm.)	MOVES	0.0007	0.0016	49%	49%	population	0.0003	0.0008
2265004071	Lawn/Garden	4-Stroke Commercial Turf Equipment (Comm.)	MOVES	0.0133	0.0430	49%	49%	population	0.0065	0.0210
2265004075	Lawn/Garden	4-Stroke Other Lawn & Garden Equip. (Res.)	MOVES	0.0008	0.0057	49%	49%	population	0.0004	0.0028
2265004076	Lawn/Garden	4-Stroke Other Lawn & Garden Equip. (Com.)	MOVES	0.0005	0.0031	49%	49%	population	0.0002	0.0015
2265005010	Agriculture	4-Stroke 2-Wheel Tractors	MOVES	0.0001	0.0002	88%	88%	land area	0.0001	0.0002
2265005015	Agriculture	4-Stroke Agricultural Tractors	MOVES	0.0002	0.0003	88%	88%	land area	0.0002	0.0002
2265005020	Agriculture	4-Stroke Combines	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2265005025	Agriculture	4-Stroke Balers	MOVES	0.0006	0.0008	88%	88%	land area	0.0006	0.0007
2265005030	Agriculture	4-Stroke Agricultural Mowers	MOVES	0.0001	0.0002	88%	88%	land area	0.0000	0.0002
2265005035	Agriculture	4-Stroke Sprayers	MOVES	0.0011	0.0028	88%	88%	land area	0.0010	0.0025
2265005040	Agriculture	4-Stroke Tillers > 5 HP	MOVES	0.0021	0.0082	88%	88%	land area	0.0018	0.0072
2265005045	Agriculture	4-Stroke Swathers	MOVES	0.0010	0.0011	88%	88%	land area	0.0009	0.0010
2265005055	Agriculture	4-Stroke Other Agricultural Equipment	MOVES	0.0012	0.0013	88%	88%	land area	0.0010	0.0011
2265005060	Agriculture	4-Stroke Irrigation Sets	MOVES	0.0004	0.0003	88%	88%	land area	0.0003	0.0002
2265006005	Commercial	4-Stroke Light Commercial Generator Set	MOVES	0.0072	0.0429	49%	49%	population	0.0036	0.0210
2265006010	Commercial	4-Stroke Light Commercial Pumps	MOVES	0.0019	0.0083	49%	49%	population	0.0010	0.0040
2265006015	Commercial	4-Stroke Light Commercial Air Compressors	MOVES	0.0010	0.0032	49%	49%	population	0.0005	0.0016
2265006025	Commercial	4-Stroke Light Commercial Welders	MOVES	0.0021	0.0072	49%	49%	population	0.0010	0.0035
2265006030	Commercial	4-Stroke Light Commercial Pressure Wash	MOVES	0.0032	0.0168	49%	49%	population	0.0016	0.0083
2265006035	Commercial	4-Stroke Hydro Power Units	MOVES	0.0002	0.0006	49%	49%	population	0.0001	0.0003
2265007010	Logging	4-Stroke Logging Equipment Shredders > 6 HP	MOVES	0.0000	0.0002	88%	88%	land area	0.0000	0.0002
2265007015	Logging	4-Stroke Logging Equipment Skidders	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2265008005	Airport Support	4-Stroke Airport Support Equipment	EPA	0.0000	0.0000	100%	99%	airport location (1)	0.0000	0.0000
2265010010	Oil Field	4-Stroke Other Oil Field Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2267001060	Recreational	LPG Specialty Vehicle Carts	MOVES	0.0002	0.0000	88%	88%	land area	0.0001	0.0000
2267002003	Construction	LPG Asphalt Pavers	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2267002015	Construction	LPG Rollers	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2267002021	Construction	LPG Paving Equipment	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2267002024	Construction	LPG Surfacing Equipment	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2267002030	Construction	LPG Trenchers	MOVES	0.0001	0.0000	49%	49%	population	0.0000	0.0000
2267002033	Construction	LPG Bore/Drill Rigs	MOVES	0.0001	0.0000	49%	49%	population	0.0000	0.0000
2267002039	Construction	LPG Concrete/Industrial Saws	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2267002045	Construction	LPG Cranes	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2267002054	Construction	LPG Crushing/Proc. Equipment	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2267002057	Construction	LPG Rough Terrain Forklifts	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2020 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2020 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2267002060	Construction	LPG Rubber Tire Loaders	MOVES	0.0001	0.0000	49%	49%	population	0.0000	0.0000
2267002066	Construction	LPG Tractors/Loaders/Backhoes	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2267002072	Construction	LPG Skid Steer Loaders	MOVES	0.0001	0.0000	49%	49%	population	0.0001	0.0000
2267002081	Construction	LPG Other Construction Equipment	MOVES	0.0001	0.0000	49%	49%	population	0.0000	0.0000
2267003010	Industrial	LPG Aerial Lifts	MOVES	0.0038	0.0008	49%	49%	population	0.0019	0.0004
2267003020	Industrial	LPG Forklifts	MOVES	0.1373	0.0169	49%	49%	population	0.0673	0.0083
2267003030	Industrial	LPG Sweepers/Scrubbers	MOVES	0.0010	0.0001	49%	49%	population	0.0005	0.0001
2267003040	Industrial	LPG Other General Industrial Equipment	MOVES	0.0003	0.0000	49%	49%	population	0.0002	0.0000
2267003050	Industrial	LPG Other Material Handling Equipment	MOVES	0.0002	0.0000	49%	49%	population	0.0001	0.0000
2267003070	Industrial	LPG Terminal Tractors	MOVES	0.0006	0.0001	49%	49%	population	0.0003	0.0000
2267004066	Lawn/Garden	LPG Chippers/Stump Grinders (Commercial)	MOVES	0.0002	0.0000	49%	49%	population	0.0001	0.0000
2267005055	Agriculture	LPG Other Agricultural Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2267005060	Agriculture	LPG Irrigation Sets	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2267006005	Commercial	LPG Light Commercial Generator Sets	MOVES	0.0037	0.0006	49%	49%	population	0.0018	0.0003
2267006010	Commercial	LPG Light Commercial Pumps	MOVES	0.0005	0.0001	49%	49%	population	0.0002	0.0000
2267006015	Commercial	LPG Light Commercial Air Compressors	MOVES	0.0003	0.0000	49%	49%	population	0.0002	0.0000
2267006025	Commercial	LPG Light Commercial Welders	MOVES	0.0004	0.0001	49%	49%	population	0.0002	0.0000
2267006030	Commercial	LPG Light Commercial Pressure Washers	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2267006035	Commercial	LPG Hydro Power Units	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2267008005	Airport Support	LPG Airport Support Equipment	EPA	0.0000	0.0000	100%	99%	airport location (1)	0.0000	0.0000
2268002081	Construction	CNG Other Construction Equipment	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2268003020	Industrial	CNG Forklifts	MOVES	0.0098	0.0044	49%	49%	population	0.0048	0.0022
2268003030	Industrial	CNG Sweepers/Scrubbers	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2268003040	Industrial	CNG Other General Industrial Equipment	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2268003060	Industrial	CNG AC/Refrigeration	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2268003070	Industrial	CNG Terminal Tractors	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2268005055	Agriculture	CNG Other Agricultural Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2268005060	Agriculture	CNG Irrigation Sets	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2268006005	Commercial	CNG Light Commercial Generator Sets	MOVES	0.0011	0.0007	49%	49%	population	0.0006	0.0003
2268006010	Commercial	CNG Light Commercial Pumps	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2268006015	Commercial	CNG Light Commercial Air Compressors	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2268006020	Commercial	CNG Light Commercial Gas Compressors	MOVES	0.0007	0.0003	49%	49%	population	0.0003	0.0002
2268008005	Airport Support	CNG Airport Support Equipment	EPA	0.0000	0.0000	100%	99%	airport location (1)	0.0000	0.0000
2268010010	Oil Field	CNG Other Oil Field Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2270001060	Recreational	Diesel Specialty Vehicle Carts	MOVES	0.0026	0.0005	88%	88%	land area	0.0023	0.0005
2270002003	Construction	Diesel Pavers	MOVES	0.0036	0.0005	49%	49%	population	0.0018	0.0002
2270002006	Construction	Diesel Tampers/Rammers (unused)	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2270002009	Construction	Diesel Plate Compactors	MOVES	0.0003	0.0000	49%	49%	population	0.0002	0.0000

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2020 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2020 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2270002015	Construction	Diesel Rollers	MOVES	0.0106	0.0013	49%	49%	population	0.0052	0.0006
2270002018	Construction	Diesel Scrapers	MOVES	0.0094	0.0013	49%	49%	population	0.0046	0.0007
2270002021	Construction	Diesel Paving Equipment	MOVES	0.0008	0.0001	49%	49%	population	0.0004	0.0000
2270002024	Construction	Diesel Surfacing Equipment	MOVES	0.0007	0.0001	49%	49%	population	0.0003	0.0000
2270002027	Construction	Diesel Signal Boards	MOVES	0.0031	0.0003	49%	49%	population	0.0015	0.0002
2270002030	Construction	Diesel Trenchers	MOVES	0.0082	0.0007	49%	49%	population	0.0040	0.0003
2270002033	Construction	Diesel Bore/Drill Rigs	MOVES	0.0097	0.0009	49%	49%	population	0.0048	0.0004
2270002036	Construction	Diesel Excavators	MOVES	0.0230	0.0049	49%	49%	population	0.0113	0.0024
2270002039	Construction	Diesel Concrete/Industrial Saws	MOVES	0.0006	0.0000	49%	49%	population	0.0003	0.0000
2270002042	Construction	Diesel Cement & Mortar Mixers	MOVES	0.0004	0.0000	49%	49%	population	0.0002	0.0000
2270002045	Construction	Diesel Cranes	MOVES	0.0097	0.0012	49%	49%	population	0.0048	0.0006
2270002048	Construction	Diesel Graders	MOVES	0.0055	0.0012	49%	49%	population	0.0027	0.0006
2270002051	Construction	Diesel Off-highway Trucks	MOVES	0.0433	0.0047	49%	49%	population	0.0212	0.0023
2270002054	Construction	Diesel Crushing/Proc. Equipment	MOVES	0.0023	0.0002	49%	49%	population	0.0011	0.0001
2270002057	Construction	Diesel Rough Terrain Forklifts	MOVES	0.0144	0.0018	49%	49%	population	0.0071	0.0009
2270002060	Construction	Diesel Rubber Tire Loaders	MOVES	0.0508	0.0060	49%	49%	population	0.0249	0.0029
2270002066	Construction	Diesel Tractors/Loaders/Backhoes	MOVES	0.0486	0.0092	49%	49%	population	0.0238	0.0045
2270002069	Construction	Diesel Crawler Tractors	MOVES	0.0362	0.0052	49%	49%	population	0.0177	0.0025
2270002072	Construction	Diesel Skid Steer Loaders	MOVES	0.0442	0.0084	49%	49%	population	0.0217	0.0041
2270002075	Construction	Diesel Off-Highway Tractors	MOVES	0.0070	0.0006	49%	49%	population	0.0034	0.0003
2270002078	Construction	Diesel Dumpers/Tenders	MOVES	0.0001	0.0000	49%	49%	population	0.0001	0.0000
2270002081	Construction	Diesel Other Construction Equipment	MOVES	0.0065	0.0006	49%	49%	population	0.0032	0.0003
2270003010	Industrial	Diesel Aerial Lifts	MOVES	0.0098	0.0020	49%	49%	population	0.0048	0.0010
2270003020	Industrial	Diesel Forklifts	MOVES	0.0395	0.0058	49%	49%	population	0.0194	0.0028
2270003030	Industrial	Diesel Sweepers/Scrubbers	MOVES	0.0190	0.0029	49%	49%	population	0.0093	0.0014
2270003040	Industrial	Diesel Other General Industrial Equipment	MOVES	0.0264	0.0033	49%	49%	population	0.0129	0.0016
2270003050	Industrial	Diesel Other Material Handling Equipment	MOVES	0.0022	0.0004	49%	49%	population	0.0011	0.0002
2270003060	Industrial	Diesel AC/Refrigeration	MOVES	0.0419	0.0024	49%	49%	population	0.0205	0.0012
2270003070	Industrial	Diesel Terminal Tractors	MOVES	0.0132	0.0039	49%	49%	population	0.0065	0.0019
2270004031	Lawn/Garden	Diesel Leafblowers/Vacuums (Commercial)	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2270004036	Lawn/Garden	Diesel Snowblowers (Commercial)	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2270004046	Lawn/Garden	Diesel Front Mowers (Commercial)	MOVES	0.0114	0.0010	49%	49%	population	0.0056	0.0005
2270004056	Lawn/Garden	Diesel Lawn & Garden Tractors (Commercial)	MOVES	0.0026	0.0003	49%	49%	population	0.0013	0.0001
2270004066	Lawn/Garden	Diesel Chippers/Stump Grinders (Commercial)	MOVES	0.0121	0.0012	49%	49%	population	0.0059	0.0006
2270004071	Lawn/Garden	Diesel Commercial Turf Equipment (Comm.)	MOVES	0.0010	0.0001	49%	49%	population	0.0005	0.0000
2270004076	Lawn/Garden	Diesel Other Lawn & Garden Equipment	MOVES	0.0000	0.0000	49%	49%	population	0.0000	0.0000
2270005010	Agriculture	Diesel 2-Wheel Tractors	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2270005015	Agriculture	Diesel Agricultural Tractors	MOVES	0.5912	0.0589	88%	88%	land area	0.5203	0.0518

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2020 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2020 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2270005020	Agriculture	Diesel Combines	MOVES	0.0674	0.0066	88%	88%	land area	0.0593	0.0058
2270005025	Agriculture	Diesel Balers	MOVES	0.0004	0.0000	88%	88%	land area	0.0004	0.0000
2270005030	Agriculture	Diesel Agricultural Mowers	MOVES	0.0001	0.0000	88%	88%	land area	0.0001	0.0000
2270005035	Agriculture	Diesel Sprayers	MOVES	0.0055	0.0006	88%	88%	land area	0.0049	0.0006
2270005040	Agriculture	Diesel Tillers > 6 HP	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2270005045	Agriculture	Diesel Swathers	MOVES	0.0054	0.0006	88%	88%	land area	0.0048	0.0006
2270005055	Agriculture	Diesel Other Agricultural Equipment	MOVES	0.0130	0.0014	88%	88%	land area	0.0114	0.0012
2270005060	Agriculture	Diesel Irrigation Sets	MOVES	0.0066	0.0007	88%	88%	land area	0.0058	0.0007
2270006005	Commercial	Diesel Light Commercial Generator Sets	MOVES	0.0214	0.0022	49%	49%	population	0.0105	0.0011
2270006010	Commercial	Diesel Light Commercial Pumps	MOVES	0.0049	0.0005	49%	49%	population	0.0024	0.0003
2270006015	Commercial	Diesel Light Commercial Air Compressors	MOVES	0.0084	0.0008	49%	49%	population	0.0041	0.0004
2270006025	Commercial	Diesel Light Commercial Welders	MOVES	0.0070	0.0012	49%	49%	population	0.0034	0.0006
2270006030	Commercial	Diesel Light Commercial Pressure Washer	MOVES	0.0007	0.0001	49%	49%	population	0.0003	0.0000
2270006035	Commercial	Diesel Hydro Power Units	MOVES	0.0004	0.0000	49%	49%	population	0.0002	0.0000
2270007015	Logging	Diesel Logging Equip Fell/Bunch/Skidders	MOVES	0.0003	0.0001	88%	88%	land area	0.0002	0.0001
2270008005	Airport Support	Diesel Airport Support Equipment	EPA	0.0000	0.0000	100%	99%	airport location (1)	0.0000	0.0000
2270010010	Oil Field	Diesel Other Oil Field Equipment	MOVES	0.0000	0.0000	88%	88%	land area	0.0000	0.0000
2275001000	Aircraft	Military Aircraft	EPA	0.0001	0.0005	100%	100%	airport location (1)	0.0001	0.0005
2275020000	Aircraft	Commercial Aviation	EPA	0.0000	0.0000	0%	0%	airport location (1)	0.0000	0.0000
2275050000	Aircraft	General Aviation	EPA	0.0054	0.0118	99%	99%	airport location (1)	0.0054	0.0117
2275060000	Aircraft	Air Taxi	EPA	0.0022	0.0028	100%	100%	airport location (1)	0.0022	0.0028
2275070000	Aircraft	Aircraft Auxiliary Power Units	EPA	0.0000	0.0000	100%	100%	airport location (1)	0.0000	0.0000
2280002100	Comm. Mar.	Commercial Marine Vessels, Diesel (c1&c2),	LADCO	0.0000	0.0000	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2280002200	Comm. Mar.	Comm. Mar. Vessels, Diesel (c1&c2), Underway	LADCO	0.3932	0.0038	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2280003100	Comm. Mar.	Comm. Mar. Vessels, Residual (c3), Port	LADCO	0.0000	0.0000	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2280003200	Comm. Mar.	Comm. Mar. Vessels, Residual (c3), Underway	LADCO	0.0000	0.0000	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2282005010	Pleasure	2-Stroke Outboards	MOVES	0.0448	0.2088	100%	100%	water area (2)	0.0448	0.2088
2282005015	Pleasure	2-Stroke Personal Watercraft	MOVES	0.0207	0.0319	19%	19%	water area (2)	0.0039	0.0061
2282010005	Pleasure	4-Stroke Inboards	MOVES	0.1221	0.1340	19%	19%	water area (2)	0.0232	0.0255
2282020005	Pleasure	Diesel Inboards	MOVES	0.1669	0.0099	19%	19%	water area (2)	0.0317	0.0019
2282020010	Pleasure	Diesel Outboards	MOVES	0.0001	0.0000	100%	100%	water area (2)	0.0001	0.0000
2285002006	Railroad	Diesel Line Haul Locomotives, Class I	EPA	0.0327	0.0016	48%	48%	rail links (1)	0.0156	0.0008
2285002007	Railroad	Diesel Line Haul Locomotives, Class II/III Ops.	EPA	0.0508	0.0019	100%	100%	rail links (1)	0.0508	0.0019
2285002015	Railroad	Diesel Railway Maintenance	MOVES	0.0003	0.0001	48%	48%	rail links (1)	0.0001	0.0000
2285004015	Railroad	4-Stroke Gasoline Railway Maintenance	MOVES	0.0000	0.0000	48%	48%	rail links (1)	0.0000	0.0000
2285006015	Railroad	LPG Railway Maintenance	MOVES	0.0000	0.0000	48%	48%	rail links (1)	0.0000	0.0000
ALL (Total)	**ALL (Total)**	**ALL (Total)**		**2.3853**	**2.0006**				**1.2236**	**1.3789**

(1) Allocation based on data from EPA 2011 National Emissions Inventory, ver. 2, for year 2011 and from EPA 2011 Modeling Platform, ver. 6.3, for years 2014, 2020 and 2030.
(2) Allocation based on surface water area from the NMIM2009 files WI_WIB.ALO and WI_WOB.ALO.

Table A7.4. 2030 Nonroad NO_X and VOC Emissions: tons per summer day (tpsd) Sheboygan County and the Inland Sheboygan County Area

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2030 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2030 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2260001010	Recreational	2-Stroke Motorcycles: Off-Road	MOVES	0.0046	0.337	88%	88%	land area	0.0041	0.2969
2260001020	Recreational	2-Stroke Snowmobiles	MOVES	0.0000	0.035	88%	88%	land area	0.0000	0.0311
2260001030	Recreational	2-Stroke All Terrain Vehicles	MOVES	0.0063	0.064	88%	88%	land area	0.0055	0.0566
2260001060	Recreational	2-Stroke Specialty Vehicle Carts	MOVES	0.0006	0.003	88%	88%	land area	0.0005	0.0028
2260002006	Construction	2-Stroke Tampers/Rammers	MOVES	0.0001	0.004	50%	50%	population	0.0001	0.0024
2260002009	Construction	2-Stroke Plate Compactors	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0001
2260002021	Construction	2-Stroke Paving Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0001
2260002027	Construction	2-Stroke Signal Boards	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2260002039	Construction	2-Stroke Concrete/Industrial Saws	MOVES	0.0003	0.012	50%	50%	population	0.0002	0.0060
2260002054	Construction	2-Stroke Crushing/Proc. Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2260003030	Industrial	2-Stroke Sweepers/Scrubbers	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2260003040	Industrial	2-Stroke Other General Industrial Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2260004015	Lawn/Garden	2-Stroke Rotary Tillers < 6 HP (Residential)	MOVES	0.0001	0.001	50%	50%	population	0.0000	0.0009
2260004016	Lawn/Garden	2-Stroke Rotary Tillers < 6 HP (Commercial)	MOVES	0.0002	0.003	50%	50%	population	0.0001	0.0017
2260004020	Lawn/Garden	2-Stroke Chain Saws < 6 HP (Residential)	MOVES	0.0005	0.017	50%	50%	population	0.0003	0.0088
2260004021	Lawn/Garden	2-Stroke Chain Saws < 6 HP (Commercial)	MOVES	0.0009	0.039	50%	50%	population	0.0004	0.0195
2260004025	Lawn/Garden	2-Stroke Trimmers/Edgers/Brush Cutters (Res.)	MOVES	0.0014	0.037	50%	50%	population	0.0007	0.0186
2260004026	Lawn/Garden	2-Stroke Trimmers/Edgers/Brush Cutters (Com.)	MOVES	0.0015	0.039	50%	50%	population	0.0008	0.0196
2260004030	Lawn/Garden	2-Stroke Leafblowers/Vacuums (Residential)	MOVES	0.0009	0.025	50%	50%	population	0.0005	0.0128
2260004031	Lawn/Garden	2-Stroke Leafblowers/Vacuums (Commercial)	MOVES	0.0014	0.039	50%	50%	population	0.0007	0.0196
2260004035	Lawn/Garden	2-Stroke Snowblowers (Residential)	MOVES	0.0000	0.002	50%	50%	population	0.0000	0.0011
2260004036	Lawn/Garden	2-Stroke Snowblowers (Commercial)	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0001
2260004071	Lawn/Garden	2-Stroke Commercial Turf Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2260005035	Agriculture	2-Stroke Sprayers	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0008
2260006005	Commercial	2-Stroke Light Commercial Generator Set	MOVES	0.0001	0.001	50%	50%	population	0.0000	0.0008
2260006010	Commercial	2-Stroke Light Commercial Pumps	MOVES	0.0004	0.010	50%	50%	population	0.0002	0.0055
2260006015	Commercial	2-Stroke Light Commercial Air Compressors	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2260006035	Commercial	2-Stroke Hydro Power Units	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2260007005	Logging	2-Stroke Logging Equipment Chain Saws > 6 HP	MOVES	0.0000	0.001	88%	88%	land area	0.0000	0.0012
2265001010	Recreational	4-Stroke Motorcycles: Off-Road	MOVES	0.0024	0.018	88%	88%	land area	0.0021	0.0164
2265001030	Recreational	4-Stroke All Terrain Vehicles	MOVES	0.0165	0.196	88%	88%	land area	0.0146	0.1728
2265001050	Recreational	4-Stroke Golf Carts	MOVES	0.0090	0.030	88%	88%	land area	0.0079	0.0267
2265001060	Recreational	4-Stroke Specialty Vehicle Carts	MOVES	0.0005	0.002	88%	88%	land area	0.0005	0.0017
2265002003	Construction	4-Stroke Asphalt Pavers	MOVES	0.0001	0.000	50%	50%	population	0.0000	0.0001

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2030 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2030 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2265002006	Construction	4-Stroke Tampers/Rammers	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2265002009	Construction	4-Stroke Plate Compactors	MOVES	0.0001	0.000	50%	50%	population	0.0001	0.0003
2265002015	Construction	4-Stroke Rollers	MOVES	0.0001	0.000	50%	50%	population	0.0001	0.0002
2265002021	Construction	4-Stroke Paving Equipment	MOVES	0.0003	0.001	50%	50%	population	0.0001	0.0006
2265002024	Construction	4-Stroke Surfacing Equipment	MOVES	0.0001	0.000	50%	50%	population	0.0001	0.0002
2265002027	Construction	4-Stroke Signal Boards	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2265002030	Construction	4-Stroke Trenchers	MOVES	0.0002	0.000	50%	50%	population	0.0001	0.0004
2265002033	Construction	4-Stroke Bore/Drill Rigs	MOVES	0.0001	0.000	50%	50%	population	0.0000	0.0002
2265002039	Construction	4-Stroke Concrete/Industrial Saws	MOVES	0.0005	0.001	50%	50%	population	0.0003	0.0008
2265002042	Construction	4-Stroke Cement & Mortar Mixers	MOVES	0.0002	0.001	50%	50%	population	0.0001	0.0008
2265002045	Construction	4-Stroke Cranes	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2265002054	Construction	4-Stroke Crushing/Proc. Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0001
2265002057	Construction	4-Stroke Rough Terrain Forklifts	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2265002060	Construction	4-Stroke Rubber Tire Loaders	MOVES	0.0001	0.000	50%	50%	population	0.0000	0.0000
2265002066	Construction	4-Stroke Tractors/Loaders/Backhoes	MOVES	0.0002	0.000	50%	50%	population	0.0001	0.0003
2265002072	Construction	4-Stroke Skid Steer Loaders	MOVES	0.0001	0.000	50%	50%	population	0.0001	0.0001
2265002078	Construction	4-Stroke Dumpers/Tenders	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0001
2265002081	Construction	4-Stroke Other Construction Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2265003010	Industrial	4-Stroke Aerial Lifts	MOVES	0.0001	0.000	50%	50%	population	0.0001	0.0001
2265003020	Industrial	4-Stroke Forklifts	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2265003030	Industrial	4-Stroke Sweepers/Scrubbers	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2265003040	Industrial	4-Stroke Other General Industrial Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2265003050	Industrial	4-Stroke Other Material Handling Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2265003060	Industrial	4-Stroke Industrial AC/Refrigeration	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2265003070	Industrial	4-Stroke Terminal Tractors	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2265004010	Lawn/Garden	4-Stroke Lawn mowers (Residential)	MOVES	0.0090	0.083	50%	50%	population	0.0045	0.0418
2265004011	Lawn/Garden	4-Stroke Lawn mowers (Commercial)	MOVES	0.0033	0.020	50%	50%	population	0.0016	0.0104
2265004015	Lawn/Garden	4-Stroke Rotary Tillers < 6 HP (Residential)	MOVES	0.0008	0.007	50%	50%	population	0.0004	0.0036
2265004016	Lawn/Garden	4-Stroke Rotary Tillers < 6 HP (Commercial)	MOVES	0.0016	0.011	50%	50%	population	0.0008	0.0059
2265004025	Lawn/Garden	4-Stroke Trimmers/Edgers/Brush Cutters (Res.)	MOVES	0.0001	0.000	50%	50%	population	0.0000	0.0003
2265004026	Lawn/Garden	4-Stroke Trimmers/Edgers/Brush Cutters (Com.)	MOVES	0.0001	0.000	50%	50%	population	0.0000	0.0003
2265004030	Lawn/Garden	4-Stroke Leafblowers/Vacuums (Residential)	MOVES	0.0001	0.000	50%	50%	population	0.0000	0.0004
2265004031	Lawn/Garden	4-Stroke Leafblowers/Vacuums (Commercial)	MOVES	0.0030	0.012	50%	50%	population	0.0015	0.0065
2265004035	Lawn/Garden	4-Stroke Snowblowers (Residential)	MOVES	0.0000	0.005	50%	50%	population	0.0000	0.0027
2265004036	Lawn/Garden	4-Stroke Snowblowers (Commercial)	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0002
2265004040	Lawn/Garden	4-Stroke Rear Engine Riding Mowers (Res.)	MOVES	0.0018	0.013	50%	50%	population	0.0009	0.0067
2265004041	Lawn/Garden	4-Stroke Rear Engine Riding Mowers (Comm.)	MOVES	0.0003	0.001	50%	50%	population	0.0002	0.0006
2265004046	Lawn/Garden	4-Stroke Front Mowers (Commercial)	MOVES	0.0004	0.001	50%	50%	population	0.0002	0.0008

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				NOx	VOC	NOx	VOC		NOx	VOC
2265004051	Lawn/Garden	4-Stroke Shredders < 6 HP (Commercial)	MOVES	0.0002	0.001	50%	50%	population	0.0001	0.0007
2265004055	Lawn/Garden	4-Stroke Lawn & Garden Tractors (Residential)	MOVES	0.0235	0.134	50%	50%	population	0.0118	0.0670
2265004056	Lawn/Garden	4-Stroke Lawn & Garden Tractors (Commercial)	MOVES	0.0047	0.016	50%	50%	population	0.0024	0.0083
2265004066	Lawn/Garden	4-Stroke Chippers/Stump Grinders (Comm.)	MOVES	0.0008	0.001	50%	50%	population	0.0004	0.0009
2265004071	Lawn/Garden	4-Stroke Commercial Turf Equipment (Comm.)	MOVES	0.0153	0.049	50%	50%	population	0.0077	0.0248
2265004075	Lawn/Garden	4-Stroke Other Lawn & Garden Equip. (Res.)	MOVES	0.0008	0.006	50%	50%	population	0.0004	0.0030
2265004076	Lawn/Garden	4-Stroke Other Lawn & Garden Equip. (Com.)	MOVES	0.0005	0.003	50%	50%	population	0.0002	0.0016
2265005010	Agriculture	4-Stroke 2-Wheel Tractors	MOVES	0.0001	0.000	88%	88%	land area	0.0001	0.0002
2265005015	Agriculture	4-Stroke Agricultural Tractors	MOVES	0.0003	0.000	88%	88%	land area	0.0002	0.0002
2265005020	Agriculture	4-Stroke Combines	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0000
2265005025	Agriculture	4-Stroke Balers	MOVES	0.0003	0.000	88%	88%	land area	0.0003	0.0003
2265005030	Agriculture	4-Stroke Agricultural Mowers	MOVES	0.0001	0.000	88%	88%	land area	0.0001	0.0002
2265005035	Agriculture	4-Stroke Sprayers	MOVES	0.0008	0.002	88%	88%	land area	0.0007	0.0022
2265005040	Agriculture	4-Stroke Tillers > 5 HP	MOVES	0.0017	0.006	88%	88%	land area	0.0015	0.0055
2265005045	Agriculture	4-Stroke Swathers	MOVES	0.0005	0.000	88%	88%	land area	0.0004	0.0004
2265005055	Agriculture	4-Stroke Other Agricultural Equipment	MOVES	0.0006	0.000	88%	88%	land area	0.0005	0.0007
2265005060	Agriculture	4-Stroke Irrigation Sets	MOVES	0.0004	0.000	88%	88%	land area	0.0004	0.0003
2265006005	Commercial	4-Stroke Light Commercial Generator Set	MOVES	0.0083	0.049	50%	50%	population	0.0041	0.0249
2265006010	Commercial	4-Stroke Light Commercial Pumps	MOVES	0.0022	0.009	50%	50%	population	0.0011	0.0049
2265006015	Commercial	4-Stroke Light Commercial Air Compressors	MOVES	0.0011	0.003	50%	50%	population	0.0006	0.0019
2265006025	Commercial	4-Stroke Light Commercial Welders	MOVES	0.0024	0.008	50%	50%	population	0.0012	0.0043
2265006030	Commercial	4-Stroke Light Commercial Pressure Wash	MOVES	0.0038	0.020	50%	50%	population	0.0019	0.0101
2265006035	Commercial	4-Stroke Hydro Power Units	MOVES	0.0002	0.000	50%	50%	population	0.0001	0.0003
2265007010	Logging	4-Stroke Logging Equipment Shredders > 6 HP	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0002
2265007015	Logging	4-Stroke Logging Equipment Skidders	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0000
2265008005	Airport Support	4-Stroke Airport Support Equipment	EPA	0.0000	0.000	100%	99%	airport location (1)	0.0000	0.0000
2265010010	Oil Field	4-Stroke Other Oil Field Equipment	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0000
2267001060	Recreational	LPG Specialty Vehicle Carts	MOVES	0.0001	0.000	88%	88%	land area	0.0001	0.0000
2267002003	Construction	LPG Asphalt Pavers	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2267002015	Construction	LPG Rollers	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2267002021	Construction	LPG Paving Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2267002024	Construction	LPG Surfacing Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2267002030	Construction	LPG Trenchers	MOVES	0.0001	0.000	50%	50%	population	0.0000	0.0000
2267002033	Construction	LPG Bore/Drill Rigs	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2267002039	Construction	LPG Concrete/Industrial Saws	MOVES	0.0001	0.000	50%	50%	population	0.0000	0.0000
2267002045	Construction	LPG Cranes	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2267002054	Construction	LPG Crushing/Proc. Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2267002057	Construction	LPG Rough Terrain Forklifts	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2030 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2030 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2267002060	Construction	LPG Rubber Tire Loaders	MOVES	0.0001	0.000	50%	50%	population	0.0000	0.0000
2267002066	Construction	LPG Tractors/Loaders/Backhoes	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2267002072	Construction	LPG Skid Steer Loaders	MOVES	0.0001	0.000	50%	50%	population	0.0000	0.0000
2267002081	Construction	LPG Other Construction Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2267003010	Industrial	LPG Aerial Lifts	MOVES	0.0020	0.000	50%	50%	population	0.0010	0.0001
2267003020	Industrial	LPG Forklifts	MOVES	0.1566	0.018	50%	50%	population	0.0783	0.0092
2267003030	Industrial	LPG Sweepers/Scrubbers	MOVES	0.0012	0.000	50%	50%	population	0.0006	0.0001
2267003040	Industrial	LPG Other General Industrial Equipment	MOVES	0.0004	0.000	50%	50%	population	0.0002	0.0000
2267003050	Industrial	LPG Other Material Handling Equipment	MOVES	0.0001	0.000	50%	50%	population	0.0000	0.0000
2267003070	Industrial	LPG Terminal Tractors	MOVES	0.0007	0.000	50%	50%	population	0.0004	0.0000
2267004066	Lawn/Garden	LPG Chippers/Stump Grinders (Commercial)	MOVES	0.0003	0.000	50%	50%	population	0.0001	0.0000
2267005055	Agriculture	LPG Other Agricultural Equipment	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0000
2267005060	Agriculture	LPG Irrigation Sets	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0000
2267006005	Commercial	LPG Light Commercial Generator Sets	MOVES	0.0020	0.000	50%	50%	population	0.0010	0.0001
2267006010	Commercial	LPG Light Commercial Pumps	MOVES	0.0003	0.000	50%	50%	population	0.0002	0.0000
2267006015	Commercial	LPG Light Commercial Air Compressors	MOVES	0.0003	0.000	50%	50%	population	0.0002	0.0000
2267006025	Commercial	LPG Light Commercial Welders	MOVES	0.0004	0.000	50%	50%	population	0.0002	0.0000
2267006030	Commercial	LPG Light Commercial Pressure Washers	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2267006035	Commercial	LPG Hydro Power Units	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2267008005	Airport Support	LPG Airport Support Equipment	EPA	0.0000	0.000	100%	99%	airport location (1)	0.0000	0.0000
2268002081	Construction	CNG Other Construction Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2268003020	Industrial	CNG Forklifts	MOVES	0.0112	0.004	50%	50%	population	0.0056	0.0024
2268003030	Industrial	CNG Sweepers/Scrubbers	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2268003040	Industrial	CNG Other General Industrial Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2268003060	Industrial	CNG AC/Refrigeration	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2268003070	Industrial	CNG Terminal Tractors	MOVES	0.0001	0.000	50%	50%	population	0.0000	0.0000
2268005055	Agriculture	CNG Other Agricultural Equipment	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0000
2268005060	Agriculture	CNG Irrigation Sets	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0000
2268006005	Commercial	CNG Light Commercial Generator Sets	MOVES	0.0006	0.000	50%	50%	population	0.0003	0.0001
2268006010	Commercial	CNG Light Commercial Pumps	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2268006015	Commercial	CNG Light Commercial Air Compressors	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2268006020	Commercial	CNG Light Commercial Gas Compressors	MOVES	0.0008	0.000	50%	50%	population	0.0004	0.0002
2268008005	Airport Support	CNG Airport Support Equipment	EPA	0.0000	0.000	100%	99%	airport location (1)	0.0000	0.0000
2268010010	Oil Field	CNG Other Oil Field Equipment	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0000
2270001060	Recreational	Diesel Specialty Vehicle Carts	MOVES	0.0019	0.000	88%	88%	land area	0.0017	0.0003
2270002003	Construction	Diesel Pavers	MOVES	0.0024	0.000	50%	50%	population	0.0012	0.0003
2270002006	Construction	Diesel Tampers/Rammers (unused)	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2270002009	Construction	Diesel Plate Compactors	MOVES	0.0004	0.000	50%	50%	population	0.0002	0.0000

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				NOx	VOC	NOx	VOC		NOx	VOC
2270002015	Construction	Diesel Rollers	MOVES	0.0066	0.001	50%	50%	population	0.0033	0.0007
2270002018	Construction	Diesel Scrapers	MOVES	0.0033	0.001	50%	50%	population	0.0016	0.0007
2270002021	Construction	Diesel Paving Equipment	MOVES	0.0005	0.000	50%	50%	population	0.0002	0.0000
2270002024	Construction	Diesel Surfacing Equipment	MOVES	0.0004	0.000	50%	50%	population	0.0002	0.0000
2270002027	Construction	Diesel Signal Boards	MOVES	0.0033	0.000	50%	50%	population	0.0017	0.0002
2270002030	Construction	Diesel Trenchers	MOVES	0.0069	0.000	50%	50%	population	0.0034	0.0003
2270002033	Construction	Diesel Bore/Drill Rigs	MOVES	0.0054	0.000	50%	50%	population	0.0027	0.0003
2270002036	Construction	Diesel Excavators	MOVES	0.0152	0.005	50%	50%	population	0.0076	0.0028
2270002039	Construction	Diesel Concrete/Industrial Saws	MOVES	0.0005	0.000	50%	50%	population	0.0003	0.0000
2270002042	Construction	Diesel Cement & Mortar Mixers	MOVES	0.0003	0.000	50%	50%	population	0.0001	0.0000
2270002045	Construction	Diesel Cranes	MOVES	0.0034	0.001	50%	50%	population	0.0017	0.0006
2270002048	Construction	Diesel Graders	MOVES	0.0026	0.001	50%	50%	population	0.0013	0.0007
2270002051	Construction	Diesel Off-highway Trucks	MOVES	0.0472	0.004	50%	50%	population	0.0236	0.0024
2270002054	Construction	Diesel Crushing/Proc. Equipment	MOVES	0.0013	0.000	50%	50%	population	0.0007	0.0001
2270002057	Construction	Diesel Rough Terrain Forklifts	MOVES	0.0065	0.001	50%	50%	population	0.0033	0.0008
2270002060	Construction	Diesel Rubber Tire Loaders	MOVES	0.0245	0.006	50%	50%	population	0.0123	0.0030
2270002066	Construction	Diesel Tractors/Loaders/Backhoes	MOVES	0.0217	0.004	50%	50%	population	0.0108	0.0022
2270002069	Construction	Diesel Crawler Tractors	MOVES	0.0205	0.005	50%	50%	population	0.0102	0.0028
2270002072	Construction	Diesel Skid Steer Loaders	MOVES	0.0342	0.004	50%	50%	population	0.0171	0.0022
2270002075	Construction	Diesel Off-Highway Tractors	MOVES	0.0050	0.000	50%	50%	population	0.0025	0.0003
2270002078	Construction	Diesel Dumpers/Tenders	MOVES	0.0001	0.000	50%	50%	population	0.0001	0.0000
2270002081	Construction	Diesel Other Construction Equipment	MOVES	0.0026	0.000	50%	50%	population	0.0013	0.0003
2270003010	Industrial	Diesel Aerial Lifts	MOVES	0.0081	0.001	50%	50%	population	0.0040	0.0005
2270003020	Industrial	Diesel Forklifts	MOVES	0.0445	0.006	50%	50%	population	0.0223	0.0034
2270003030	Industrial	Diesel Sweepers/Scrubbers	MOVES	0.0134	0.003	50%	50%	population	0.0067	0.0016
2270003040	Industrial	Diesel Other General Industrial Equipment	MOVES	0.0111	0.003	50%	50%	population	0.0056	0.0016
2270003050	Industrial	Diesel Other Material Handling Equipment	MOVES	0.0012	0.000	50%	50%	population	0.0006	0.0001
2270003060	Industrial	Diesel AC/Refrigeration	MOVES	0.0490	0.002	50%	50%	population	0.0245	0.0014
2270003070	Industrial	Diesel Terminal Tractors	MOVES	0.0113	0.004	50%	50%	population	0.0056	0.0023
2270004031	Lawn/Garden	Diesel Leafblowers/Vacuums (Commercial)	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2270004036	Lawn/Garden	Diesel Snowblowers (Commercial)	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2270004046	Lawn/Garden	Diesel Front Mowers (Commercial)	MOVES	0.0127	0.001	50%	50%	population	0.0064	0.0005
2270004056	Lawn/Garden	Diesel Lawn & Garden Tractors (Commercial)	MOVES	0.0031	0.000	50%	50%	population	0.0016	0.0002
2270004066	Lawn/Garden	Diesel Chippers/Stump Grinders (Commercial)	MOVES	0.0068	0.001	50%	50%	population	0.0034	0.0005
2270004071	Lawn/Garden	Diesel Commercial Turf Equipment (Comm.)	MOVES	0.0010	0.000	50%	50%	population	0.0005	0.0001
2270004076	Lawn/Garden	Diesel Other Lawn & Garden Equipment	MOVES	0.0000	0.000	50%	50%	population	0.0000	0.0000
2270005010	Agriculture	Diesel 2-Wheel Tractors	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0000
2270005015	Agriculture	Diesel Agricultural Tractors	MOVES	0.3057	0.048	88%	88%	land area	0.2690	0.0424

SCC	Segment Description	SCC Description	Emis-sions from	Sheboygan County 2030 Emissions		% in Inland Sheboygan Co.		Allocate by	Inland Sheb. Co. 2030 Emissions	
				NOx	VOC	NOx	VOC		NOx	VOC
2270005020	Agriculture	Diesel Combines	MOVES	0.0328	0.005	88%	88%	land area	0.0289	0.0045
2270005025	Agriculture	Diesel Balers	MOVES	0.0003	0.000	88%	88%	land area	0.0003	0.0000
2270005030	Agriculture	Diesel Agricultural Mowers	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0000
2270005035	Agriculture	Diesel Sprayers	MOVES	0.0028	0.000	88%	88%	land area	0.0025	0.0004
2270005040	Agriculture	Diesel Tillers > 6 HP	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0000
2270005045	Agriculture	Diesel Swathers	MOVES	0.0031	0.000	88%	88%	land area	0.0027	0.0004
2270005055	Agriculture	Diesel Other Agricultural Equipment	MOVES	0.0060	0.001	88%	88%	land area	0.0053	0.0009
2270005060	Agriculture	Diesel Irrigation Sets	MOVES	0.0028	0.000	88%	88%	land area	0.0025	0.0006
2270006005	Commercial	Diesel Light Commercial Generator Sets	MOVES	0.0163	0.001	50%	50%	population	0.0082	0.0009
2270006010	Commercial	Diesel Light Commercial Pumps	MOVES	0.0036	0.000	50%	50%	population	0.0018	0.0002
2270006015	Commercial	Diesel Light Commercial Air Compressors	MOVES	0.0057	0.000	50%	50%	population	0.0028	0.0004
2270006025	Commercial	Diesel Light Commercial Welders	MOVES	0.0063	0.000	50%	50%	population	0.0031	0.0003
2270006030	Commercial	Diesel Light Commercial Pressure Washer	MOVES	0.0005	0.000	50%	50%	population	0.0003	0.0000
2270006035	Commercial	Diesel Hydro Power Units	MOVES	0.0003	0.000	50%	50%	population	0.0002	0.0000
2270007015	Logging	Diesel Logging Equip Fell/Bunch/Skidders	MOVES	0.0001	0.000	88%	88%	land area	0.0001	0.0001
2270008005	Airport Support	Diesel Airport Support Equipment	EPA	0.0000	0.000	100%	99%	airport location (1)	0.0000	0.0000
2270010010	Oil Field	Diesel Other Oil Field Equipment	MOVES	0.0000	0.000	88%	88%	land area	0.0000	0.0000
2275001000	Aircraft	Military Aircraft	EPA	0.0001	0.000	100%	100%	airport location (1)	0.0001	0.0005
2275020000	Aircraft	Commercial Aviation	EPA	0.0000	0.000	0%	0%	airport location (1)	0.0000	0.0000
2275050000	Aircraft	General Aviation	EPA	0.0054	0.011	99%	99%	airport location (1)	0.0054	0.0117
2275060000	Aircraft	Air Taxi	EPA	0.0022	0.002	100%	100%	airport location (1)	0.0022	0.0028
2275070000	Aircraft	Aircraft Auxiliary Power Units	EPA	0.0000	0.000	100%	100%	airport location (1)	0.0000	0.0000
2280002100	Comm. Mar.	Commercial Marine Vessels, Diesel (c1&c2),	LADCO	0.0000	0.000	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2280002200	Comm. Mar.	Comm. Mar. Vessels, Diesel (c1&c2), Underway	LADCO	0.3378	0.003	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2280003100	Comm. Mar.	Comm. Mar. Vessels, Residual (c3), Port	LADCO	0.0000	0.000	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2280003200	Comm. Mar.	Comm. Mar. Vessels, Residual (c3), Underway	LADCO	0.0000	0.000	0%	0%	Lk. Mich. Shoreline	0.0000	0.0000
2282005010	Pleasure	2-Stroke Outboards	MOVES	0.0472	0.102	100%	100%	water area (2)	0.0472	0.1027
2282005015	Pleasure	2-Stroke Personal Watercraft	MOVES	0.0225	0.024	19%	19%	water area (2)	0.0043	0.0047
2282010005	Pleasure	4-Stroke Inboards	MOVES	0.0609	0.091	19%	19%	water area (2)	0.0116	0.0175
2282020005	Pleasure	Diesel Inboards	MOVES	0.1672	0.011	19%	19%	water area (2)	0.0318	0.0022
2282020010	Pleasure	Diesel Outboards	MOVES	0.0001	0.000	100%	100%	water area (2)	0.0001	0.0000
2285002006	Railroad	Diesel Line Haul Locomotives, Class I	EPA	0.0296	0.001	48%	48%	rail links (1)	0.0141	0.0007
2285002007	Railroad	Diesel Line Haul Locomotives, Class II/III Ops.	EPA	0.0460	0.001	100%	100%	rail links (1)	0.0460	0.0018
2285002015	Railroad	Diesel Railway Maintenance	MOVES	0.0002	0.000	48%	48%	rail links (1)	0.0001	0.0000
2285004015	Railroad	4-Stroke Gasoline Railway Maintenance	MOVES	0.0000	0.000	48%	48%	rail links (1)	0.0000	0.0000
2285006015	Railroad	LPG Railway Maintenance	MOVES	0.0000	0.000	48%	48%	rail links (1)	0.0000	0.0000
ALL (Total)	**ALL (Total)**	**ALL (Total)**		**1.8014**	**1.814**				**0.8560**	**1.2137**

(1) Allocation based on data from EPA 2011 National Emissions Inventory, ver. 2, for year 2011 and from EPA 2011 Modeling Platform, ver. 6.3, for years 2014, 2020 and 2030.
(2) Allocation based on surface water area from the NMIM2009 files WI_WIB.ALO and WI_WOB.ALO.

APPENDIX 8

Onroad Emissions and Activity Data for 2011, 2014, 2020 and 2030

This appendix provides detailed listings of the estimated onroad daily emissions and activity data for the Inland Sheboygan County area for 2011, 2014, 2020 and 2030. The sums of NOx and VOC emissions from the different onroad source types were used for the onroad sector NOx and VOC tons per summer weekday (tpswd) emission estimates in sections 4.2 (Nonattainment Year and Attainment Year Inventories) and 4.3 (Maintenance Year Inventories) of the Wisconsin Department of Natural Resources' (WDNR) Redesignation Request and Maintenance Plan for the Inland Sheboygan County, Wisconsin 1997 And 2008 8-Hour Ozone Nonattainment Area.

Table A8.1. 2011 Onroad NO_X and VOC Emissions: tons per summer weekday (tpswd) for the Inland Sheboygan County area.

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2011			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	**Total**
Motorcycle	Gasoline	Off-Network	0.0001	0.0003	0.0203	0.0206
Motorcycle	Gasoline	Rural Restricted	0.0006	0.0006	0.0003	0.0009
Motorcycle	Gasoline	Rural Unrestricted	0.0079	0.0098	0.0056	0.0153
Motorcycle	Gasoline	Urban Restricted	0.0020	0.0021	0.0010	0.0031
Motorcycle	Gasoline	Urban Unrestricted	0.0005	0.0008	0.0005	0.0013
Passenger Car	Gasoline	Off-Network	0.1537	0.1683	0.2064	0.3747
Passenger Car	Gasoline	Rural Restricted	0.0221	0.0047	0.0020	0.0067
Passenger Car	Gasoline	Rural Unrestricted	0.2475	0.0569	0.0285	0.0854
Passenger Car	Gasoline	Urban Restricted	0.0905	0.0192	0.0083	0.0275
Passenger Car	Gasoline	Urban Unrestricted	0.0258	0.0065	0.0035	0.0100
Passenger Car	Diesel	Off-Network	0.0006	0.0013	0.0000	0.0013
Passenger Car	Diesel	Rural Restricted	0.0001	0.0000	0.0000	0.0000
Passenger Car	Diesel	Rural Unrestricted	0.0010	0.0006	0.0000	0.0006
Passenger Car	Diesel	Urban Restricted	0.0004	0.0002	0.0000	0.0002
Passenger Car	Diesel	Urban Unrestricted	0.0001	0.0001	0.0000	0.0001
Passenger Car	Ethanol (E-85)	Off-Network	0.0000	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Passenger Truck	Gasoline	Off-Network	0.1674	0.1973	0.0947	0.2920
Passenger Truck	Gasoline	Rural Restricted	0.0256	0.0050	0.0009	0.0060
Passenger Truck	Gasoline	Rural Unrestricted	0.3199	0.0698	0.0149	0.0848
Passenger Truck	Gasoline	Urban Restricted	0.0951	0.0187	0.0034	0.0221
Passenger Truck	Gasoline	Urban Unrestricted	0.0264	0.0064	0.0015	0.0079
Passenger Truck	Diesel	Off-Network	0.0024	0.0018	0.0000	0.0018
Passenger Truck	Diesel	Rural Restricted	0.0012	0.0002	0.0000	0.0002
Passenger Truck	Diesel	Rural Unrestricted	0.0168	0.0035	0.0000	0.0035
Passenger Truck	Diesel	Urban Restricted	0.0044	0.0009	0.0000	0.0009
Passenger Truck	Diesel	Urban Unrestricted	0.0015	0.0003	0.0000	0.0003
Passenger Truck	Ethanol (E-85)	Off-Network	0.0000	0.0000	0.0000	0.0000
Passenger Truck	Ethanol (E-85)	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Passenger Truck	Ethanol (E-85)	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Passenger Truck	Ethanol (E-85)	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Passenger Truck	Ethanol (E-85)	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Light Commercial Truck	Gasoline	Off-Network	0.0580	0.0689	0.0363	0.1052
Light Commercial Truck	Gasoline	Rural Restricted	0.0094	0.0022	0.0004	0.0027
Light Commercial Truck	Gasoline	Rural Unrestricted	0.1197	0.0323	0.0073	0.0395
Light Commercial Truck	Gasoline	Urban Restricted	0.0346	0.0082	0.0016	0.0098
Light Commercial Truck	Gasoline	Urban Unrestricted	0.0098	0.0030	0.0007	0.0037
Light Commercial Truck	Diesel	Off-Network	0.0022	0.0018	0.0000	0.0018
Light Commercial Truck	Diesel	Rural Restricted	0.0012	0.0003	0.0000	0.0003
Light Commercial Truck	Diesel	Rural Unrestricted	0.0168	0.0040	0.0000	0.0040
Light Commercial Truck	Diesel	Urban Restricted	0.0043	0.0010	0.0000	0.0010
Light Commercial Truck	Diesel	Urban Unrestricted	0.0015	0.0004	0.0000	0.0004
Light Commercial Truck	Ethanol (E-85)	Off-Network	0.0000	0.0000	0.0000	0.0000
Light Commercial Truck	Ethanol (E-85)	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Light Commercial Truck	Ethanol (E-85)	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2011			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	**Total**
Light Commercial Truck	Ethanol (E-85)	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Light Commercial Truck	Ethanol (E-85)	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Intercity Bus	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Intercity Bus	Diesel	Rural Restricted	0.0004	0.0000	0.0000	0.0000
Intercity Bus	Diesel	Rural Unrestricted	0.0055	0.0004	0.0000	0.0004
Intercity Bus	Diesel	Urban Restricted	0.0023	0.0002	0.0000	0.0002
Intercity Bus	Diesel	Urban Unrestricted	0.0006	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Transit Bus	Diesel	Rural Restricted	0.0008	0.0001	0.0000	0.0001
Transit Bus	Diesel	Rural Unrestricted	0.0077	0.0006	0.0000	0.0006
Transit Bus	Diesel	Urban Restricted	0.0041	0.0003	0.0000	0.0003
Transit Bus	Diesel	Urban Unrestricted	0.0008	0.0001	0.0000	0.0001
Transit Bus	CNG	Off-Network	0.0000	0.0000	0.0000	0.0000
Transit Bus	CNG	Rural Restricted	0.0001	0.0000	0.0000	0.0000
Transit Bus	CNG	Rural Unrestricted	0.0006	0.0001	0.0000	0.0001
Transit Bus	CNG	Urban Restricted	0.0003	0.0000	0.0000	0.0000
Transit Bus	CNG	Urban Unrestricted	0.0001	0.0000	0.0000	0.0000
School Bus	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0001
School Bus	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Rural Unrestricted	0.0001	0.0001	0.0000	0.0001
School Bus	Gasoline	Urban Restricted	0.0001	0.0000	0.0000	0.0000
School Bus	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
School Bus	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
School Bus	Diesel	Rural Restricted	0.0010	0.0001	0.0000	0.0001
School Bus	Diesel	Rural Unrestricted	0.0104	0.0017	0.0000	0.0017
School Bus	Diesel	Urban Restricted	0.0053	0.0008	0.0000	0.0008
School Bus	Diesel	Urban Unrestricted	0.0011	0.0002	0.0000	0.0002
Refuse Truck	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0001
Refuse Truck	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Gasoline	Rural Unrestricted	0.0003	0.0001	0.0000	0.0001
Refuse Truck	Gasoline	Urban Restricted	0.0001	0.0000	0.0000	0.0000
Refuse Truck	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Diesel	Rural Restricted	0.0017	0.0001	0.0000	0.0001
Refuse Truck	Diesel	Rural Unrestricted	0.0123	0.0008	0.0000	0.0008
Refuse Truck	Diesel	Urban Restricted	0.0059	0.0004	0.0000	0.0004
Refuse Truck	Diesel	Urban Unrestricted	0.0009	0.0001	0.0000	0.0001
Single Unit Short-haul Truck	Gasoline	Off-Network	0.0083	0.0081	0.0064	0.0145
Single Unit Short-haul Truck	Gasoline	Rural Restricted	0.0023	0.0004	0.0000	0.0005
Single Unit Short-haul Truck	Gasoline	Rural Unrestricted	0.0227	0.0054	0.0006	0.0060
Single Unit Short-haul Truck	Gasoline	Urban Restricted	0.0109	0.0021	0.0002	0.0023
Single Unit Short-haul Truck	Gasoline	Urban Unrestricted	0.0019	0.0006	0.0001	0.0007
Single Unit Short-haul Truck	Diesel	Off-Network	0.0022	0.0002	0.0000	0.0002
Single Unit Short-haul Truck	Diesel	Rural Restricted	0.0086	0.0013	0.0000	0.0013
Single Unit Short-haul Truck	Diesel	Rural Unrestricted	0.0987	0.0161	0.0000	0.0161
Single Unit Short-haul Truck	Diesel	Urban Restricted	0.0412	0.0062	0.0000	0.0062
Single Unit Short-haul Truck	Diesel	Urban Unrestricted	0.0093	0.0015	0.0000	0.0015

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2011			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	**Total**
Single Unit Long-haul Truck	Gasoline	Off-Network	0.0002	0.0003	0.0002	0.0005
Single Unit Long-haul Truck	Gasoline	Rural Restricted	0.0001	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Gasoline	Rural Unrestricted	0.0009	0.0002	0.0000	0.0003
Single Unit Long-haul Truck	Gasoline	Urban Restricted	0.0005	0.0001	0.0000	0.0001
Single Unit Long-haul Truck	Gasoline	Urban Unrestricted	0.0001	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Diesel	Off-Network	0.0001	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Diesel	Rural Restricted	0.0005	0.0001	0.0000	0.0001
Single Unit Long-haul Truck	Diesel	Rural Unrestricted	0.0059	0.0011	0.0000	0.0011
Single Unit Long-haul Truck	Diesel	Urban Restricted	0.0025	0.0004	0.0000	0.0004
Single Unit Long-haul Truck	Diesel	Urban Unrestricted	0.0006	0.0001	0.0000	0.0001
Motor Home	Gasoline	Off-Network	0.0005	0.0006	0.0019	0.0025
Motor Home	Gasoline	Rural Restricted	0.0002	0.0000	0.0000	0.0000
Motor Home	Gasoline	Rural Unrestricted	0.0024	0.0007	0.0001	0.0008
Motor Home	Gasoline	Urban Restricted	0.0011	0.0003	0.0000	0.0003
Motor Home	Gasoline	Urban Unrestricted	0.0002	0.0001	0.0000	0.0001
Motor Home	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Motor Home	Diesel	Rural Restricted	0.0001	0.0000	0.0000	0.0000
Motor Home	Diesel	Rural Unrestricted	0.0020	0.0003	0.0000	0.0003
Motor Home	Diesel	Urban Restricted	0.0008	0.0001	0.0000	0.0001
Motor Home	Diesel	Urban Unrestricted	0.0002	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Diesel	Rural Restricted	0.0159	0.0009	0.0000	0.0009
Combination Short-haul Truck	Diesel	Rural Unrestricted	0.1194	0.0073	0.0000	0.0073
Combination Short-haul Truck	Diesel	Urban Restricted	0.0567	0.0033	0.0000	0.0033
Combination Short-haul Truck	Diesel	Urban Unrestricted	0.0083	0.0005	0.0000	0.0005
Combination Long-haul Truck	Diesel	Off-Network	0.0594	0.0154	0.0000	0.0154
Combination Long-haul Truck	Diesel	Rural Restricted	0.0481	0.0027	0.0000	0.0027
Combination Long-haul Truck	Diesel	Rural Unrestricted	0.3404	0.0204	0.0000	0.0204
Combination Long-haul Truck	Diesel	Urban Restricted	0.1656	0.0093	0.0000	0.0093
Combination Long-haul Truck	Diesel	Urban Unrestricted	0.0230	0.0014	0.0000	0.0014
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**2.5950**	**0.8117**	**0.4478**	**1.2595**
Motorcycle	ALL	ALL	0.0110	0.0136	0.0277	0.0412
Passenger Car	ALL	ALL	0.5418	0.2578	0.2487	0.5066
Passenger Truck	ALL	ALL	0.6607	0.3041	0.1154	0.4195
Light Commercial Truck	ALL	ALL	0.2574	0.1221	0.0463	0.1684
Intercity Bus	ALL	ALL	0.0088	0.0006	0.0000	0.0006
Transit Bus	ALL	ALL	0.0145	0.0012	0.0000	0.0012
School Bus	ALL	ALL	0.0180	0.0029	0.0000	0.0030
Refuse Truck	ALL	ALL	0.0213	0.0015	0.0000	0.0015
Single Unit Short-haul Truck	ALL	ALL	0.2061	0.0419	0.0073	0.0492
Single Unit Long-haul Truck	ALL	ALL	0.0112	0.0024	0.0003	0.0026
Motor Home	ALL	ALL	0.0075	0.0023	0.0020	0.0043
Combination Short-haul Truck	ALL	ALL	0.2003	0.0121	0.0000	0.0121
Combination Long-haul Truck	ALL	ALL	0.6364	0.0493	0.0000	0.0493

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2011			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	**Total**
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**2.5950**	**0.8117**	**0.4478**	**1.2595**
ALL	Gasoline	ALL	1.4696	0.7004	0.4477	1.1481
ALL	Diesel	ALL	1.1243	0.1111	0.0000	0.1111
ALL	CNG	ALL	0.0011	0.0002	0.0000	0.0002
ALL	Ethanol (E-85)	ALL	0.0001	0.0000	0.0000	0.0001
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**2.5950**	**0.8117**	**0.4478**	**1.2595**
ALL	ALL	Off-Network	0.4551	0.4645	0.3662	0.8307
ALL	ALL	Rural Restricted	0.1398	0.0190	0.0037	0.0227
ALL	ALL	Rural Unrestricted	1.3590	0.2322	0.0570	0.2892
ALL	ALL	Urban Restricted	0.5285	0.0738	0.0146	0.0884
ALL	ALL	Urban Unrestricted	0.1126	0.0222	0.0062	0.0284
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**2.5950**	**0.8117**	**0.4478**	**1.2595**

Table A8.2. 2014 Onroad NO_X and VOC Emissions: tons per summer weekday (tpswd) for the Inland Sheboygan County area.

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2014			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	**Total**
Motorcycle	Gasoline	Off-Network	0.0001	0.0003	0.0194	0.0197
Motorcycle	Gasoline	Rural Restricted	0.0011	0.0011	0.0006	0.0017
Motorcycle	Gasoline	Rural Unrestricted	0.0071	0.0079	0.0052	0.0132
Motorcycle	Gasoline	Urban Restricted	0.0016	0.0015	0.0009	0.0024
Motorcycle	Gasoline	Urban Unrestricted	0.0005	0.0007	0.0005	0.0012
Passenger Car	Gasoline	Off-Network	0.1143	0.1202	0.1532	0.2734
Passenger Car	Gasoline	Rural Restricted	0.0298	0.0059	0.0027	0.0086
Passenger Car	Gasoline	Rural Unrestricted	0.1492	0.0320	0.0168	0.0488
Passenger Car	Gasoline	Urban Restricted	0.0493	0.0098	0.0044	0.0142
Passenger Car	Gasoline	Urban Unrestricted	0.0162	0.0038	0.0021	0.0059
Passenger Car	Diesel	Off-Network	0.0006	0.0007	0.0000	0.0007
Passenger Car	Diesel	Rural Restricted	0.0002	0.0001	0.0000	0.0001
Passenger Car	Diesel	Rural Unrestricted	0.0009	0.0004	0.0000	0.0004
Passenger Car	Diesel	Urban Restricted	0.0003	0.0001	0.0000	0.0001
Passenger Car	Diesel	Urban Unrestricted	0.0001	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Off-Network	0.0000	0.0000	0.0000	0.0001
Passenger Car	Ethanol (E-85)	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Passenger Truck	Gasoline	Off-Network	0.1120	0.1251	0.0700	0.1951
Passenger Truck	Gasoline	Rural Restricted	0.0344	0.0062	0.0012	0.0075
Passenger Truck	Gasoline	Rural Unrestricted	0.1901	0.0379	0.0090	0.0470
Passenger Truck	Gasoline	Urban Restricted	0.0515	0.0093	0.0019	0.0112
Passenger Truck	Gasoline	Urban Unrestricted	0.0164	0.0036	0.0009	0.0046
Passenger Truck	Diesel	Off-Network	0.0021	0.0011	0.0000	0.0011
Passenger Truck	Diesel	Rural Restricted	0.0018	0.0003	0.0000	0.0003
Passenger Truck	Diesel	Rural Unrestricted	0.0118	0.0021	0.0000	0.0021
Passenger Truck	Diesel	Urban Restricted	0.0028	0.0005	0.0000	0.0005
Passenger Truck	Diesel	Urban Unrestricted	0.0011	0.0002	0.0000	0.0002
Passenger Truck	Ethanol (E-85)	Off-Network	0.0001	0.0001	0.0001	0.0002
Passenger Truck	Ethanol (E-85)	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Passenger Truck	Ethanol (E-85)	Rural Unrestricted	0.0001	0.0000	0.0000	0.0000
Passenger Truck	Ethanol (E-85)	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Passenger Truck	Ethanol (E-85)	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Light Commercial Truck	Gasoline	Off-Network	0.0470	0.0568	0.0289	0.0856
Light Commercial Truck	Gasoline	Rural Restricted	0.0148	0.0033	0.0007	0.0039
Light Commercial Truck	Gasoline	Rural Unrestricted	0.0840	0.0213	0.0048	0.0261
Light Commercial Truck	Gasoline	Urban Restricted	0.0220	0.0049	0.0010	0.0059
Light Commercial Truck	Gasoline	Urban Unrestricted	0.0072	0.0021	0.0005	0.0026
Light Commercial Truck	Diesel	Off-Network	0.0020	0.0015	0.0000	0.0015
Light Commercial Truck	Diesel	Rural Restricted	0.0019	0.0004	0.0000	0.0004
Light Commercial Truck	Diesel	Rural Unrestricted	0.0125	0.0028	0.0000	0.0028
Light Commercial Truck	Diesel	Urban Restricted	0.0029	0.0006	0.0000	0.0006
Light Commercial Truck	Diesel	Urban Unrestricted	0.0012	0.0003	0.0000	0.0003
Light Commercial Truck	Ethanol (E-85)	Off-Network	0.0000	0.0000	0.0000	0.0000
Light Commercial Truck	Ethanol (E-85)	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Light Commercial Truck	Ethanol (E-85)	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2014			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	**Total**
Light Commercial Truck	Ethanol (E-85)	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Light Commercial Truck	Ethanol (E-85)	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Intercity Bus	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Intercity Bus	Diesel	Rural Restricted	0.0008	0.0000	0.0000	0.0000
Intercity Bus	Diesel	Rural Unrestricted	0.0042	0.0003	0.0000	0.0003
Intercity Bus	Diesel	Urban Restricted	0.0016	0.0001	0.0000	0.0001
Intercity Bus	Diesel	Urban Unrestricted	0.0005	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Transit Bus	Diesel	Rural Restricted	0.0013	0.0001	0.0000	0.0001
Transit Bus	Diesel	Rural Unrestricted	0.0055	0.0004	0.0000	0.0004
Transit Bus	Diesel	Urban Restricted	0.0027	0.0002	0.0000	0.0002
Transit Bus	Diesel	Urban Unrestricted	0.0006	0.0000	0.0000	0.0000
Transit Bus	CNG	Off-Network	0.0000	0.0000	0.0000	0.0000
Transit Bus	CNG	Rural Restricted	0.0001	0.0000	0.0000	0.0000
Transit Bus	CNG	Rural Unrestricted	0.0004	0.0001	0.0000	0.0001
Transit Bus	CNG	Urban Restricted	0.0003	0.0000	0.0000	0.0000
Transit Bus	CNG	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
School Bus	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
School Bus	Diesel	Rural Restricted	0.0015	0.0002	0.0000	0.0002
School Bus	Diesel	Rural Unrestricted	0.0065	0.0011	0.0000	0.0011
School Bus	Diesel	Urban Restricted	0.0032	0.0005	0.0000	0.0005
School Bus	Diesel	Urban Unrestricted	0.0007	0.0001	0.0000	0.0001
Refuse Truck	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0001
Refuse Truck	Gasoline	Rural Restricted	0.0001	0.0000	0.0000	0.0000
Refuse Truck	Gasoline	Rural Unrestricted	0.0002	0.0000	0.0000	0.0001
Refuse Truck	Gasoline	Urban Restricted	0.0001	0.0000	0.0000	0.0000
Refuse Truck	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Diesel	Rural Restricted	0.0026	0.0002	0.0000	0.0002
Refuse Truck	Diesel	Rural Unrestricted	0.0083	0.0005	0.0000	0.0005
Refuse Truck	Diesel	Urban Restricted	0.0037	0.0002	0.0000	0.0002
Refuse Truck	Diesel	Urban Unrestricted	0.0006	0.0000	0.0000	0.0000
Single Unit Short-haul Truck	Gasoline	Off-Network	0.0074	0.0071	0.0061	0.0132
Single Unit Short-haul Truck	Gasoline	Rural Restricted	0.0038	0.0007	0.0001	0.0008
Single Unit Short-haul Truck	Gasoline	Rural Unrestricted	0.0165	0.0038	0.0004	0.0043
Single Unit Short-haul Truck	Gasoline	Urban Restricted	0.0074	0.0014	0.0001	0.0015
Single Unit Short-haul Truck	Gasoline	Urban Unrestricted	0.0015	0.0004	0.0000	0.0005
Single Unit Short-haul Truck	Diesel	Off-Network	0.0025	0.0002	0.0000	0.0002
Single Unit Short-haul Truck	Diesel	Rural Restricted	0.0130	0.0019	0.0000	0.0019
Single Unit Short-haul Truck	Diesel	Rural Unrestricted	0.0647	0.0099	0.0000	0.0099
Single Unit Short-haul Truck	Diesel	Urban Restricted	0.0253	0.0036	0.0000	0.0036
Single Unit Short-haul Truck	Diesel	Urban Unrestricted	0.0065	0.0010	0.0000	0.0010

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2014			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	**Total**
Single Unit Long-haul Truck	Gasoline	Off-Network	0.0002	0.0002	0.0002	0.0004
Single Unit Long-haul Truck	Gasoline	Rural Restricted	0.0001	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Gasoline	Rural Unrestricted	0.0005	0.0001	0.0000	0.0002
Single Unit Long-haul Truck	Gasoline	Urban Restricted	0.0002	0.0001	0.0000	0.0001
Single Unit Long-haul Truck	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Diesel	Off-Network	0.0001	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Diesel	Rural Restricted	0.0008	0.0001	0.0000	0.0001
Single Unit Long-haul Truck	Diesel	Rural Unrestricted	0.0039	0.0007	0.0000	0.0007
Single Unit Long-haul Truck	Diesel	Urban Restricted	0.0015	0.0002	0.0000	0.0002
Single Unit Long-haul Truck	Diesel	Urban Unrestricted	0.0004	0.0001	0.0000	0.0001
Motor Home	Gasoline	Off-Network	0.0004	0.0006	0.0017	0.0023
Motor Home	Gasoline	Rural Restricted	0.0003	0.0001	0.0000	0.0001
Motor Home	Gasoline	Rural Unrestricted	0.0019	0.0006	0.0001	0.0006
Motor Home	Gasoline	Urban Restricted	0.0008	0.0002	0.0000	0.0002
Motor Home	Gasoline	Urban Unrestricted	0.0002	0.0001	0.0000	0.0001
Motor Home	Diesel	Off-Network	0.0001	0.0000	0.0000	0.0000
Motor Home	Diesel	Rural Restricted	0.0003	0.0000	0.0000	0.0000
Motor Home	Diesel	Rural Unrestricted	0.0016	0.0003	0.0000	0.0003
Motor Home	Diesel	Urban Restricted	0.0006	0.0001	0.0000	0.0001
Motor Home	Diesel	Urban Unrestricted	0.0002	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Diesel	Rural Restricted	0.0224	0.0012	0.0000	0.0012
Combination Short-haul Truck	Diesel	Rural Unrestricted	0.0724	0.0043	0.0000	0.0043
Combination Short-haul Truck	Diesel	Urban Restricted	0.0322	0.0018	0.0000	0.0018
Combination Short-haul Truck	Diesel	Urban Unrestricted	0.0054	0.0003	0.0000	0.0003
Combination Long-haul Truck	Diesel	Off-Network	0.1162	0.0272	0.0000	0.0272
Combination Long-haul Truck	Diesel	Rural Restricted	0.0793	0.0043	0.0000	0.0043
Combination Long-haul Truck	Diesel	Rural Unrestricted	0.2415	0.0139	0.0000	0.0139
Combination Long-haul Truck	Diesel	Urban Restricted	0.1101	0.0060	0.0000	0.0060
Combination Long-haul Truck	Diesel	Urban Unrestricted	0.0173	0.0010	0.0000	0.0010
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**1.8965**	**0.5632**	**0.3338**	**0.8970**
Motorcycle	ALL	ALL	0.0104	0.0116	0.0266	0.0382
Passenger Car	ALL	ALL	0.3610	0.1731	0.1793	0.3523
Passenger Truck	ALL	ALL	0.4243	0.1866	0.0832	0.2699
Light Commercial Truck	ALL	ALL	0.1955	0.0940	0.0358	0.1298
Intercity Bus	ALL	ALL	0.0070	0.0005	0.0000	0.0005
Transit Bus	ALL	ALL	0.0110	0.0009	0.0000	0.0009
School Bus	ALL	ALL	0.0120	0.0020	0.0000	0.0020
Refuse Truck	ALL	ALL	0.0155	0.0010	0.0000	0.0011
Single Unit Short-haul Truck	ALL	ALL	0.1486	0.0298	0.0068	0.0366
Single Unit Long-haul Truck	ALL	ALL	0.0079	0.0016	0.0002	0.0018
Motor Home	ALL	ALL	0.0065	0.0019	0.0019	0.0038
Combination Short-haul Truck	ALL	ALL	0.1324	0.0077	0.0000	0.0077
Combination Long-haul Truck	ALL	ALL	0.5644	0.0524	0.0000	0.0524

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2014			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	Total
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**1.8965**	**0.5632**	**0.3338**	**0.8970**
ALL	Gasoline	ALL	0.9908	0.4694	0.3336	0.8030
ALL	Diesel	ALL	0.9045	0.0934	0.0000	0.0934
ALL	CNG	ALL	0.0009	0.0001	0.0000	0.0001
ALL	Ethanol (E-85)	ALL	0.0004	0.0002	0.0002	0.0004
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**1.8965**	**0.5632**	**0.3338**	**0.8970**
ALL	ALL	Off-Network	0.4052	0.3414	0.2797	0.6211
ALL	ALL	Rural Restricted	0.2104	0.0262	0.0053	0.0315
ALL	ALL	Rural Unrestricted	0.8841	0.1405	0.0364	0.1769
ALL	ALL	Urban Restricted	0.3202	0.0411	0.0083	0.0494
ALL	ALL	Urban Unrestricted	0.0766	0.0140	0.0041	0.0181
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**1.8965**	**0.5632**	**0.3338**	**0.8970**

Table A8.3. 2020 Onroad NO_X and VOC Emissions: tons per summer weekday (tpswd) for the Inland Sheboygan County area.

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2020			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	Total
Motorcycle	Gasoline	Off-Network	0.0001	0.0004	0.0252	0.0256
Motorcycle	Gasoline	Rural Restricted	0.0013	0.0012	0.0007	0.0019
Motorcycle	Gasoline	Rural Unrestricted	0.0077	0.0082	0.0057	0.0139
Motorcycle	Gasoline	Urban Restricted	0.0018	0.0017	0.0010	0.0026
Motorcycle	Gasoline	Urban Unrestricted	0.0006	0.0007	0.0006	0.0013
Passenger Car	Gasoline	Off-Network	0.0670	0.0790	0.1154	0.1944
Passenger Car	Gasoline	Rural Restricted	0.0111	0.0022	0.0019	0.0041
Passenger Car	Gasoline	Rural Unrestricted	0.0520	0.0109	0.0114	0.0223
Passenger Car	Gasoline	Urban Restricted	0.0184	0.0036	0.0031	0.0068
Passenger Car	Gasoline	Urban Unrestricted	0.0058	0.0013	0.0015	0.0028
Passenger Car	Diesel	Off-Network	0.0004	0.0004	0.0000	0.0004
Passenger Car	Diesel	Rural Restricted	0.0001	0.0000	0.0000	0.0000
Passenger Car	Diesel	Rural Unrestricted	0.0004	0.0001	0.0000	0.0001
Passenger Car	Diesel	Urban Restricted	0.0001	0.0000	0.0000	0.0000
Passenger Car	Diesel	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Off-Network	0.0002	0.0004	0.0004	0.0008
Passenger Car	Ethanol (E-85)	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Rural Unrestricted	0.0001	0.0000	0.0000	0.0001
Passenger Car	Ethanol (E-85)	Urban Restricted	0.0001	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Passenger Truck	Gasoline	Off-Network	0.0572	0.0621	0.0541	0.1162
Passenger Truck	Gasoline	Rural Restricted	0.0115	0.0021	0.0010	0.0031
Passenger Truck	Gasoline	Rural Unrestricted	0.0580	0.0115	0.0068	0.0183
Passenger Truck	Gasoline	Urban Restricted	0.0171	0.0032	0.0015	0.0047
Passenger Truck	Gasoline	Urban Unrestricted	0.0051	0.0011	0.0007	0.0018
Passenger Truck	Diesel	Off-Network	0.0021	0.0006	0.0000	0.0006
Passenger Truck	Diesel	Rural Restricted	0.0011	0.0001	0.0000	0.0001
Passenger Truck	Diesel	Rural Unrestricted	0.0069	0.0009	0.0000	0.0009
Passenger Truck	Diesel	Urban Restricted	0.0017	0.0002	0.0000	0.0002
Passenger Truck	Diesel	Urban Unrestricted	0.0007	0.0001	0.0000	0.0001
Passenger Truck	Ethanol (E-85)	Off-Network	0.0006	0.0008	0.0008	0.0017
Passenger Truck	Ethanol (E-85)	Rural Restricted	0.0001	0.0000	0.0000	0.0000
Passenger Truck	Ethanol (E-85)	Rural Unrestricted	0.0006	0.0001	0.0001	0.0002
Passenger Truck	Ethanol (E-85)	Urban Restricted	0.0002	0.0000	0.0000	0.0001
Passenger Truck	Ethanol (E-85)	Urban Unrestricted	0.0001	0.0000	0.0000	0.0000
Light Commercial Truck	Gasoline	Off-Network	0.0276	0.0311	0.0216	0.0527
Light Commercial Truck	Gasoline	Rural Restricted	0.0056	0.0012	0.0004	0.0017
Light Commercial Truck	Gasoline	Rural Unrestricted	0.0299	0.0073	0.0030	0.0103
Light Commercial Truck	Gasoline	Urban Restricted	0.0083	0.0018	0.0007	0.0025
Light Commercial Truck	Gasoline	Urban Unrestricted	0.0026	0.0007	0.0003	0.0010
Light Commercial Truck	Diesel	Off-Network	0.0016	0.0008	0.0000	0.0008
Light Commercial Truck	Diesel	Rural Restricted	0.0010	0.0002	0.0000	0.0002
Light Commercial Truck	Diesel	Rural Unrestricted	0.0060	0.0011	0.0000	0.0011
Light Commercial Truck	Diesel	Urban Restricted	0.0015	0.0003	0.0000	0.0003
Light Commercial Truck	Diesel	Urban Unrestricted	0.0006	0.0001	0.0000	0.0001
Light Commercial Truck	Ethanol (E-85)	Off-Network	0.0002	0.0002	0.0002	0.0004
Light Commercial Truck	Ethanol (E-85)	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Light Commercial Truck	Ethanol (E-85)	Rural Unrestricted	0.0001	0.0000	0.0000	0.0001

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2020			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	**Total**
Light Commercial Truck	Ethanol (E-85)	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Light Commercial Truck	Ethanol (E-85)	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Intercity Bus	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Intercity Bus	Diesel	Rural Restricted	0.0007	0.0000	0.0000	0.0000
Intercity Bus	Diesel	Rural Unrestricted	0.0032	0.0002	0.0000	0.0002
Intercity Bus	Diesel	Urban Restricted	0.0014	0.0001	0.0000	0.0001
Intercity Bus	Diesel	Urban Unrestricted	0.0004	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Transit Bus	Diesel	Rural Restricted	0.0009	0.0001	0.0000	0.0001
Transit Bus	Diesel	Rural Unrestricted	0.0035	0.0003	0.0000	0.0003
Transit Bus	Diesel	Urban Restricted	0.0019	0.0002	0.0000	0.0002
Transit Bus	Diesel	Urban Unrestricted	0.0004	0.0000	0.0000	0.0000
Transit Bus	CNG	Off-Network	0.0000	0.0000	0.0000	0.0000
Transit Bus	CNG	Rural Restricted	0.0001	0.0000	0.0000	0.0000
Transit Bus	CNG	Rural Unrestricted	0.0003	0.0001	0.0000	0.0001
Transit Bus	CNG	Urban Restricted	0.0002	0.0000	0.0000	0.0000
Transit Bus	CNG	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
School Bus	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
School Bus	Diesel	Rural Restricted	0.0011	0.0001	0.0000	0.0001
School Bus	Diesel	Rural Unrestricted	0.0045	0.0006	0.0000	0.0006
School Bus	Diesel	Urban Restricted	0.0024	0.0003	0.0000	0.0003
School Bus	Diesel	Urban Unrestricted	0.0005	0.0001	0.0000	0.0001
Refuse Truck	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Diesel	Rural Restricted	0.0020	0.0001	0.0000	0.0001
Refuse Truck	Diesel	Rural Unrestricted	0.0057	0.0004	0.0000	0.0004
Refuse Truck	Diesel	Urban Restricted	0.0028	0.0002	0.0000	0.0002
Refuse Truck	Diesel	Urban Unrestricted	0.0005	0.0000	0.0000	0.0000
Single Unit Short-haul Truck	Gasoline	Off-Network	0.0055	0.0054	0.0051	0.0104
Single Unit Short-haul Truck	Gasoline	Rural Restricted	0.0015	0.0003	0.0001	0.0004
Single Unit Short-haul Truck	Gasoline	Rural Unrestricted	0.0058	0.0016	0.0003	0.0018
Single Unit Short-haul Truck	Gasoline	Urban Restricted	0.0029	0.0006	0.0001	0.0007
Single Unit Short-haul Truck	Gasoline	Urban Unrestricted	0.0005	0.0002	0.0000	0.0002
Single Unit Short-haul Truck	Diesel	Off-Network	0.0031	0.0002	0.0000	0.0002
Single Unit Short-haul Truck	Diesel	Rural Restricted	0.0078	0.0010	0.0000	0.0010
Single Unit Short-haul Truck	Diesel	Rural Unrestricted	0.0348	0.0046	0.0000	0.0046
Single Unit Short-haul Truck	Diesel	Urban Restricted	0.0151	0.0018	0.0000	0.0018
Single Unit Short-haul Truck	Diesel	Urban Unrestricted	0.0035	0.0005	0.0000	0.0005

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2020			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	**Total**
Single Unit Long-haul Truck	Gasoline	Off-Network	0.0001	0.0001	0.0001	0.0003
Single Unit Long-haul Truck	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Gasoline	Rural Unrestricted	0.0002	0.0000	0.0000	0.0001
Single Unit Long-haul Truck	Gasoline	Urban Restricted	0.0001	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Diesel	Off-Network	0.0001	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Diesel	Rural Restricted	0.0005	0.0001	0.0000	0.0001
Single Unit Long-haul Truck	Diesel	Rural Unrestricted	0.0020	0.0003	0.0000	0.0003
Single Unit Long-haul Truck	Diesel	Urban Restricted	0.0009	0.0001	0.0000	0.0001
Single Unit Long-haul Truck	Diesel	Urban Unrestricted	0.0002	0.0000	0.0000	0.0000
Motor Home	Gasoline	Off-Network	0.0004	0.0006	0.0021	0.0027
Motor Home	Gasoline	Rural Restricted	0.0002	0.0001	0.0000	0.0001
Motor Home	Gasoline	Rural Unrestricted	0.0013	0.0004	0.0001	0.0005
Motor Home	Gasoline	Urban Restricted	0.0006	0.0002	0.0000	0.0002
Motor Home	Gasoline	Urban Unrestricted	0.0001	0.0001	0.0000	0.0001
Motor Home	Diesel	Off-Network	0.0001	0.0000	0.0000	0.0000
Motor Home	Diesel	Rural Restricted	0.0002	0.0000	0.0000	0.0000
Motor Home	Diesel	Rural Unrestricted	0.0013	0.0002	0.0000	0.0002
Motor Home	Diesel	Urban Restricted	0.0006	0.0001	0.0000	0.0001
Motor Home	Diesel	Urban Unrestricted	0.0002	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Diesel	Rural Restricted	0.0134	0.0007	0.0000	0.0007
Combination Short-haul Truck	Diesel	Rural Unrestricted	0.0392	0.0022	0.0000	0.0022
Combination Short-haul Truck	Diesel	Urban Restricted	0.0192	0.0010	0.0000	0.0010
Combination Short-haul Truck	Diesel	Urban Unrestricted	0.0030	0.0002	0.0000	0.0002
Combination Long-haul Truck	Diesel	Off-Network	0.1203	0.0242	0.0000	0.0242
Combination Long-haul Truck	Diesel	Rural Restricted	0.0523	0.0027	0.0000	0.0027
Combination Long-haul Truck	Diesel	Rural Unrestricted	0.1440	0.0079	0.0000	0.0079
Combination Long-haul Truck	Diesel	Urban Restricted	0.0724	0.0037	0.0000	0.0037
Combination Long-haul Truck	Diesel	Urban Unrestricted	0.0107	0.0006	0.0000	0.0006
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**1.0120**	**0.3027**	**0.2661**	**0.5688**
Motorcycle	ALL	ALL	0.0114	0.0122	0.0331	0.0452
Passenger Car	ALL	ALL	0.1558	0.0979	0.1338	0.2318
Passenger Truck	ALL	ALL	0.1629	0.0830	0.0650	0.1480
Light Commercial Truck	ALL	ALL	0.0852	0.0448	0.0263	0.0711
Intercity Bus	ALL	ALL	0.0056	0.0004	0.0000	0.0004
Transit Bus	ALL	ALL	0.0073	0.0006	0.0000	0.0006
School Bus	ALL	ALL	0.0085	0.0012	0.0000	0.0012
Refuse Truck	ALL	ALL	0.0110	0.0007	0.0000	0.0007
Single Unit Short-haul Truck	ALL	ALL	0.0806	0.0161	0.0055	0.0216
Single Unit Long-haul Truck	ALL	ALL	0.0041	0.0007	0.0002	0.0008
Motor Home	ALL	ALL	0.0050	0.0017	0.0023	0.0039
Combination Short-haul Truck	ALL	ALL	0.0748	0.0042	0.0000	0.0042
Combination Long-haul Truck	ALL	ALL	0.3997	0.0391	0.0000	0.0391

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2020			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	Total
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**1.0120**	**0.3027**	**0.2661**	**0.5688**
ALL	Gasoline	ALL	0.4082	0.2410	0.2644	0.5054
ALL	Diesel	ALL	0.6006	0.0599	0.0000	0.0599
ALL	CNG	ALL	0.0007	0.0001	0.0000	0.0001
ALL	Ethanol (E-85)	ALL	0.0025	0.0017	0.0017	0.0034
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**1.0120**	**0.3027**	**0.2661**	**0.5688**
ALL	ALL	Off-Network	0.2866	0.2065	0.2250	0.4315
ALL	ALL	Rural Restricted	0.1126	0.0123	0.0041	0.0165
ALL	ALL	Rural Unrestricted	0.4076	0.0588	0.0275	0.0863
ALL	ALL	Urban Restricted	0.1697	0.0192	0.0064	0.0256
ALL	ALL	Urban Unrestricted	0.0354	0.0058	0.0031	0.0089
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**1.0120**	**0.3027**	**0.2661**	**0.5688**
Safety Margin			15%			15%
Emissions Budget			**1.1638**			**0.6541**

Table A8.4. 2030 Onroad NO_X and VOC Emissions: tons per summer weekday (tpswd) for the Inland Sheboygan County area.

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2030			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	**Total**
Motorcycle	Gasoline	Off-Network	0.0001	0.0005	0.0213	0.0218
Motorcycle	Gasoline	Rural Restricted	0.0013	0.0010	0.0007	0.0018
Motorcycle	Gasoline	Rural Unrestricted	0.0077	0.0072	0.0058	0.0130
Motorcycle	Gasoline	Urban Restricted	0.0019	0.0015	0.0010	0.0025
Motorcycle	Gasoline	Urban Unrestricted	0.0006	0.0007	0.0006	0.0012
Passenger Car	Gasoline	Off-Network	0.0275	0.0347	0.0582	0.0929
Passenger Car	Gasoline	Rural Restricted	0.0038	0.0008	0.0010	0.0018
Passenger Car	Gasoline	Rural Unrestricted	0.0165	0.0037	0.0062	0.0099
Passenger Car	Gasoline	Urban Restricted	0.0063	0.0013	0.0017	0.0030
Passenger Car	Gasoline	Urban Unrestricted	0.0018	0.0004	0.0008	0.0013
Passenger Car	Diesel	Off-Network	0.0003	0.0003	0.0000	0.0003
Passenger Car	Diesel	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Passenger Car	Diesel	Rural Unrestricted	0.0002	0.0000	0.0000	0.0000
Passenger Car	Diesel	Urban Restricted	0.0001	0.0000	0.0000	0.0000
Passenger Car	Diesel	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Off-Network	0.0004	0.0005	0.0009	0.0014
Passenger Car	Ethanol (E-85)	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Rural Unrestricted	0.0002	0.0000	0.0001	0.0002
Passenger Car	Ethanol (E-85)	Urban Restricted	0.0001	0.0000	0.0000	0.0000
Passenger Car	Ethanol (E-85)	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Passenger Truck	Gasoline	Off-Network	0.0216	0.0249	0.0377	0.0626
Passenger Truck	Gasoline	Rural Restricted	0.0042	0.0008	0.0008	0.0016
Passenger Truck	Gasoline	Rural Unrestricted	0.0189	0.0037	0.0056	0.0093
Passenger Truck	Gasoline	Urban Restricted	0.0062	0.0012	0.0012	0.0024
Passenger Truck	Gasoline	Urban Unrestricted	0.0017	0.0003	0.0006	0.0010
Passenger Truck	Diesel	Off-Network	0.0017	0.0002	0.0000	0.0002
Passenger Truck	Diesel	Rural Restricted	0.0004	0.0000	0.0000	0.0000
Passenger Truck	Diesel	Rural Unrestricted	0.0027	0.0003	0.0000	0.0003
Passenger Truck	Diesel	Urban Restricted	0.0006	0.0001	0.0000	0.0001
Passenger Truck	Diesel	Urban Unrestricted	0.0003	0.0000	0.0000	0.0000
Passenger Truck	Ethanol (E-85)	Off-Network	0.0010	0.0015	0.0023	0.0037
Passenger Truck	Ethanol (E-85)	Rural Restricted	0.0002	0.0000	0.0001	0.0001
Passenger Truck	Ethanol (E-85)	Rural Unrestricted	0.0009	0.0002	0.0004	0.0006
Passenger Truck	Ethanol (E-85)	Urban Restricted	0.0003	0.0001	0.0001	0.0001
Passenger Truck	Ethanol (E-85)	Urban Unrestricted	0.0001	0.0000	0.0000	0.0001
Light Commercial Truck	Gasoline	Off-Network	0.0081	0.0093	0.0098	0.0191
Light Commercial Truck	Gasoline	Rural Restricted	0.0013	0.0003	0.0002	0.0005
Light Commercial Truck	Gasoline	Rural Unrestricted	0.0066	0.0013	0.0015	0.0028
Light Commercial Truck	Gasoline	Urban Restricted	0.0020	0.0004	0.0003	0.0007
Light Commercial Truck	Gasoline	Urban Unrestricted	0.0006	0.0001	0.0002	0.0003
Light Commercial Truck	Diesel	Off-Network	0.0011	0.0003	0.0000	0.0003
Light Commercial Truck	Diesel	Rural Restricted	0.0003	0.0000	0.0000	0.0000
Light Commercial Truck	Diesel	Rural Unrestricted	0.0018	0.0003	0.0000	0.0003
Light Commercial Truck	Diesel	Urban Restricted	0.0004	0.0001	0.0000	0.0001
Light Commercial Truck	Diesel	Urban Unrestricted	0.0002	0.0000	0.0000	0.0000
Light Commercial Truck	Ethanol (E-85)	Off-Network	0.0003	0.0004	0.0005	0.0009
Light Commercial Truck	Ethanol (E-85)	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Light Commercial Truck	Ethanol (E-85)	Rural Unrestricted	0.0002	0.0000	0.0001	0.0001

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2030			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	**Total**
Light Commercial Truck	Ethanol (E-85)	Urban Restricted	0.0001	0.0000	0.0000	0.0000
Light Commercial Truck	Ethanol (E-85)	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Intercity Bus	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Intercity Bus	Diesel	Rural Restricted	0.0003	0.0000	0.0000	0.0000
Intercity Bus	Diesel	Rural Unrestricted	0.0013	0.0001	0.0000	0.0001
Intercity Bus	Diesel	Urban Restricted	0.0006	0.0000	0.0000	0.0000
Intercity Bus	Diesel	Urban Unrestricted	0.0001	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Transit Bus	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Transit Bus	Diesel	Rural Restricted	0.0003	0.0000	0.0000	0.0000
Transit Bus	Diesel	Rural Unrestricted	0.0011	0.0001	0.0000	0.0001
Transit Bus	Diesel	Urban Restricted	0.0007	0.0000	0.0000	0.0000
Transit Bus	Diesel	Urban Unrestricted	0.0001	0.0000	0.0000	0.0000
Transit Bus	CNG	Off-Network	0.0000	0.0000	0.0000	0.0000
Transit Bus	CNG	Rural Restricted	0.0001	0.0000	0.0000	0.0000
Transit Bus	CNG	Rural Unrestricted	0.0002	0.0000	0.0000	0.0000
Transit Bus	CNG	Urban Restricted	0.0001	0.0000	0.0000	0.0000
Transit Bus	CNG	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
School Bus	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
School Bus	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
School Bus	Diesel	Rural Restricted	0.0007	0.0001	0.0000	0.0001
School Bus	Diesel	Rural Unrestricted	0.0024	0.0002	0.0000	0.0002
School Bus	Diesel	Urban Restricted	0.0015	0.0001	0.0000	0.0001
School Bus	Diesel	Urban Unrestricted	0.0003	0.0000	0.0000	0.0000
Refuse Truck	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Refuse Truck	Diesel	Rural Restricted	0.0007	0.0000	0.0000	0.0000
Refuse Truck	Diesel	Rural Unrestricted	0.0019	0.0001	0.0000	0.0001
Refuse Truck	Diesel	Urban Restricted	0.0010	0.0000	0.0000	0.0000
Refuse Truck	Diesel	Urban Unrestricted	0.0001	0.0000	0.0000	0.0000
Single Unit Short-haul Truck	Gasoline	Off-Network	0.0021	0.0023	0.0019	0.0043
Single Unit Short-haul Truck	Gasoline	Rural Restricted	0.0008	0.0001	0.0000	0.0002
Single Unit Short-haul Truck	Gasoline	Rural Unrestricted	0.0027	0.0007	0.0002	0.0008
Single Unit Short-haul Truck	Gasoline	Urban Restricted	0.0015	0.0003	0.0001	0.0003
Single Unit Short-haul Truck	Gasoline	Urban Unrestricted	0.0002	0.0001	0.0000	0.0001
Single Unit Short-haul Truck	Diesel	Off-Network	0.0034	0.0002	0.0000	0.0002
Single Unit Short-haul Truck	Diesel	Rural Restricted	0.0033	0.0003	0.0000	0.0003
Single Unit Short-haul Truck	Diesel	Rural Unrestricted	0.0135	0.0013	0.0000	0.0013
Single Unit Short-haul Truck	Diesel	Urban Restricted	0.0064	0.0006	0.0000	0.0006
Single Unit Short-haul Truck	Diesel	Urban Unrestricted	0.0014	0.0001	0.0000	0.0001

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2030			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	**Total**
Single Unit Long-haul Truck	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Diesel	Off-Network	0.0001	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Diesel	Rural Restricted	0.0003	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Diesel	Rural Unrestricted	0.0011	0.0001	0.0000	0.0001
Single Unit Long-haul Truck	Diesel	Urban Restricted	0.0005	0.0000	0.0000	0.0000
Single Unit Long-haul Truck	Diesel	Urban Unrestricted	0.0001	0.0000	0.0000	0.0000
Motor Home	Gasoline	Off-Network	0.0001	0.0002	0.0006	0.0008
Motor Home	Gasoline	Rural Restricted	0.0001	0.0000	0.0000	0.0000
Motor Home	Gasoline	Rural Unrestricted	0.0004	0.0001	0.0000	0.0001
Motor Home	Gasoline	Urban Restricted	0.0002	0.0000	0.0000	0.0000
Motor Home	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Motor Home	Diesel	Off-Network	0.0001	0.0000	0.0000	0.0000
Motor Home	Diesel	Rural Restricted	0.0001	0.0000	0.0000	0.0000
Motor Home	Diesel	Rural Unrestricted	0.0006	0.0001	0.0000	0.0001
Motor Home	Diesel	Urban Restricted	0.0003	0.0000	0.0000	0.0000
Motor Home	Diesel	Urban Unrestricted	0.0001	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Off-Network	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Rural Restricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Rural Unrestricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Urban Restricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Gasoline	Urban Unrestricted	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Diesel	Off-Network	0.0000	0.0000	0.0000	0.0000
Combination Short-haul Truck	Diesel	Rural Restricted	0.0060	0.0003	0.0000	0.0003
Combination Short-haul Truck	Diesel	Rural Unrestricted	0.0166	0.0008	0.0000	0.0008
Combination Short-haul Truck	Diesel	Urban Restricted	0.0087	0.0004	0.0000	0.0004
Combination Short-haul Truck	Diesel	Urban Unrestricted	0.0013	0.0001	0.0000	0.0001
Combination Long-haul Truck	Diesel	Off-Network	0.1221	0.0206	0.0000	0.0206
Combination Long-haul Truck	Diesel	Rural Restricted	0.0214	0.0009	0.0000	0.0009
Combination Long-haul Truck	Diesel	Rural Unrestricted	0.0558	0.0025	0.0000	0.0025
Combination Long-haul Truck	Diesel	Urban Restricted	0.0297	0.0013	0.0000	0.0013
Combination Long-haul Truck	Diesel	Urban Unrestricted	0.0043	0.0002	0.0000	0.0002
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**0.4714**	**0.1335**	**0.1626**	**0.2960**
Motorcycle	ALL	ALL	0.0116	0.0108	0.0293	0.0402
Passenger Car	ALL	ALL	0.0572	0.0419	0.0691	0.1110
Passenger Truck	ALL	ALL	0.0608	0.0334	0.0487	0.0821
Light Commercial Truck	ALL	ALL	0.0231	0.0125	0.0126	0.0252
Intercity Bus	ALL	ALL	0.0023	0.0002	0.0000	0.0002
Transit Bus	ALL	ALL	0.0027	0.0002	0.0000	0.0002
School Bus	ALL	ALL	0.0049	0.0005	0.0000	0.0005
Refuse Truck	ALL	ALL	0.0037	0.0002	0.0000	0.0002
Single Unit Short-haul Truck	ALL	ALL	0.0352	0.0059	0.0022	0.0081
Single Unit Long-haul Truck	ALL	ALL	0.0021	0.0002	0.0000	0.0002
Motor Home	ALL	ALL	0.0020	0.0006	0.0006	0.0012
Combination Short-haul Truck	ALL	ALL	0.0326	0.0015	0.0000	0.0015
Combination Long-haul Truck	ALL	ALL	0.2332	0.0255	0.0000	0.0255

Source Type	Fuel Type	Road Type	Inland Sheboygan County – Year 2030			
			NO_x Emissions (tpswd)	VOC Emissions (tpswd)		
			Total	Exhaust	Evaporative	**Total**
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**0.4714**	**0.1335**	**0.1626**	**0.2960**
ALL	Gasoline	ALL	0.1469	0.0981	0.1580	0.2562
ALL	Diesel	ALL	0.3202	0.0325	0.0000	0.0325
ALL	CNG	ALL	0.0005	0.0000	0.0000	0.0000
ALL	Ethanol (E-85)	ALL	0.0037	0.0028	0.0045	0.0074
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**0.4714**	**0.1335**	**0.1626**	**0.2960**
ALL	ALL	Off-Network	0.1900	0.0960	0.1332	0.2292
ALL	ALL	Rural Restricted	0.0457	0.0048	0.0029	0.0077
ALL	ALL	Rural Unrestricted	0.1533	0.0229	0.0198	0.0428
ALL	ALL	Urban Restricted	0.0690	0.0074	0.0044	0.0119
ALL	ALL	Urban Unrestricted	0.0133	0.0022	0.0023	0.0045
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**0.4714**	**0.1335**	**0.1626**	**0.2960**
Safety Margin			15%			15%
Emissions Budget			**0.5421**			**0.3404**

Table A8.5. Vehicle Activity Data Output from the MOVES2014a Model for Years 2011, 2014, 2020 and 2030 for the Inland Sheboygan County area.

Source Type	Fuel Type	Road Type	Inland Sheboygan County							
			Vehicle Population				Vehicle-Miles of Travel Summer Weekday			
			2011	2014	2020	2030	2011	2014	2020	2030
Motorcycle	Gasoline	Off-Network	1,625	1,557	1,721	1,791				
Motorcycle	Gasoline	Rural Restricted					745	1,541	1,768	1,850
Motorcycle	Gasoline	Rural Unrestricted					11,390	10,575	11,528	11,954
Motorcycle	Gasoline	Urban Restricted					2,591	2,169	2,484	2,598
Motorcycle	Gasoline	Urban					886	865	970	1,029
Passenger Car	Gasoline	Off-Network	21,287	20,400	22,481	23,132				
Passenger Car	Gasoline	Rural Restricted					39,440	81,746	93,290	97,552
Passenger Car	Gasoline	Rural Unrestricted					444,951	413,799	448,518	464,822
Passenger Car	Gasoline	Urban Restricted					161,781	135,664	154,468	161,435
Passenger Car	Gasoline	Urban					46,354	45,313	50,568	53,575
Passenger Car	Diesel	Off-Network	90	123	194	270				
Passenger Car	Diesel	Rural Restricted					161	512	877	1,158
Passenger Car	Diesel	Rural Unrestricted					1,816	2,592	4,217	5,517
Passenger Car	Diesel	Urban Restricted					660	850	1,452	1,916
Passenger Car	Diesel	Urban					189	284	475	636
Passenger Car	Ethanol (E-85)	Off-Network	2	13	126	344				
Passenger Car	Ethanol (E-85)	Rural Restricted					3	59	552	1,461
Passenger Car	Ethanol (E-85)	Rural Unrestricted					39	300	2,656	6,960
Passenger Car	Ethanol (E-85)	Urban Restricted					14	98	915	2,417
Passenger Car	Ethanol (E-85)	Urban					4	33	299	802
Passenger Truck	Gasoline	Off-Network	15,610	14,862	16,101	16,156				
Passenger Truck	Gasoline	Rural Restricted					30,299	62,108	69,678	69,552
Passenger Truck	Gasoline	Rural Unrestricted					395,842	364,069	387,929	383,772
Passenger Truck	Gasoline	Urban Restricted					112,433	93,243	104,368	104,121
Passenger Truck	Gasoline	Urban					33,328	32,221	35,348	35,749
Passenger Truck	Diesel	Off-Network	263	271	324	347				
Passenger Truck	Diesel	Rural Restricted					529	1,163	1,421	1,499
Passenger Truck	Diesel	Rural Unrestricted					6,918	6,816	7,912	8,273
Passenger Truck	Diesel	Urban Restricted					1,965	1,746	2,129	2,245
Passenger Truck	Diesel	Urban					582	603	721	771
Passenger Truck	Ethanol (E-85)	Off-Network	4	32	325	930				
Passenger Truck	Ethanol (E-85)	Rural Restricted					8	147	1,493	4,042
Passenger Truck	Ethanol (E-85)	Rural Unrestricted					100	864	8,311	22,303

Source Type	Fuel Type	Road Type	Inland Sheboygan County							
			Vehicle Population				Vehicle-Miles of Travel Summer Weekday			
			2011	2014	2020	2030	2011	2014	2020	2030
Passenger Truck	Ethanol (E-85)	Urban Restricted					28	221	2,236	6,051
Passenger Truck	Ethanol (E-85)	Urban					8	76	757	2,078
Light Commercial Truck	Gasoline	Off-Network	3,673	3,579	3,969	3,993				
Light Commercial Truck	Gasoline	Rural Restricted					7,425	15,360	17,306	17,286
Light Commercial Truck	Gasoline	Rural Unrestricted					96,269	89,353	95,623	94,654
Light Commercial Truck	Gasoline	Urban Restricted					27,349	22,889	25,731	25,686
Light Commercial Truck	Gasoline	Urban					8,078	7,881	8,683	8,787
Light Commercial Truck	Diesel	Off-Network	207	205	226	236				
Light Commercial Truck	Diesel	Rural Restricted					424	879	987	1,022
Light Commercial Truck	Diesel	Rural Unrestricted					5,501	5,116	5,452	5,597
Light Commercial Truck	Diesel	Urban Restricted					1,563	1,311	1,467	1,519
Light Commercial Truck	Diesel	Urban					462	451	495	520
Light Commercial Truck	Ethanol (E-85)	Off-Network	1	6	68	216				
Light Commercial Truck	Ethanol (E-85)	Rural Restricted					2	29	330	953
Light Commercial Truck	Ethanol (E-85)	Rural Unrestricted					20	167	1,823	5,221
Light Commercial Truck	Ethanol (E-85)	Urban Restricted					6	43	491	1,417
Light Commercial Truck	Ethanol (E-85)	Urban					2	15	166	485
Intercity Bus	Diesel	Off-Network	3	3	3	3				
Intercity Bus	Diesel	Rural Restricted					36	78	95	110
Intercity Bus	Diesel	Rural Unrestricted					451	414	455	484
Intercity Bus	Diesel	Urban Restricted					190	164	200	232
Intercity Bus	Diesel	Urban					43	42	48	52
Transit Bus	Gasoline	Off-Network	0	0	0	0				
Transit Bus	Gasoline	Rural Restricted					1	2	4	5
Transit Bus	Gasoline	Rural Unrestricted					12	13	18	23
Transit Bus	Gasoline	Urban Restricted					5	5	8	11
Transit Bus	Gasoline	Urban					1	1	2	3
Transit Bus	Diesel	Off-Network	8	9	10	10				
Transit Bus	Diesel	Rural Restricted					64	131	159	183
Transit Bus	Diesel	Rural Unrestricted					803	710	770	817
Transit Bus	Diesel	Urban Restricted					338	281	339	392
Transit Bus	Diesel	Urban					78	73	81	88
Transit Bus	CNG	Off-Network	1	1	2	2				
Transit Bus	CNG	Rural Restricted					9	19	26	35
Transit Bus	CNG	Rural Unrestricted					108	105	128	154
Transit Bus	CNG	Urban Restricted					46	42	57	74
Transit Bus	CNG	Urban					10	11	14	17

Source Type	Fuel Type	Road Type	Inland Sheboygan County							
			Vehicle Population				Vehicle-Miles of Travel Summer Weekday			
			2011	2014	2020	2030	2011	2014	2020	2030
School Bus	Gasoline	Off-Network	1	1	1	1				
School Bus	Gasoline	Rural Restricted					3	5	5	6
School Bus	Gasoline	Rural Unrestricted					44	27	26	27
School Bus	Gasoline	Urban Restricted					18	11	12	13
School Bus	Gasoline	Urban					4	3	3	3
School Bus	Diesel	Off-Network	84	88	101	112				
School Bus	Diesel	Rural Restricted					195	419	514	590
School Bus	Diesel	Rural Unrestricted					2,456	2,268	2,495	2,637
School Bus	Diesel	Urban Restricted					1,035	898	1,099	1,263
School Bus	Diesel	Urban					238	233	264	283
Refuse Truck	Gasoline	Off-Network	2	1	0	0				
Refuse Truck	Gasoline	Rural Restricted					7	10	2	2
Refuse Truck	Gasoline	Rural Unrestricted					51	31	5	4
Refuse Truck	Gasoline	Urban Restricted					25	15	3	2
Refuse Truck	Gasoline	Urban					3	2	0	0
Refuse Truck	Diesel	Off-Network	25	28	35	37				
Refuse Truck	Diesel	Rural Restricted					162	365	448	507
Refuse Truck	Diesel	Rural Unrestricted					1,141	1,100	1,212	1,264
Refuse Truck	Diesel	Urban Restricted					572	519	635	721
Refuse Truck	Diesel	Urban					75	77	87	92
Single Unit Short-haul	Gasoline	Off-Network	301	314	346	374				
Single Unit Short-haul	Gasoline	Rural Restricted					730	1,644	2,049	2,387
Single Unit Short-haul	Gasoline	Rural Unrestricted					7,953	7,678	8,584	9,205
Single Unit Short-haul	Gasoline	Urban Restricted					3,509	3,184	3,959	4,620
Single Unit Short-haul	Gasoline	Urban					660	676	777	846
Single Unit Short-haul	Diesel	Off-Network	594	639	745	805				
Single Unit Short-haul	Diesel	Rural Restricted					1,659	3,680	4,487	5,042
Single Unit Short-haul	Diesel	Rural Unrestricted					18,079	17,191	18,796	19,442
Single Unit Short-haul	Diesel	Urban Restricted					7,976	7,129	8,668	9,757
Single Unit Short-haul	Diesel	Urban					1,500	1,513	1,702	1,786
Single Unit Long-haul Truck	Gasoline	Off-Network	10	8	5	1				
Single Unit Long-haul Truck	Gasoline	Rural Restricted					24	32	12	1
Single Unit Long-haul Truck	Gasoline	Rural Unrestricted					266	151	51	3
Single Unit Long-haul Truck	Gasoline	Urban Restricted					117	62	24	1
Single Unit Long-haul Truck	Gasoline	Urban					22	13	5	0
Single Unit Long-haul Truck	Diesel	Off-Network	28	32	41	48				
Single Unit Long-haul Truck	Diesel	Rural Restricted					106	260	366	432

Source Type	Fuel Type	Road Type	Inland Sheboygan County							
			Vehicle Population				Vehicle-Miles of Travel Summer Weekday			
			2011	2014	2020	2030	2011	2014	2020	2030
Single Unit Long-haul Truck	Diesel	Rural Unrestricted					1,155	1,213	1,531	1,662
Single Unit Long-haul Truck	Diesel	Urban Restricted					510	503	706	834
Single Unit Long-haul Truck	Diesel	Urban					96	107	138	152
Motor Home	Gasoline	Off-Network	144	144	162	152				
Motor Home	Gasoline	Rural Restricted					44	95	104	95
Motor Home	Gasoline	Rural Unrestricted					632	592	582	488
Motor Home	Gasoline	Urban Restricted					267	235	257	235
Motor Home	Gasoline	Urban					60	60	61	52
Motor Home	Diesel	Off-Network	77	88	104	139				
Motor Home	Diesel	Rural Restricted					23	58	67	87
Motor Home	Diesel	Rural Unrestricted					336	361	372	446
Motor Home	Diesel	Urban Restricted					142	143	165	215
Motor Home	Diesel	Urban					32	37	39	47
Combination Short-haul	Gasoline	Off-Network	0	0	0	0				
Combination Short-haul	Gasoline	Rural Restricted					0	1	0	0
Combination Short-haul	Gasoline	Rural Unrestricted					4	2	0	0
Combination Short-haul	Gasoline	Urban Restricted					2	1	0	0
Combination Short-haul	Gasoline	Urban					0	0	0	0
Combination Short-haul	Diesel	Off-Network	183	184	202	210				
Combination Short-haul	Diesel	Rural Restricted					1,373	2,959	4,099	4,909
Combination Short-haul	Diesel	Rural Unrestricted					9,891	9,134	11,346	12,510
Combination Short-haul	Diesel	Urban Restricted					4,894	4,249	5,869	7,041
Combination Short-haul	Diesel	Urban					646	633	809	905
Combination Long-haul	Diesel	Off-Network	191	202	243	287				
Combination Long-haul	Diesel	Rural Restricted					5,083	10,561	12,478	14,385
Combination Long-haul	Diesel	Rural Unrestricted					34,497	30,718	32,551	34,543
Combination Long-haul	Diesel	Urban Restricted					17,497	14,646	17,258	19,929
Combination Long-haul	Diesel	Urban					2,192	2,071	2,257	2,431
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**44,412**	**42,791**	**47,536**	**49,599**	**1,570,368**	**1,532,836**	**1,705,278**	**1,783,863**
Motorcycle	ALL	ALL	1,625	1,557	1,721	1,791	15,611	15,149	16,750	17,430
Passenger Car	ALL	ALL	21,378	20,536	22,801	23,747	695,413	681,251	758,288	798,252
Passenger Truck	ALL	ALL	15,876	15,165	16,750	17,433	582,042	563,278	622,303	640,455
Light Commercial Truck	ALL	ALL	3,881	3,789	4,263	4,445	147,099	143,493	158,555	163,145
Intercity Bus	ALL	ALL	3	3	3	3	721	698	799	879
Transit Bus	ALL	ALL	10	10	11	13	1,475	1,394	1,606	1,801

Source Type	Fuel Type	Road Type	Inland Sheboygan County							
			Vehicle Population				Vehicle-Miles of Travel Summer Weekday			
			2011	2014	2020	2030	2011	2014	2020	2030
School Bus	ALL	ALL	86	90	103	113	3,993	3,864	4,418	4,822
Refuse Truck	ALL	ALL	27	30	35	38	2,036	2,118	2,391	2,592
Single Unit Short-haul	ALL	ALL	895	953	1,092	1,179	42,065	42,694	49,022	53,084
Single Unit Long-haul Truck	ALL	ALL	38	40	46	49	2,297	2,342	2,833	3,086
Motor Home	ALL	ALL	221	232	266	291	1,537	1,581	1,647	1,664
Combination Short-haul	ALL	ALL	183	184	202	210	16,811	16,978	22,123	25,365
Combination Long-haul	ALL	ALL	191	202	243	287	59,269	57,995	64,545	71,288
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**44,412**	**42,791**	**47,536**	**49,599**	**1,570,368**	**1,532,836**	**1,705,278**	**1,783,863**
ALL	Gasoline	ALL	42,653	40,869	44,787	45,600	1,433,626	1,393,346	1,524,812	1,552,450
ALL	Diesel	ALL	1,753	1,870	2,229	2,506	136,333	137,261	160,211	176,945
ALL	CNG	ALL	1	1	2	2	173	177	225	279
ALL	Ethanol (E-85)	ALL	6	50	519	1,490	236	2,053	20,030	54,189
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**44,412**	**42,791**	**47,536**	**49,599**	**1,570,368**	**1,532,836**	**1,705,278**	**1,783,863**
ALL	ALL	Off-Network	44,412	42,791	47,536	49,599				
ALL	ALL	Rural Restricted					88,555	183,865	212,619	225,151
ALL	ALL	Rural Unrestricted					1,040,723	965,358	1,052,893	1,092,783
ALL	ALL	Urban Restricted					345,535	290,320	334,998	354,744
ALL	ALL	Urban					95,554	93,293	104,769	111,186
ALL (Total)	**ALL (Total)**	**ALL (Total)**	**44,412**	**42,791**	**47,536**	**49,599**	**1,570,368**	**1,532,836**	**1,705,278**	**1,783,863**

APPENDIX 9

Permanent and Enforceable Control Measures in the Inland Sheboygan County Area

This appendix provides additional details about the permanent and enforceable control measures that have reduced emissions of ozone precursors from the Inland Sheboygan County area. This information expands upon that presented in Section 6 of the Redesignation Request and Maintenance Plan for the Inland Sheboygan County, Wisconsin 1997 and 2008 8-hour Ozone Nonattainment Area.

1. Point Source Control Measures

NO_x Control Measures

Wisconsin NO_x RACT – Wisconsin has implemented RACT for major NO_x sources (sources with a Potential to Emit, PTE, of 100 tons or greater per year) in Wisconsin as part of compliance requirements for the 1997 ozone NAAQS. NOx RACT applies to all of Sheboygan County. The NOx RACT requirements are codified under ss. NR 428.20 to 428.25, Wis. Adm. Code and became applicable May 1, 2009.

In 2014, there were approximately 100 individual emission units with 367 tons of NOx emissions from point sources in the Inland Sheboygan County area (Table A9.1). These emission units are at smaller facilities that do not have PTEs above major source thresholds or are individual emissions units that are relatively small in PTE or operate infrequently (e.g., batch heat treat furnaces, emergency generators, auxiliary boilers) and therefore are not subject to NOx RACT requirements. If the owners of these facilities modify or add sources such that total facility potential emissions increase above 100 tons per year, the facilities and emission units become subject to state NOx RACT requirements. In addition, any new emission units at these facilities would be subject to performance standards under s. NR 428.05, Wis. Adm. Code, as discussed in section 5.

Table A9.1. 2008-2014 NOx emissions and requirements for point sources in the Inland Sheboygan County area.

Facility	2008 NOx (Annual Tons)	2011 NOx (Annual Tons)	2014 NOx (Annual Tons)	2008 – 2014 Emissions Change	Permanent and Enforceable Control Measures
Emissions	120	303	367	207%	Emission units become subject to NOx RACT if facilities exceed 100 TPY PTE in the future.
Number of Emission Units	86	97	100		

Federal NOx Transport Rules – Beginning January 1, 2009, EGUs in 22 states east of the Mississippi (including Wisconsin) became subject to ozone season NOx emission budgets under the Clean Air Interstate Rule (CAIR). CAIR addresses the broad regional interstate transport of

NOx affecting attainment and maintenance of the 1997 ozone NAAQS as required under CAA s. 110(a)(2)(D). CAIR resulted in a significant reduction of NOx emissions during the ozone season in areas contributing to Sheboygan County over the 2009-2014 period.

Table A9.2 shows emission levels for EGUs affected by the CAIR rule through 2014 for states upwind of the Inland Sheboygan County area. The states listed (in decreasing order of contribution) are those states contributing more than 1% of the 2008 standard (0.75 ppb) to the Sheboygan Kohler-Andre monitor. Between 2008 and 2014, total EGU emissions across these states decreased by approximately 24%. Emission reductions were proportionately larger, ranging from 24% to 54.4%, for the three states contributing the most to Sheboygan County ozone concentrations: Illinois, Indiana, and Wisconsin.

Starting with the 2015 ozone season, the Cross-State Air Pollution Rule (CSAPR) replaced CAIR to reduce interstate NOx transport relative to the 1997 ozone NAAQS. CSAPR implemented NOx budgets for the impacted states in two phases. Phase I limits NOx emissions in 2015 and 2016. EPA published the CSAPR Update (81 FR 74504) in 2016 to address NOx transport affecting the attainment and maintenance of the 2008 ozone NAAQS (79 FR 16436). The CSAPR Update establishes Phase II NOx budgets starting with the 2017 ozone season.

VOC Control Measures

VOC RACT / CTG – The 2008 Ozone Implementation Rule states that RACT requirements can be met through previously adopted RACT controls approved by EPA under prior ozone NAAQS (80 FR 12264). Wisconsin has implemented VOC Control Techniques Guidelines (CTG) to fulfill RACT requirements for Wisconsin nonattainment areas, including all of Sheboygan County, under the 1997 ozone NAAQS. These VOC RACT / CTG requirements are codified under chapters NR 419 through 424, Wis. Adm. Code. The list of the CTGs in place in Wisconsin are provided in Appendix 10. All of these CTG requirements were implemented and effective prior to the 2011 base year. Appendix 11 establishes that there are no sources within the Inland Sheboygan County area that are applicable to the CTGs that have not been incorporated into Wisconsin's Administrative Code and provides Negative Declarations regarding the need for regulation codifying these CTGs.

Table A9.2. EGU NOx emitted under the CAIR program in states contributing > 0.75 ppb (1% of the 2008 NAAQS) in Sheboygan County.

State	CSAPR Modeled Contribution to Sheboygan County[1] (ppb)	Ozone Season NOx Emissions (Tons)			Percent Reduction		
		2008	2011	2014	2008 - 2011	2011 – 2014	2008 – 2014
Illinois	28.209	29,891	25,755	17,132	13.8%	33.5%	42.7%
Indiana	11.244	53,016	48,926	40,247	7.7%	17.7%	24.1%
Wisconsin	8.437	19,947	13,818	9,087	30.7%	34.2%	54.4%
Michigan	3.117	38,437	32,780	24,981	14.7%	23.8%	35.0%
Ohio	3.027	52,479	43,346	32,181	17.4%	25.8%	38.7%
Kentucky	2.007	39,324	40,055	33,896	-1.9%	15.4%	13.8%
Missouri	1.812	34,820	26,912	31,235	22.7%	-16.1%	10.3%
W. Virginia	1.167	25,398	23,431	28,681	7.7%	-22.4%	-12.9%
Pennsylvania	1.159	53,545	64,885	44,005	-21.2%	32.2%	17.8%
Virginia	0.865	17,392	15,620	9,695	10.2%	37.9%	44.3%
Arkansas	0.840	16,561	17,868	18,135	-7.9%	-1.5%	-9.5%
Louisiana	0.767	24,031	22,785	18,278	5.2%	19.8%	23.9%
Total		**404,842**	**376,180**	**307,554**	**7.1%**	**18.2%**	**24.0%**

[1] Ozone contributions as determined by EPA in the final CSAPR rule, 76 FR 48208, August 8, 2011.
Source: EPA Clean Air Markets Division, Database of reported emissions.

National Emission Standards for Hazardous Air Pollutant (NESHAP) rules – A number of federal NESHAP rules were implemented to control hazardous pollutants. These rules include requirements to control hazardous organic pollutants through ensuring complete combustion of fuels or implementing requirements for emissions of total hydrocarbons. Under either approach, the rules act to reduce total VOC emitted by the affected sources. These NESHAP rules apply to both major and area source facilities. Major sources are those facilities emitting more than 10 tons per year of a single hazardous air pollutant or more than 25 tons per year of all hazardous air pollutants in total. Area sources are those facilities that emit less than the major source thresholds for hazardous air pollutants.

These NESHAP measures apply to sources within the Inland Sheboygan County area but also apply nationally, thereby reducing the transport of VOC emissions into the nonattainment area. The NESHAP rules that apply to sources in the Inland Sheboygan County area are listed in Table A9.3.

Table A9.3 lists the point sources emitting VOCs in the Inland Sheboygan County area in 2014. This assessment shows that approximately 92.5 of 2014 VOC emissions come from non-combustion sources. As indicated in Table A9.3, the majority of these non-combustion-related emissions are subject to various NESHAP rules that became effective prior to 2011. Other sources are subject to VOC RACT, as indicated. These rules aid in controlling VOC emissions

but were implemented prior to 2011 with no additional incremental reduction expected between 2011 and 2014.

Table A9.3. 2014 VOC emissions and requirements for point sources in the Inland Sheboygan County area.

FID	Facility	Unit	Annual VOC (Tons)	Percent of Total	Permanent and Enforceable Control Measures
Combustion Sources					
Multiple	Industrial, Commercial and Institutional Boilers and Process Heaters	72 units	6.4	1.6%	ICI Boiler and process heater NESHAP combustion requirements[1]
Multiple	Reciprocating Engines	15 units	23.2	5.8%	RICE NESHAP requirements[1]
Multiple	Other small combustion units	4 units	0.4	0.1%	Individual emission units subject to NESHAPs as applicable
Subtotal =		**91 units**	**30.0**	**7.5%**	
Non-Combustion Sources					
460032870	Kohler Co. Metals Processing	13 units	56.1	14.0%	Iron and Steel Foundries NESHAP requirements[1]
460034630	Bemis Manufacturing - Plant B	4 units	19.4	4.9%	Plywood and Composite Wood Products NESHAP requirements[1]
Multiple	Specific NESHAP source categories as applicable	15 units	10.7	2.7%	Individual emission units subject to NESHAP requirements[1]
Multiple	Individual emission units subject to VOC RACT / CTGs as applicable	48 units	284.5	71.0%	Individual emission units subject to VOC RACT / CTGs as applicable
Subtotal =		**80 units**	**370.7**	**92.5%**	
Total =			**400.7**	**100.0%**	

ICI = Industrial, Commercial and Institutional, RICE = Reciprocating Internal Combustion Engine.

[1] The emissions units are subject to either major source or area source NESHAP emission requirements based on size thresholds. The applicability of requirements and exemptions for each unit has not been determined for purposes of this assessment. Natural gas-fired boilers and processes at area sources are not subject to requirements.

Table A9.3 shows that approximately 7.5% of VOC point source emissions in 2014 came from combustion activities or processes. These combustion emissions originated from a number of industrial boilers, reciprocating engines, and various space and process heating units. It should be noted, however, that although the combustion NESHAP requirements are expected to minimize VOC emissions, the incremental emission reductions due to these rules are expected to be relatively small and difficult to quantify.

2. Area Source Control Measures

As noted for point sources, Wisconsin has implemented all of the necessary VOC RACT / CTG rules under chs. NR 419 through 424, Wis. Adm. Code. A number of these rules limit VOC

emissions from area sources as noted in Appendix 10. Wisconsin previously had a Stage 2 vehicle refueling vapor recovery program in place. However, this program was removed from Wisconsin's ozone SIP on November 4, 2013 (78 FR 65875) with EPA approval because the equipment was found to defeat onboard vapor recovery systems for some new vehicles. As stage 2 equipment is removed, actual VOC emissions are anticipated to decrease slightly. This SIP revision was based on a technical showing of net benefit as required under the CAA in order to prevent SIP backsliding.

There are also a number of federal programs in place which reduce area source VOC emissions. VOC emission standards for consumer and commercial products were promulgated under 40 CFR Part 59. This program was implemented prior to 2011 and will continue to maintain reduced VOCs emitted from this source category. Actual emission levels going into the future will vary depending on population and activity use factors. Two other federal rules, the NESHAPs for Gasoline Distribution (Stage I) and Area Source ICI Boilers, also control area VOC emissions associated with fuel storage and transfer activities.

3. Onroad Source Control Measures

Both NOx and VOC emissions from on-road mobile sources are substantially controlled through federal new vehicle emission standards programs and fuel standards. Although initial compliance dates in many cases were prior to 2011, these regulations have continued to reduce area-wide emissions as fleets turn over to newer vehicles. All of these programs apply nationally and have reduced emissions both within the nonattainment area and contributing ozone precursor transport areas. The federal programs contributing to attainment of the 2008 ozone NAAQS include those listed in Table A9.4.

The Wisconsin-administered I/M program also limits on-road VOC and NOx emissions from on-road sources and is required for Sheboygan County. The Wisconsin I/M program was first implemented in 1984 and has gone through several modifications and enhancements since that time. The I/M program requirements are codified in chs. NR 485 and Trans 131, Wis. Adm. Code. The I/M program reduces average vehicle VOC and NOx emissions and garners some level of continued incremental reduction as fleets turn over to new vehicles.

Table A9.4. Federal onroad mobile source regulations contributing to attainment.

On-road Control Program	Pollutants	Model Year[1]	Regulation
Passenger vehicles, SUVs, and light duty trucks – emissions and fuel standards	VOC & NOx	2004 – 2009+ (Tier 2) 2017+ (Tier 3)	40 CFR Part 85 & 86
Light-duty trucks and medium duty passenger vehicle – evaporative standards	VOC	2004 - 2010	40 CFR Part 86
Heavy-duty highway compression engines	VOC & NOx	2007+	40 CFR Part 86
Heavy-duty spark ignition engines	VOC & NOx	2005 – 2008+	40 CFR Part 86
Motorcycles	VOC & NOx	2006 – 2010 (Tier 1 & 2)	40 CFR Part 86
Mobile Source Air Toxics – fuel formulation, passenger vehicle emissions, and portable container emissions	Organic Toxics & VOC	2009 - 2015[2]	40 CFR Part 59, 80, 85, & 86
Light duty vehicle corporate average fuel economy (CAFE) standards	Fuel efficiency (VOC and NOx)	2012-2016 & 2017-2025	40 CFR Part 600

[1]The range in model years affected can reflect phasing of requirements based on engine size or initial years for replacing earlier tier requirements.
[2]The range in model years reflects phased implementation of fuel, passenger vehicle, and portable container emission requirements as well as the phasing by vehicle size and type.

4. Nonroad Source Control Measures

Similar to on-road sources, VOC and NOx emitted by non-road mobile sources are significantly controlled via federal standards for new engines. These programs therefore reduce ozone precursor emissions generated within Sheboygan County and in the broader regional areas contributing to ozone transport. Table A9.5 lists the non-road source categories and applicable federal regulations. The non-road regulations continue to slowly lower average unit and total sector emissions as equipment fleets are replaced each year (approximately 20 years for complete fleet turnover) pulling the highest emitting equipment out of circulation or substantially reducing its use. The new engine tier requirements are implemented in conjunction with fuel programs regulating fuel sulfur content. The fuel programs enable achievement of various new engine tier VOC and NOx emission limits.

5. New Source Requirements

Wisconsin has a fully approved NSR program. For areas designated or redesignated attainment, the NSR program implements PSD requirements as codified under ch. NR 405, Wis. Adm. Code. The state's PSD program has also been approved by EPA, as discussed in section 2.1 of the main document. Under the PSD program, any new major source or an existing major source undergoing a major modification will be required to apply Best Available Control Technology. A major modification is defined as a major source increasing net emissions or potential-to-emit of

an air contaminant above the applicable thresholds of 40 tons NOx per year and/or 40 tons VOC per year.

Table A9.5. Federal nonroad mobile source regulations contributing to attainment.

Nonroad Control Program	Pollutants	Model Year[1]	Regulation
Aircraft	HC & NOx	2000 – 2005+	40 CFR Part 87
Compression Ignition[2]	NMHC & NOx	2000 – 2015+ (Tier 4)	40 CFR Part 89 & 1039
Large Spark Ignition	HC & NOx	2007+	40 CFR Part 1048
Locomotive Engines	HC & NOx	2012 – 2014 (Tier 3)	
2015+ (Tier 4)	40 CFR Part 1033		
Marine Compression Ignition	HC & NOx	2012 – 2018	40 CFR Part 1042
Marine Spark Ignition	HC & NOx	2010+	40 CFR Part 1045
Recreational Vehicle[3]	HC & NOx	2006 – 2012 (Tier 1 – 3) (phasing dependent on vehicle type)	40 CFR Part 1051
Small Spark Ignition Engine[4] < 19d Kw – emission standards	HC & NOx	2005 – 2012 (Tier 2 & 3)	

HC – Hydrocarbon (VOCs)
NMHC – Non-Methane Hydrocarbon (VOCs)
[1]The range in model years affected can reflect phasing of requirements based on engine size or initial years for replacing earlier tier requirements.
[2]Compression ignition applies to diesel non-road compression engines including engines operated in construction, agricultural, and mining equipment.
[3]Recreational vehicles include snowmobiles, off-road motorcycles, and ATVs
[4]Small spark ignition engines include engines operated in lawn and hand-held equipment.

6. Section 110(l) Noninterference Requirements

When revising rules and regulations in the SIP, the state is responsible for demonstrating that such a change will not interfere with attainment of the NAAQS, Rate of Progress (ROP), or other applicable CAA requirements for any of the criteria pollutants. This request for redesignation does not implement any changes in the control programs or requirements approved in the SIP and in place during the 2014 attainment year. Therefore, all requirements related to section 110(l) noninterference are fulfilled under this request. Further, Wisconsin will continue to implement all control programs currently in the SIP for emissions of ozone precursors from the Inland Sheboygan County area. As documented in Wisconsin's I-SIP for the 2008 ozone NAAQS (Appendix 1), the WDNR has the legal authority and necessary resources to actively enforce any violations of its rules or permit provisions. Removal of any control program from the SIP will be subject to a public hearing process, a demonstration of noninterference, and approval by EPA.

APPENDIX 10

Wisconsin VOC RACT Regulations

Table A10.1. Volatile Organic Compounds (VOC) Control Technique Guidelines (CTGs) Incorporated into Wisconsin Administrative Code.

Source	Title (Description)	EPA CTG Report No.	Wis. Adm. Code Incorporation	Emissions Inventory Classification[1]
Petroleum and Gasoline Sources				
Bulk Gasoline Plants	Control of Volatile Organic Emissions from Bulk Gasoline Plants [bulk gasoline plant unloading, loading and storage]	EPA-450/2-77-035	NR 420.04(2)	Stationary Point Source
Refinery Equipment - Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds	Control of Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds	EPA-450/2-77-025	NR 420.05(1), (2) and (3)	Stationary Point Source
Refinery Equipment - Control of VOC Leaks	Control of Volatile Organic Compound Leaks from Petroleum Refinery Equipment	EPA-450/2-78-036	NR 420.05(4)	Stationary Point Source
Refinery Equipment - Control of VOC Leaks	Control of Volatile Organic Compound Equipment Leaks from Natural Gas/Gasoline Processing Plants	EPA-450/3-83-007	NR 420.05(4)	Stationary Point Source
Tanks - Fixed Roof	Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed-Roof Tanks	EPA-450/2-77-036	NR 420.03(5)	Stationary Point Source
Tanks - External Floating Roofs	Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks	EPA-450/2-78-047	NR 420.03(6) and (7)	Stationary Point Source
Gasoline Loading Terminals	Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals	EPA-450/2-77-026	NR 420.04(1)	Stationary Point Source
Tank Trucks	Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems	EPA-450/2-78-051	NR 420.04(4)	Stationary Area Source
Gasoline Delivery - Stage I Vapor Control Systems	Design Criteria for Stage I Vapor Control Systems – Gasoline Service Stations	EPA-450/R-75-102	NR 420.04(3)	Stationary Area Source
Surface Coating				
Automobile & Light-duty Truck	Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings	EPA 453/R-08-006	NR 422.09	Stationary Point Source

Source	Title (Description)	EPA CTG Report No.	Wis. Adm. Code Incorporation	Emissions Inventory Classification[1]
Cans	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks	EPA-450/2-77-008	NR 422.05	Stationary Point Source
Coils	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks	EPA-450/2-77-008	NR 422.06	Stationary Point Source
Fabric & Vinyl	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks	EPA-450/2-77-008	NR 422.08	Stationary Point Source
Flat Wood Paneling	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VII: Factory Surface Coating of Flat Wood Paneling	EPA-450/2-78-032	NR 422.13	Stationary Point Source
	Control Techniques Guidelines for Flat Wood Paneling Coatings	EPA-453/R-06-004	NR 422.131	Stationary Point Source
Large Appliances	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume V: Surface Coating of Large Appliances	EPA-450/2-77-034	NR 422.11	Stationary Point Source
	Control Techniques Guidelines for Large Appliance Coatings	EPA 453/R-07-004	NR 422.115	Stationary Point Source
Magnet Wire	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume IV: Surface Coating of Insulation of Magnet Wire	EPA-450/2-77-033	NR 422.12	Stationary Point Source
Metal Furniture	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume III: Surface Coating of Metal Furniture	EPA-450/2-77-032	NR 422.1	Stationary Point Source
	Control Techniques Guidelines for Metal Furniture Coatings	EPA 453/R-07-005	NR 422.105	Stationary Point Source
Metal Parts, miscellaneous	Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings	EPA 453/R-08-003	NR 422.15	Stationary Point Source
	Fire Truck and Emergency Response Vehicle Manufacturing - surface coating	(covered under Misc. Metal Parts CTG)	NR 422.151	Stationary Point Source

Source	Title (Description)	EPA CTG Report No.	Wis. Adm. Code Incorporation	Emissions Inventory Classification[1]
Paper, Film and Foil	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks	EPA-450/2-77-008	NR 422.07	Stationary Point Source
	Control Techniques Guidelines for Paper, Film, and Foil Coatings	EPA 453/R-07-003	NR 422.075	Stationary Point Source
Plastic Parts - Coatings	Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings	EPA 453/R-08-003	NR 422.083	Stationary Point Source
Traffic Markings	Reduction of Volatile Organic Compound Emissions from the Application of Traffic Markings	EPA-450/3-88-007	NR 422.17	Stationary Area Source
Wood Furniture	Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations	EPA-453/R-96-007	NR 422.125	Stationary Point Source
Graphic Arts				
Rotogravure & Flexography	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VIII: Graphic Arts-Rotogravure and Flexography	EPA-450/2-78-033	NR 422.14	Stationary Point Source
Flexible Packaging	Control Techniques Guidelines for Flexible Package Printing	EPA-453/R-06-003	NR 422.141	Stationary Point Source
Letterpress	Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing	EPA-453/R-06-002	NR 422.144	Stationary Point Source
Lithographic	Control Techniques Guidelines for Offset Lithographic Printing and Letterpress Printing	EPA-453/R-06-002	NR 422.142 and 422.143	Stationary Point Source
Solvents				
Dry Cleaning	Control of Volatile Organic Emissions from Perchloroethylene Dry Cleaning Systems	EPA-450/2-78-050	NR 423.05	Stationary Area Source
Dry Cleaning	Control of Volatile Organic Compound Emissions from Large Petroleum Dry Cleaners	EPA-450/3-82-009	NR 423.05	Stationary Area Source
Industrial Cleaning	Control Techniques Guidelines for Industrial Cleaning Solvents	EPA-453/R-06-001	NR 423.035 and 423.037	Stationary Area Source
Metal Cleaning	Control of Volatile Organic Emissions from Solvent Metal Cleaning	EPA-450/2-77-022	NR 423.03	Stationary Area Source

Source	Title (Description)	EPA CTG Report No.	Wis. Adm. Code Incorporation	Emissions Inventory Classification[1]
Chemical				
Pharmaceutical	Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products	EPA-450/2-78-029	NR 421.03	Stationary Point Source
Polystyrene	Control of Volatile Organic Compound Emissions from Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins	EPA-450/3-83-008	NR 421.05	Stationary Point Source
Rubber	Control of Volatile Organic Emissions from Manufacture of Pneumatic Rubber Tires	EPA-450/2-78-030	NR 421.04	Stationary Point Source
Synthetic Organic	Control of Volatile Organic Compound Emissions from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry	EPA-450/3-84-015	NR 421.07	Stationary Point Source
Synthetic Organic	Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations in Synthetic Organic Chemical Manufacturing Industry	EPA-450/4-91-031	NR 421.07	Stationary Point Source
Synthetic Resin	Control of Volatile Organic Compound Leaks from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment	EPA-450/3-83-006	NR 421.05	Stationary Point Source
Manufacturing				
Asphalt	Control of Volatile Organic Emissions from Use of Cutback Asphalt	EPA-450/2-77-037	NR 422.16	Stationary Area Source

[1] For purposes of this table, an "Area" source is defined as a nonpoint or fugitive emission source.

APPENDIX 11

Negative Declarations for the Inland Sheboygan County Area

This appendix provides negative declarations regarding the need for regulation codifying the Control Techniques Guidelines (CTGs) that have not been incorporated into Wisconsin's Administrative Code for sources within the Inland Sheboygan County area. This appendix describes the Wisconsin Department of Natural Resources' (WDNR) analysis to determine that there are no sources within the Inland Sheboygan County area that are applicable to these CTGs. This appendix also includes a list of the major stationary sources of volatile organic compounds (VOC) within the Inland Sheboygan County area, along with descriptions of their respective emission control systems. This information expands upon that presented in Section 6 of the Redesignation Request and Maintenance Plan for the Inland Sheboygan County, Wisconsin 1997 and 2008 8-Hour Ozone Nonattainment Area.

Background

Section 182(b)(2) of the Clean Air Act (CAA) requires implementation of RACT for sources of VOC in moderate or higher nonattainment areas for which EPA has published CTGs and major stationary sources whose source categories have not been addressed by a CTG (non-CTG major sources).[1] Appendix 10 lists the CTGs for which Wisconsin has promulgated RACT regulations that cover applicable sources located within the state. Wisconsin has not adopted VOC RACT requirements covered by the following four CTGs (year published):

- Shipbuilding and Ship Repair (1996),
- Aerospace Manufacturing (1997),
- Fiberglass Boat Manufacturing (2008), and
- Oil and Natural Gas Industry (2016).

Wisconsin previously promulgated RACT requirements for industrial adhesive use (NR 422.127), metal (NR 422.15) and plastic parts coatings (NR 422.083), and automobile and light-duty truck manufacturing (NR 422.09). However, Wisconsin's Administrative Code does not currently reflect the following most recently published CTGs for these source categories (year published):

- Miscellaneous Industrial Adhesives (2008),
- Miscellaneous Metal and Plastic Parts Coatings (2008), and
- Automobile and Light-Duty Truck Assembly Coatings (2008).

To satisfy Section 182(b)(2)(A) and (B) requirements for the Inland Sheboygan County 2008 ozone nonattainment area, Wisconsin must officially certify with negative declarations that there are currently no facilities within the area for which Wisconsin has not codified RACT requirements or for which Wisconsin's Administrative Code does not reflect the most recently

[1] Section 302(j) of the CAA defines a major stationary source as any source that emits, or has the potential to emit, 100 TPY or more of any air pollutant. Per EPA, Section 182(b)(2)(C) of the CAA addresses all other major stationary sources of VOC whose source categories have not been addressed by an existing CTG (see, for example, National Service Center for Environmental Publications' Major Non-CTG VOC Sources in Region 5 Areas Requiring 1982 Ozone SIPs).

published CTG. To satisfy Section 182(b)(2)(C) requirements, RACT must also be implemented for non-CTG major sources within the Inland Sheboygan County nonattainment area.

WDNR's VOC RACT applicability analysis is described step-wise below for each CTG category for which Wisconsin has not adopted/updated RACT requirements and for major stationary sources. Negative declarations are provided below for Wisconsin's missing CTGs, and describe WDNR's thorough search to determine that there are no facilities located within the area that meet the applicability criteria specified in the missing CTGs. Non-CTG major sources of VOC within the area are also listed below, along with descriptions of the sources' emission control systems.

Shipbuilding and Ship Repair Operations CTG

The WDNR determined that there are no facilities in the Inland Sheboygan County area that satisfy the CTG for Shipbuilding and Ship Repair Operations' (SSRO) applicability criteria for a major VOC source. Under the SSRO CTG, major sources are facilities that have the potential to emit (PTE) equal to or greater than 25 tons per year (TPY).

Methodology

The WDNR took the following steps to make this determination:

1. The WDNR queried the Wisconsin Air Emissions Inventory[2] to create a list of all the VOC-emitting facilities in the Inland Sheboygan County area. The WDNR searched this list for facilities with the following ship building and ship repair-related Standard Industrial Classification (SIC) codes:
    a. 3731 – Ship Building and Repairing
    b. 1721 – Ship Painting Contractors
    c. 4491 – Ship Hold Cleaning
    d. 4499 – Ship Cleaning (except holds)
    e. 7699 – Ship Scaling

2. The WDNR searched the Wisconsin Air Resource Program (WARP) database, which contains facility and emissions information about all Wisconsin companies that have obtained an air pollution control permit, for sources located within the partial county nonattainment area with the SIC codes identified above.

3. The WDNR searched the membership directories found on the following organizations' websites:
    a. WorkBoat Associations and Organizations Directory
    b. Shipbuilders Council of America
    c. Chamber of Shipping of America
    d. Sheboygan County Chamber of Commerce

4. The WDNR also searched the ReferenceUSA Database for facilities located within the partial county nonattainment area with the SIC codes listed above. ReferenceUSA provides SIC code-searchable directories of U.S. companies. This step would identify facilities not listed in the Wisconsin Air Emissions Inventory or WARP database.

After reviewing information from the sources listed above, WDNR did not identify any facilities in the Inland Sheboygan County area that engage in ship building or ship repair.

[2] Wisconsin State Code Chapter NR 438.03(a) requires facilities that emit equal to or greater than 3 tons of VOC per year to submit annual emission inventory reports to the State.

Aerospace Manufacturing and Rework Operations CTG

The WDNR determined that there are no facilities in the Inland Sheboygan County area that satisfy the applicability criteria for a major VOC source defined by the Coating Operations at Aerospace Manufacturing and Rework Operations (Aerospace) CTG. Under the Aerospace CTG, major sources are facilities that have a PTE equal to or greater than 25 TPY.

Methodology

The WDNR took the following steps to make this determination:

1. The WDNR queried the Wisconsin Air Emissions Inventory[2] to create a list of all the VOC-emitting facilities in the Inland Sheboygan County area. The WDNR searched this list for facilities for the following aerospace-related SIC codes:
    a. 3720 – Aircraft and Parts
    b. 3721 – Aircraft
    c. 3724 – Aircraft Engines and Engine Parts
    d. 3728 – Aircraft Parts and Equipment
    e. 3760 – Guided Missiles, Space Vehicles, and Parts
    f. 3761 – Guided Missiles and Space Vehicles
    g. 3764 – Space Propulsion Units and Parts
    h. 3769 – Space Vehicle Equipment
    i. 4512 – Air Transportation, Scheduled
    j. 4581 – Airports, Flying Fields, and Services
    k. 9711 – National Security

2. The WDNR searched the WARP database for facilities located within the partial county nonattainment area with the SIC codes identified above.

3. The WDNR searched the membership directories found on the following organizations' websites:
    a. Wisconsin Aerospace Partners
    b. In Wisconsin Aerospace Company Directory
    c. Sheboygan County Chamber of Commerce
    d. The New North, Inc.

4. The WDNR also searched the ReferenceUSA database for facilities located within the partial county nonattainment area with the SIC codes listed above.

Several aviation-related sources were identified within the Inland Sheboygan County area, but none of the facilities are covered under the Aerospace CTG. These facilities include: the Sheboygan County Memorial Airport, a small, un-towered airport; Burrows Aviation LLC, the fixed base operator (FBO) for the airport; and Airworthy Aviation LLC, which performs aircraft maintenance at the airport. The Kohler Corporation also maintains an aircraft hangar nearby to house corporate jets.

After reviewing information from the sources listed above, WDNR did not identify any facilities in the Inland Sheboygan County area that engage in aerospace manufacturing operations that meet the applicability criteria of the Aerospace CTG.

Fiberglass Boat Manufacturing CTG

The WDNR determined that there are no facilities in the Inland Sheboygan County area that meet the applicability threshold of 15 lb VOC emitted per day, or equivalently 3 TPY, specified by the CTG for Fiberglass Boat Manufacturing.

Methodology

The WDNR took the following steps to make this determination:

1. The WDNR queried the Wisconsin Air Emissions Inventory[2] to create a list of all the VOC-emitting facilities in the Inland Sheboygan County area. The WDNR searched this list for facilities with the following SIC code:
    a. 3732 – Boat Building and Repair

2. The WDNR searched the WARP database for facilities located within the partial county nonattainment area with the SIC code identified above.

3. The WDNR searched the membership directories found on the following organizations' websites:
    a. National Marine Manufacturers Association's website
    b. Sheboygan County Chamber of Commerce website

4. The WDNR also searched the ReferenceUSA database for facilities located within the partial county nonattainment area with the SIC code listed above.

After reviewing information from the sources listed above, WDNR did not identify any facilities in the Inland Sheboygan County area that engage in fiberglass boat manufacturing operations.

Miscellaneous Industrial Adhesives

The WDNR determined that there are no facilities in the Inland Sheboygan County area that satisfy the applicability threshold of 15 lb VOC emitted per day, or equivalently 3 TPY, specified by the CTG for Miscellaneous Industrial Adhesives.

Methodology

The WDNR took the following steps to make this determination:

1. The WDNR queried the Wisconsin Air Emissions Inventory[2] to create a list of all the VOC-emitting facilities in the Inland Sheboygan County area. The WDNR searched this list for facilities that work with industrial adhesives based on the following Standard Classification Codes (SCCs):
    a. 40200701 – Adhesive Application
    b. 40200706 – Adhesive: Solvent Mixing
    c. 40200707 – Adhesive: Solvent Storage
    d. 40200710 – Adhesive: General
    e. 40200711 – Adhesive: Spray
    f. 40200712 – Adhesive: Roll-on

2. The WDNR searched the WARP database for facilities located within the partial county nonattainment area with the SCCs identified above.

After completing these steps, the WDNR identified two facilities within the Inland Sheboygan County area that have adhesive application processes. WDNR calculated the total actual VOC emissions from adhesive-related processes for these facilities using the WARP database, which contains process-level emission information. The most recent complete inventory year, 2018, was considered. The attached table lists the facilities and their adhesive-related VOC emissions, which are below the CTG threshold of 3 TPY.

Table A11.1. Sources Analyzed for Miscellaneous Industrial Adhesives CTG Applicability

Facility	Facility Identification (FID)	VOC Emissions
Richardson Yacht Interiors	460061250	0.79 TPY VOC-Adhesives
Certain Teed	460157500	0.19 TPY VOC-Adhesives

After reviewing information from the sources listed above, WDNR did not identify any facilities in the Inland Sheboygan County area whose applicable emissions exceed the Miscellaneous Industrial Adhesives CTG threshold.

Miscellaneous Metal and Plastic Parts Coatings

The WDNR determined that there are no facilities in the Inland Sheboygan County area that satisfy the applicability threshold of 15 lb VOC emitted per day, or equivalently 3 TPY, specified by the CTG for Miscellaneous Metal and Plastic Parts Coatings.

Methodology

The WDNR took the following steps to make this determination:

1. The WDNR queried the Wisconsin Air Emissions Inventory[2] to create a list of all the VOC-emitting facilities in the Inland Sheboygan County area. The WDNR searched this list for facilities with SIC codes that begin with the following digits:
    a. 282 – Plastics Materials and Synthetic Resins, Synthetic Rubber
    b. 30 – Rubber and Miscellaneous Plastics Products
    c. 33 – Primary Metal Industries
    d. 34 – Fabricated Metal Products, except Machinery and Transportation Equipment
    e. 35 – Industrial and Commercial Machinery and Computer Equipment
    f. 36 – Electronic and other Electrical Equipment and Components, except Computer Equipment
    g. 37 – Transportation Equipment
    h. 38 – Measuring, Analyzing, and Controlling Instruments; Photographic, Medical and Optical Goods; Watches and Clocks
    i. 39 – Miscellaneous Manufacturing Industries

2. The WDNR searched the WARP database for facilities located within the partial county nonattainment area with the SIC codes identified above.

3. The WDNR searched the ReferenceUSA database for facilities located within the partial county nonattainment area with the SIC codes listed above.

4. The WDNR then filtered the resulting list to include only the facilities that engage in coating-related processes. This information is provided in each facilities' annual emissions inventory report submitted to WDNR.

After completing these steps, the WDNR identified five facilities within the Inland Sheboygan County area that conduct coating applications of metal or plastic products. WDNR calculated the total actual VOC emissions from coating processes, including cleaning, from each of the facilities using the WARP database, which contains process-level emission information. The most recent complete inventory year, 2018, was considered. The table below lists each of the facilities and their VOC emissions associated with metal or plastic coating and coating cleanup operations.

Table A11.2. Sources Analyzed for Miscellaneous Metal and Plastic Parts Coatings CTG Applicability

Facility	Facility Identification (FID)	VOC Emissions
Kohler Co-Metals Processing Complex	460032870	0.90 TPY VOC-Coatings
Curt G. Joa, Inc.	460013510	1.99 TPY VOC-Coatings
Bemis Mfg. Co. - Plant D	460034410	0.90 TPY VOC-Coatings
Kohler Co-Engine Plant	460147930	0.99 TPY VOC-Coatings
Bemis Mfg. Co. - Plant B	460034630	NA. Facility manufactures molded wood products.

Four of the five identified facilities produced total actual VOC emissions below the CTG threshold of 3 TPY. According to inventory data, one of these four facilities, Kohler Co-Metals Processing Complex, produced CTG-applicable VOC emissions in excess of the CTG threshold. However, follow-up with the facility revealed that VOC emissions from non-coating-related cleaning operations were erroneously identified as "painting/coating" in its air emissions inventory summary report. The Kohler Co-Metals Processing Complex facility's total actual VOC emissions related to coating operations is below the CTG threshold.

The fifth facility, Bemis Manufacturing Co. – Plant B, was incorrectly identified by SIC code: 3089 – "Plastic Products, Not Elsewhere Classified" in WARP. The facility manufactures molded wood toilet seats. The WDNR confirmed through communications with the facility that they do not conduct any coating operations of plastic or metal products. This facility is therefore not covered by the Miscellaneous Metal and Plastic Parts Coatings CTG.

After reviewing information from the sources listed above, WDNR did not identify any facilities in the Inland Sheboygan County area whose applicable emissions exceed the Miscellaneous Metal and Plastic Parts Coatings CTG threshold.

Automobile and Light-Duty Truck Assembly Coatings CTG

The WDNR determined that there are no facilities in the Inland Sheboygan County area that satisfy the applicability threshold of 15 lb VOC emitted per day, or equivalently 3 TPY, specified by the Automobile and Light-Duty Truck Assembly Coatings (Auto Coatings) CTG.

Methodology

The WDNR took the following steps to make this determination:

1. The WDNR queried the Wisconsin Air Emissions Inventory[2] to create a list of all the VOC-emitting facilities in the Inland Sheboygan County area. The WDNR searched this list for facilities with the following coating-related SIC codes:
    a. 3711 – Motor Vehicles and Passenger Car Bodies
    b. 3714 – Motor Vehicle Parts and Accessories
    c. 7532 – Top, Body, and Upholstery Repair Shops and Paint Shops
    d. 7549 – Automotive Services, Except Repair and Carwashes

2. The WDNR searched the WARP database for facilities located within the partial county nonattainment area with the SIC codes listed above. WDNR also search the WARP database for facilities located within the partial county nonattainment area that have the following automobile coating-related SCCs:
    a. 40201621 – Prime Coating: Solvent-borne – Automobiles
    b. 40201622 – Prime Coating: Electro-deposition – Automobiles
    c. 40201623 – Guide Coating: Solvent-borne – Automobiles
    d. 40201624 – Guide Coating: Water-borne – Automobiles

3. The WDNR also searched the ReferenceUSA database for facilities located within the partial county nonattainment area with the SIC codes listed above.

After completing these steps, the WDNR identified three facilities within the Inland Sheboygan County area that conducted coating applications of automobiles at one time. The WDNR calculated the total actual VOC emissions from coating processes, including cleaning, from each of the facilities using the WARP database. The table below lists each of the facilities and their VOC emissions associated with automobile and light-duty truck coatings. The most recent complete inventory year was considered, and is also provided in parentheses in the table below.

Table A11.3. Sources Analyzed for Automobile and Light-Duty Truck Assembly Coatings CTG Applicability

Facility	Facility Identification (FID)	VOC Emissions
Lakeland Sports Center	460120760	(2013) 2.2 TPY VOC-Coatings (spray booth for fiberglass truck caps/accessories)
SRJJ Enterprises LLC	460045080	(2004) 0 TPY VOC - Coatings
Falls Uptown Motors Inc	460092490	(2004) 0 TPY VOC - Coatings

According to the most recent inventory data, all three facilities produced total actual CTG-applicable VOC emissions below the CTG threshold. Lakeland Sports Center has not reported emissions since 2013, and SRJJ Enterprises LLC and Falls Uptown Motors Inc. have not reported emissions since 2004. Wisconsin facilities that emit less than 3 tons VOC per year are not required to submit annual emissions inventory reports.[2]

After reviewing information from the sources listed above, WDNR did not identify any facilities in the Inland Sheboygan County area whose applicable emissions exceed the Auto Coatings CTG threshold.

Oil and Natural Gas Industry CTG

The WDNR determined that there are no facilities in the Inland Sheboygan County area that are applicable to the Oil and Natural Gas Industry (O&NG) CTG. The O&NG CTG covers select sources of VOC emissions in the onshore production and processing of oil and natural gas, including: pneumatic controllers, pneumatic pumps, compressors, equipment leaks, fugitive emissions, and storage vessels.

Methodology

The WDNR took the following steps to make this determination:

1. The WDNR queried the Wisconsin Air Emissions Inventory[2] to create a list of all the VOC-emitting facilities in the Inland Sheboygan County area. The WDNR searched this list for facilities with the following oil and natural gas industry-related SIC codes:
    a. 1311 – Crude Petroleum and Natural Gas
    b. 1312 – Natural Gas Liquids
    c. 1389 – Oil and Gas Field Services
    d. 4619 – Pipelines
    e. 4922 – Natural Gas Transmission
    f. 4923 – Natural Gas Transmission and Distribution

2. The WDNR searched the WARP database for facilities located within the partial county nonattainment area with the SIC codes listed above.

After completing these steps, the WDNR identified a single natural gas compressor station within the Inland Sheboygan County area. However, the station's location within the natural gas transmission and storage segment precludes it from meeting the O&NG CTG applicability criteria. Table A11.4 below lists the facility and its 2018 VOC emissions from the facility's four 660 HP reciprocating compressor engines, which totaled 0.07 TPY.

Table A11.4. Source Analyzed for Oil and Natural Gas Industry CTG Applicability

Facility	Facility Identification (FID)	VOC Emissions
ANR Pipeline Co (Kewaskum Compressor Station)	460040460	0.07 TPY – Reciprocating Compressors

The O&NG CTG defines applicability criteria for reciprocating compressors that are, "…located between the wellhead and point of custody transfer to the natural gas transmission and storage segment." The ANR Pipeline Co reciprocating compressors are therefore not applicable to the O&NG CTG because the compressor station is located after the point of custody transfer, or the point when the processed/treated natural gas is transferred to pipelines for transportation.[3] The

[3] 40 CFR § 60.5430 Standards of Performance for New Stational Sources, Subpart OOOO

facility does, however, operate nonselective catalytic reduction (NSCR) systems on each reciprocating compressor engine, as required by the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart ZZZZ.[4]

[4] 40 CFR § 63.6603(a), item 12 in Table 2d to 40 CFR Part 63, Subpart ZZZZ, s. 285.65(13), Wis. Stats., and 12-KLH-017-R1

Non-CTG Major Stationary Sources of VOC

Section 182(b)(2)(C) of the CAA requires ozone nonattainment areas classified as moderate or higher to implement VOC RACT for non-CTG major stationary sources, or sources that have the potential to emit (PTE) 100 TPY or more of VOC from non-CTG applicable processes.[1] Four facilities in the Inland Sheboygan County area have the PTE greater than 100 TPY of VOC after subtraction of potential CTG-applicable emissions. PTE is defined as the maximum amount of VOC a source could emit after control, with enforceable limits. The PTE information is from the preliminary determination document for the permit issued to each facility. Table A11.5 lists the non-CTG major sources in the Inland Sheboygan County area, and includes each sources' total PTE, non-CTG PTE, and actual 2018 VOC emissions.

In general, for each process line with VOC emissions greater than 15 pounds in any day, the facility is required to control the VOC emissions by 85% pursuant to s. NR 424.03(2)(b), Wis. Adm. Code or by Latest Available Control Techniques and operating practices demonstrating best current technology (LACT) pursuant to s. NR 424.03(2)(c), Wis. Adm. Code. VOC control requirements for the four Inland Sheboygan County area non-CTG major sources are described below. Wisconsin's VOC RACT for non-CTG major sources in the whole Sheboygan County area have been previously approved for the 1997 ozone NAAQS (77 FR 46961). The 2008 Ozone Implementation Rule states that RACT requirements can be met through previously adopted RACT controls approved by EPA under prior ozone NAAQS (80 FR 12264). WDNR is certifying that the VOC control requirements described below represent a RACT-level of control for the Inland Sheboygan County area's non-CTG major sources under the 2008 ozone NAAQS, as they reflect the most current pollution control technologies and economic considerations.

Bemis Manufacturing Co. – Plant B

The Bemis Manufacturing Co. – Plant B manufactures molded wood toilet seats. As outlined in the source's Title V permit (No. 460034630-P20, issued on September 21, 2015), VOC emissions from all coating related operations are subject to s. NR 422.135, Wis. Adm. Code for Molded Wood Parts or Products. The main VOC emitting units at this facility and the associated requirements are listed as follows:

(1) Sealer room (P60) and paint room (P61) are required to comply with the VOC content limits in s. NR 422.135(2)(a), Wis. Adm. Code and a VOC emissions limit of 877 tons per 12 consecutive month period.

(2) The molded wood coating line (P90) is required to comply with the VOC content limits in s. NR 422.135(2)(a), Wis. Adm. Code and a VOC emissions limit of 90.8 tons per 12 consecutive month period. Additionally, formaldehyde content of coatings used in the molded wood coating line (P90) is limited to 0.1% by weight.

(3) The spray booths (P50 and P54) is required to comply with the VOC content limits in s. NR 422.135(2)(a), Wis. Adm. Code and a VOC emissions limit of 39.0 tons per 12 consecutive month period.

(4) The molding lines (P05, P30, P38, P47) are required to comply with Best Available Control Technology (BACT) limits for formaldehyde, which include an emissions limit of less than 76 lbs/month, and formaldehyde content of the resin less than 0.1%, by weight.

Kohler Co-Engine Plant

The Kohler Co-Engine Plant manufactures engines and related equipment. According to the facility's Title V permit (No. 460147930-P20, issued on September 21, 2015), the emissions from the main VOC emitting units at this facility are regulated as follows:

(1) Engine testing station (P71) is required to be controlled by a regenerative thermal oxidizer (RTO) system with at least 85% overall control efficiency.

(2) Wipe cleaning operations (F98) is required to comply with s. NR 423.03(7)(d)2, Wis. Adm. Code which requires the affected facilities to use solvents with a volatility of less than 0.3 psia at 100^{o}F if the VOC emissions are greater than 15 lbs/day.

(3) Cold Cleaning operations (F99) is required to comply with the work practices specified in s. NR 423.03(3), Wis. Adm. Code for Cold Cleaners.

Kohler Co-Metals Processing Complex

The Kohler Co-Metals Processing Complex manufactures plumbing fixtures, fittings, and castings. Limits for VOC emissions from the facility are outlined in the source's Title V permit (No. 460032870-P10, issued on August 21, 2012). The emissions from the main VOC emitting units at this facility are regulated as follows:

(1) Cooling system (P3D) is required to control the VOC emissions by using LACT, which has been determined to be the Operation and Maintenance Plan specified in the National Emission Standard for Hazardous Air Pollutants (NESHAP), Subpart EEEEE.

(2) Shakeout and sand systems (P2E, P2D, and P2F) are required to be controlled by LACT per s. NR 424.03(2)(c), Wis. Adm. Code. The LACT requirements have been determined to be a total VOC emission limit of 3,159 lbs/month. Shakeout and sand systems (P3E and P3I) are also limited by LACT, and may not exceed 5,926 lbs/month of VOC.

(3) The facility's whirlpool assembly's (P8F) emissions may not exceed 15 lbs/day of VOC.

(4) Emissions from the paint drying oven (P13B) are limited according to the NESHAP for Surface Coating of Miscellaneous Metal Parts and Products.

(5) Emissions from the melting furnace (P1E) are limited according to the NESHAP for Iron and Steel Foundries, Subpart EEEEE.

(6) Core oven machines (P4D and P4E) are required to be controlled by a wet scrubber with at least 85% overall control efficiency per s. NR 424.03(2)(b), Wis. Adm. Code.

(7) Airset shakeout processes (P4H) is required to limit the benzene emission to less than 157 lbs/month per s. NR 445.05, Wis. Adm. Code for HAP emissions controls.

(8) Enamelware paint line emissions (P13A) is required to comply with the VOC content limits specified in s. NR 422.15, Wis. Adm. Code for Miscellaneous Metal Parts and Products and a VOC emission limit of 1,666 lbs/month.

Plymouth Foam Incorporated

Plymouth Foam manufactures polystyrene foam products. Limits for VOC emissions from the facility are outlined in the source's Title V permit (No. 460098760-P21, issued on October 12, 2018). The emissions from the main VOC emitting units at this facility are regulated as follows:

(1) Pre-expanders (P31), aging bins (P32), and shape molding machines (P30, P33-P35) are required to be controlled by an oxidizer with at least 97% destruction efficiency and an 85% overall control efficiency per s. NR 424.03(2)(b), Wis. Adm. Code. Total VOC emissions from P30 through P35, and fugitive emissions from mold cutting/storage/packaging (P10) are limited to less than 22.4 tons/month.

(2) Shape molding machines (P42, P43, P49, P52, and P53) are required to be controlled by an oxidizer with at least 97% destruction efficiency and an 85% overall control efficiency per s. NR 424.03(2)(b), Wis. Adm. Code. The production rate for these shape molding machines is limited to less than 53,333.3 lbs of pre-expanded polystyrene beads per month. The residual VOC content in the shape molded foam products exiting the machines is limited to 50% of that of the raw material. The VOC content in the raw material beads used in P42, P43, and P49 is limited to 4.5% by weight. The VOC content in the raw material beads used in P52 and P53 is limited to 8% by weight.

(3) Pre-expander (P61) also is required to be controlled by an oxidizer with at least 97% destruction efficiency and an 85% overall control efficiency per s. NR 424.03(2)(b), Wis. Adm. Code. The VOC emissions from this process are limited to 1,666 lbs/month.

Table A11.5. Non-CTG Major VOC Stationary Sources in the Inland Sheboygan County Area

FID	Facility Name	PTE of VOC for Entire Source (TPY)	CTG-Affected Units	PTE of VOC, excluding CTG-Affected Units (TPY)	Actual Non-CTG VOC Emissions in 2018 (TPY)
460034630	Bemis Manufacturing Co. - Plant B	1062	N/A	**1062**	157.4
460147930	Kohler Co-Engine Plant	137	F98, F99	**108**	14.3
460032870	Kohler Co-Metals Processing Complex	312	P13A	**302**	44.5
460098760	Plymouth Foam Incorporated	317	N/A	**317**	70.0

APPENDIX 12

Response to Public Comments

This appendix contains responses by the Wisconsin Department of Natural Resources (WDNR) to the public comments received on the draft Redesignation Request and Maintenance Plan for the Inland Sheboygan County, Wisconsin 1997 and 2008 8-Hour Ozone Nonattainment Area ("redesignation request").

1. Numerous commenters asked the agency to place more monitors to assess ozone throughout Sheboygan County.

Department response:

This comment is beyond the scope of this action. However, the WDNR is providing a response due to the public interest in this topic.

The statewide monitoring network is spatially distributed to provide air quality information based on geographic coverage and population density. As required by the Clean Air Act (CAA), the EPA sets National Ambient Air Quality Standards (NAAQS) for criteria pollutants, which include particulate matter, NO_2, ozone, CO, SO_2 and lead. The WDNR conducts ambient air monitoring in locations directed by federal requirements (40 CFR Part 58) to measure concentrations of criteria pollutants for comparison to the appropriate NAAQS.

The CAA also requires submittal of an annual monitoring network plan, which demonstrates that the state air monitoring network meets current federal requirements, details any changes proposed for the 18 months following publication and provides the opportunity for the public to comment via a public meeting and 30-day public comment period. This plan must be submitted to EPA each year by July 1 and approved by EPA within 90 days of submittal.

The minimum monitoring requirements for ozone are established in Section 4.1 of Appendix D of 40 CFR part 58 and summarized in Appendix A, tables 15 and 16 of the 2020 Air Monitoring Network Plan. Based on the most recent census data and design value, Sheboygan County is federally required to have one ozone monitoring site. The state maintains two sites in Sheboygan county specifically designed to determine the lakeshore ozone gradient. As described in Section 3.1 of the redesignation request, the Haven monitor is located in the Inland Sheboygan County area, while the Kohler Andrae monitor is located in the Shoreline Sheboygan County area.

The department is currently focusing resources on initiatives that continue to help decisionmakers better understand the science behind why the lakeshore areas continue to experience elevated ozone concentrations even though emissions of ozone precursors (NOx and VOCs) have significantly decreased. These include:

- Implementing an Enhanced Ozone Monitoring Plan, which includes collecting additional, special purpose criteria pollutant measurements along with detailed ozone precursor measurements along the lakeshore. Appendix E of the 2020 Air Monitoring Network Plan contains details about this effort.
- Analyzing the data collected through Enhanced Ozone Monitoring and the LMOS 2017 field campaign to better understand what is happening chemically and atmospherically along the lakeshore during high ozone episodes.

- Working with Lake Michigan Air Directors Consortium, NASA, NOAA, the University of Wisconsin and other partners on a two-year project to improve the long-term ozone models on which attainment planning is based.
- Preparing for the 5-year air monitoring network assessment required by 40 CFR Part 58. This effort is guided by LADCO and takes a regional view of monitoring networks.

These science-based efforts to better understand ozone formation impacting Sheboygan County, as well as the rest of the Wisconsin lakeshore, are expected to provide information that exceeds what could be obtained through the operation of additional regulatory monitors in the county.

2. Numerous commenters expressed concern over removal of the Kohler Andrae monitor from the monitoring network.

Department response:
No changes in any ozone monitor operations or locations were proposed, or are being finalized, as part of this action. However, the WDNR is providing a response due to the public interest in this topic.

As described in the final version of WDNR's 2020 Air Monitoring Network Plan, submitted to EPA on June 24, 2019, the WDNR will continue to operate the Kohler Andrae ozone monitor.

Further explanation regarding the initial exclusion of the Kohler Andrae monitor from the draft Air Monitoring Network plan is outlined in the response to comments to the draft 2020 Air Monitoring Network Plan and described below:

Effective March 30, 2018, Act 159 created a new section, 285.72(3), in the air monitoring section of chapter 285, Wisconsin State Statute. Under the authority of the new statutory section, the department may not include the air monitoring site located in Kohler-Andrae State Park in Sheboygan County in the state's monitoring network plan. If EPA does not approve the initial network plan submitted by the department, the department may submit a revised plan that includes the air monitoring site at Kohler-Andrae. To comply with state law, the Sheboygan Kohler Andrae monitor was omitted from the 2020 annual network plan. EPA submitted written comments noting that the network plan was incomplete and not approvable due to the omission of the Kohler Andrae monitor. In response to EPA's comments, WDNR included both the Sheboygan Haven and the Kohler Andrae monitor in the final plan submittal. Additionally, the Kohler Andrae monitoring site does not meet federal State and Local Air Monitoring Station (SLAMS) shutdown requirements outlined in 40 CFR Part 58.14(c).

3. The department received numerous comments stating the Haven monitor is not representative of the inland portion of Sheboygan County and/or is not near population centers.

Department response:
Appendix D of 40 CFR Part 58 contains the EPA's criteria for siting air quality monitors. The statewide monitoring network is spatially distributed to provide air quality information based on

geographic coverage and population density. Wisconsin's existing ambient air quality monitoring network, including the Haven monitor, established in 2014, has been approved by EPA annually through the federally required, Annual Air Monitoring Network Plan. WDNR's 2020 Air Monitoring Network Plan contains a more detailed description of siting criteria, as well as how the current network meets federal requirements.

The process for siting any monitor is based on the need for data at a specific location. In this case, 285.72(1), Wis. Stats. specifically provides funding for the establishment and operation of a second monitor in Sheboygan County. The state has been able to utilize this monitor (Haven) to gather information to help the state better meet its Clean Air Act (CAA) planning requirements; specifically, it has allowed WDNR to better understand and define the lakeshore ozone gradient in Sheboygan and other lakeshore counties.

4. A few commenters said that the Haven monitor is barely meeting the standard, has only been in use since 2014, and there is not enough data to establish any long-term trends. Commenters note that the design value increased each year and it is possible the upward trend will continue due to climate change.

Department response:
As described in Section 3.2 of the redesignation request, federal regulations describe how monitoring data is compared to the appropriate National Ambient Air Quality Standard (NAAQS). Specifically, three complete years of monitoring data are used to calculate a design value; this design value is then compared to the NAAQS to determine attainment. Every design value measured at the Haven monitor since it began operating has attained the 2008 ozone NAAQS of 75 ppb. Table 3.1 presents the most recent design value (71 ppb for the 2016-18 period). On July 15, 2019, EPA confirmed that the Haven monitor has three years of complete, quality-assured, and certified data which meets the 2008 ozone NAAQS (84 FR 33699).

If the Inland Sheboygan County nonattainment area is redesignated to attainment, but future design values violate the 2008 ozone NAAQS for any reason, WDNR is required to implement specific contingency measures to bring the area back into attainment, as described in Section 7.3 of the redesignation request.

5. Several commenters asked for real time access to monitoring data to plan outdoor activities or requested daily readings of ozone along the lakeshore. A related comment expressed concern that the publicly available ozone monitoring data was only available on a delay.

Department response:
The WDNR maintains an interactive website containing the most recently available monitoring data at https://airquality.wi.gov/home/map. Monitoring data from throughout the state is updated to this site when the next complete hour of data becomes available; absent technical issues, this is usually about 8 minutes after each hour. There are other reasons why there might appear to be

a delay in the posting of this data; these are described on the site's "Information" page at https://airquality.wi.gov/home/text/5. These include:

- Data is timestamped using the beginning hour; for example, the 1-hour average for 7:00-7:59 is given the "07" hour time stamp.
- Central Standard Time is always used, so data will appear to be an additional hour behind during Daylight Saving Time.

In addition to this real-time data availability, regularly updated air quality forecasts for Wisconsin are available at https://airquality.wi.gov/home/text/6.

6. Numerous commenters expressed concern over the health impacts of ozone, including the impacts of ozone on certain high-risk population categories (children and teens, 65 or older, residents with lung disease, residents with cardiovascular disease) in the county. Related comments asked for the department to discuss health impacts in any redesignation request and asked for a health study of Sheboygan County.

Department response:
The CAA requires EPA to set national ambient air quality standards (NAAQS) for ozone and five other pollutants considered harmful to public health and the environment. EPA sets a primary NAAQS for each pollutant to protect human health, including sensitive populations such as children, the elderly, and individuals suffering from respiratory diseases. The CAA also requires EPA to periodically review the standards to ensure that they provide adequate health and environmental protection, and to update those standards as necessary. Both state and federal law require the WDNR to take action to meet EPA's air quality standards.

In 2008, EPA revised the primary NAAQS to 75 ppb. As described in Section 3.2 of the redesignation request, data recorded by the Haven monitor shows that the Inland Sheboygan County area is attaining this health-based ozone NAAQS.

In 2015, EPA further revised the primary ozone NAAQS to 70 ppb. Only the eastern part of Sheboygan County was determined to be in nonattainment of this standard. Most of Sheboygan County – specifically, the portion of the county identical to the 2008 ozone Inland Sheboygan County area – was determined by EPA to meet that more stringent standard. This part of Sheboygan County, therefore, is meeting all of EPA's health-based ozone NAAQS.

The WDNR does not have the authority to set air quality standards that are more stringent than federal requirements.

7. Several commenters noted that the American Lung Association (ALA) has given Sheboygan County's air quality an "F" grade.

Department response:
ALA's approach for assigning air quality letter grades is quite different than the method that EPA requires to be used to determine compliance with the NAAQS. As described in #6, EPA

sets the form and level of the ozone NAAQS that it determines is necessary to protect public health and welfare; EPA also prescribes exactly how ozone data is to be compared to the NAAQS, given that form and level.

ALA does not use EPA's method. Instead, among other important differences, ALA uses a count of maximum daily observed ozone values over the NAAQS; it also uses data that is not appropriate to compare to the standard. While this method may be a useful way to describe the quality of the air generally, ALA itself acknowledges that "this system differs significantly from the methodology the EPA uses to determine violations of both the ozone and the 24-hour $PM_{2.5}$ standards."[1]

It is important to note that ALA's grade for Sheboygan County only considers data from the Kohler Andrae monitor; it does not consider data from the Haven monitor. ALA's report also acknowledges that its grading system does not attempt to account for differences in air quality that might occur within a single county, even one with data from multiple monitors, like Sheboygan County.

8. The department received numerous comments stating the department needs a multi-state, multi-source attainment plan to address transport of ozone from sources upwind of Sheboygan County. Commenters noted that the majority of the ozone-causing agents in Sheboygan County originate from outside the state.

Department response:
The WDNR has been a member of the Lake Michigan Air Directors Consortium (LADCO), a multi-state organization devoted to improving air quality in the Great Lakes region, for nearly thirty years. LADCO member states (Wisconsin, Illinois, Indiana, Michigan, Ohio and Minnesota) work together to address air pollution in the region, including ozone issues. Additionally, Section 110(a)(2)(D)(i) of the CAA prohibits states from contributing significantly to nonattainment, or interfering with maintenance, of a NAAQS in another state, and states are required to implement programs to address transport of emissions across state boundaries. WDNR has routinely engaged its neighbor states and EPA on researching and addressing regional ozone issues; however, WDNR only has the authority to implement programs in Wisconsin.

9. Several commenters expressed concern that if a portion of the county is in attainment for an ozone standard then point sources would not be subject to the same permitting requirements as in a nonattainment area when modifying or creating new facilities. Commenters cited data in the draft redesignation request showing an increase in NOx emissions in the nonattainment area from 2008-2014.

[1] ALA 2019 State of the Air report, "Description of County Grading System," available at: https://www.lung.org/our-initiatives/healthy-air/sota/key-findings/methodology-and-acknowledgements.html

Department response:
While sources in a former ozone nonattainment area are no longer subject to Nonattainment New Source Review (NNSR) permitting requirements, the Prevention of Significant Deterioration (PSD) permitting program exists to ensure emissions from these sources continue to be regulated so that these areas will continue to meet the air quality standard and not "backslide" into nonattainment. PSD permits cannot be issued unless all air quality standards are demonstrated to be attained.

In addition, the conditions set in NNSR permits are permanent, regardless of any change to the attainment status of the area. This means that any conditions establishing Lowest Achievable Emission Rate (LAER) and offsets (for example) in a NNSR permit cannot be removed because the area is redesignated to attainment.

Finally, all emissions from construction and modification of air sources that are not significant enough to trigger PSD or NNSR permitting are covered by minor source construction permitting rules. These conditions apply equally in attainment and nonattainment areas and are a federally enforceable part of how the state demonstrates that it attains and maintains air quality standards.

All permits contain requirements that sources monitor and report their emissions to WDNR.

Section 4 of the redesignation request contains the required inventories for NOx and VOC emissions for the Inland Sheboygan County area. When considering emissions from all sources, including point sources like power plants and industry, emissions within the Inland Sheboygan County area are expected to decrease 34% for NOx and 16% for VOCs over that period (see Table 4.1 and Table 4.2).

10. <u>The department received numerous comments on the public input process: the department needs to have more transparency in the process: earlier input into the development of this submittal; hold public meetings later in the day to encourage attendance.</u>

Department response:
The CAA requires states to provide the public the opportunity to review and comment on proposed SIP submittals. This proposed redesignation request was posted for public review on WDNR's website on May 6, 2019 and a public hearing to obtain comments was held at the Plymouth Public Library on June 7, 2019. Written comments were accepted through June 17, 2019 and are given the same weight as comments made at a public hearing. WDNR strives to offer opportunities for public comment on these submittals, including selecting public hearing times and locations that achieve this goal and that also accommodate factors like the availability of appropriate facility and staff. The WDNR also attempts to directly notify interested parties of SIP submittals and, through this public process, has identified some additional parties with which to communicate in the future.

11. WDNR should consider the potential for increased onroad and non-road emissions resulting from diesel-related emissions associated with a proposed golf course in Sheboygan County.

Department response:
Section 4 of the redesignation request contains the required inventories for NOx and VOC emissions for the Inland Sheboygan County area. This includes onroad and non-road sector emissions for the years 2011, 2014, 2020 and 2030. Transportation-related emissions were based on modeling and forecasting data for the area provided by the Wisconsin Department of Transportation. Detailed information about WDNR's methodology for developing these inventories is contained in Appendix 2 and Appendix 3 of the redesignation request.

12. The data to support the split is flawed and does not have the support of EPA.

Department response:
EPA's proposed and final rules splitting the Sheboygan County 1997 and 2008 ozone nonattainment area into two distinct areas, as well as making a clean data determination for the Inland Sheboygan County area, include EPA's rationale in support of this action.[2] In summary, EPA states that this revised designation is supported by air quality data, emissions and emissions-related data, meteorology, geography/topography and jurisdictional boundaries. Details can be found in the referenced federal register notices.

The WDNR has compiled an extensive body of knowledge describing the science behind lakeshore ozone levels, including how and why elevated ozone values are observed along Wisconsin lakeshore, including in Sheboygan County, but decrease sharply as one moves inland. Two useful references on this subject are the following technical support documents:

- WDNR's Supplemental Information for 2015 Ozone National Ambient Air Quality Standard (NAAQS) Area Designations (4/20/2017)
- WDNR's response to EPA's Intended Area Designations for the 2015 Ozone National Ambient Air Quality Standards (NAAQS) (2/28/2018)

13. Two comments expressed disappointment that the proposed plan did not ask other states to reduce their emissions as Wisconsin has done.

Department response:
Section 4.5 of the redesignation request describes how out-of-state transport of ozone and its precursors contribute to the high ozone concentrations monitored in Sheboygan. Despite transport of pollutants from upwind areas, the Haven monitor's design values have attained the 2008 ozone NAAQS for the past three years, as discussed in Section 3 of the redesignation request. The WDNR continues to work closely with other states and EPA to address air pollution planning in the region. However, the WDNR only has authority to implement programs within Wisconsin.

[2] See 84 FR 4422 (Feb. 15, 2019) and 84 FR 33699 (July 15, 2019)

14. One comment was received supporting the proposed redesignation request and stating the Inland Sheboygan County nonattainment area has met all of the applicable provisions of the Clean Air Act to be eligible for redesignation.

Department response:
No response required.