

DRAFT STAFF WORK PRODUCT

Sheboygan County Ozone Status and Issues - 05/15/17

2015 Ozone NAAQS (70 ppb)

1. There are two air quality monitors in Sheboygan County. Based on 2014-2016 data, the lakeshore Kohler-Andrae monitor has a design value above the standard (79 ppb) while the inland Sheboygan-Haven monitor has a design value below the standard (69 ppb).
2. On September 21, 2016 Governor Walker recommended to EPA that all counties in Wisconsin (including Sheboygan County) be designated as “attainment” for the 2015 ozone NAAQS.
3. On April 20, 2017 WDNR submitted supplemental information to EPA to support the governor’s recommendation of statewide attainment. This submittal confirms that high ozone levels are confined to a very narrow band along the shoreline (including Sheboygan County), and that high ozone levels in Wisconsin are due to emissions that originate from outside the state. This conclusion is based on a variety of sources, including:
 - Ozone monitoring data
 - Including analysis of differences between lakeshore and inland monitors
 - Analyses of ozone concentrations relative to wind direction
 - Regional emissions inventories
 - Photochemical modeling predicting the ozone gradient along the lakeshore
 - “Source apportionment” modeling showing out-of-state contributions to Wisconsin’s ozone monitors
 - Modeling showing that, even if all anthropogenic NO_x and VOC emissions in Sheboygan County were eliminated, design values at the Kohler-Andrae monitor would not decrease.
4. Additional emissions reductions in the area have been shown to have no meaningful impact on monitored ozone concentrations. Therefore, a designation of attainment is appropriate.
5. If EPA imposes nonattainment area designations contrary to the governor’s recommendation, the submittal describes the maximum geographic extent of the 70 ppb contour along Wisconsin’s Lake Michigan shoreline. In Sheboygan County. Specifically, the analysis indicates that, at most, the 70 ppb contour extends 2.9 miles from the shoreline in the county. *See attached figures.*

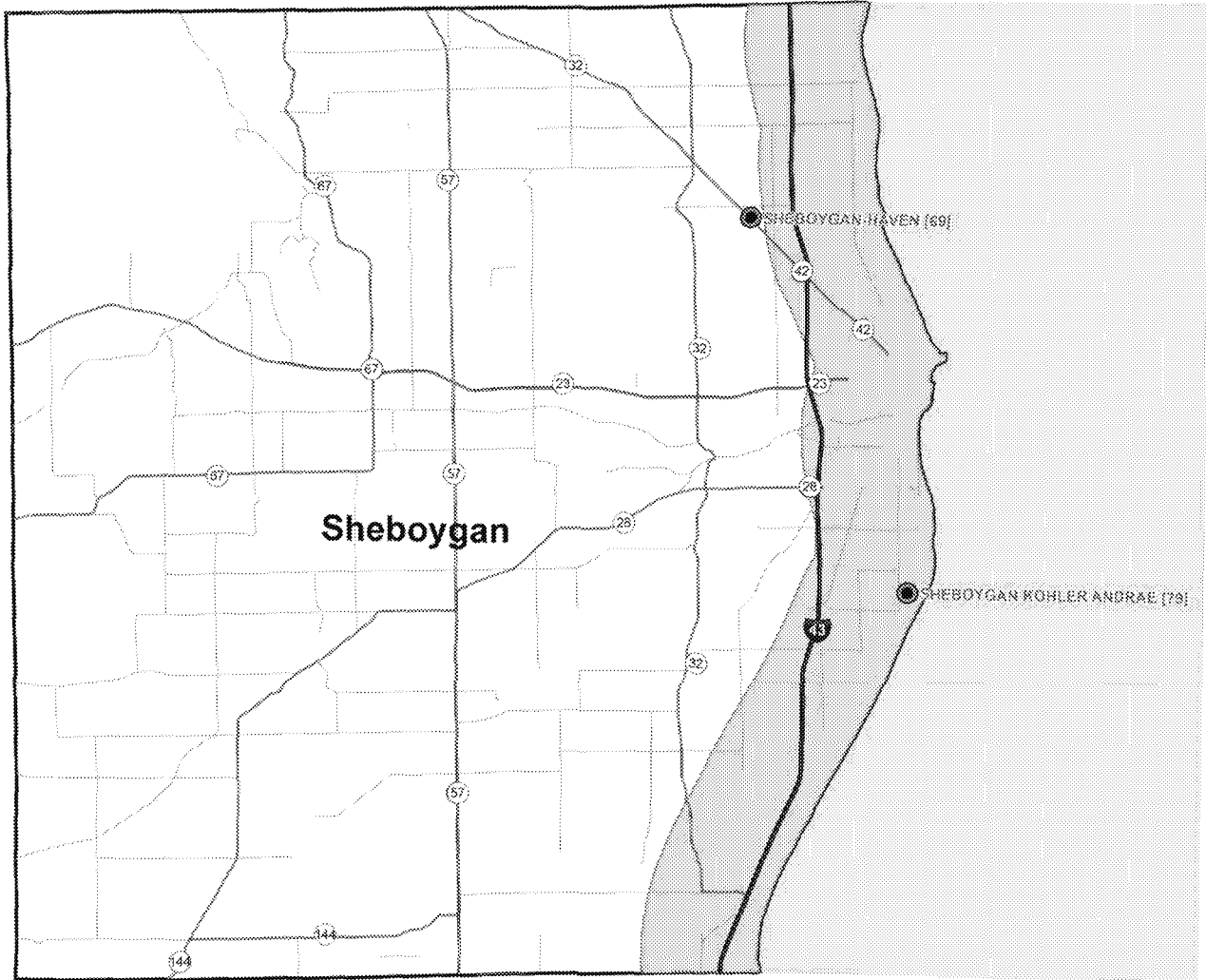
2008 Ozone NAAQS (75 ppb)

1. All of Sheboygan County is currently designated nonattainment for the 2008 ozone NAAQS. In June 2013, WDNR requested that EPA correct Sheboygan County’s boundary to reflect a “partial county” area. At EPA’s request, WDNR submitted additional supporting data in January 2014. EPA has not acted on this state request.
2. In December 2016, EPA changed Sheboygan County’s classification for the 2008 ozone NAAQS to “moderate” because the Sheboygan Kohler-Andrae monitor did not show that the area achieved NAAQS by the marginal area attainment date of July 2015. WDNR commented to EPA that it should not take this action, due to Wisconsin’s limited ability to influence ozone concentrations in Sheboygan County. WDNR also asked for more time to develop the required attainment plan (EPA proposed in September 2016, finalized in December 2016 with the plan due January 1, 2017.)

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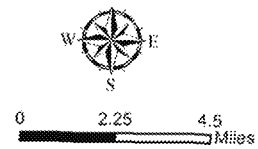
Maximum extent of 70 ppb design value contour – Sheboygan County only

(From WDNR supplemental submittal to EPA re: 2015 ozone area designations, April 20, 2017)



- Interstate HWY
- U.S. Route HWY
- State Route HWY
- County Route HWY

- County boundary
- Ozone Monitor Locations and 2014-2016 DVs



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Maximum extent of 70 ppb design value contour – Statewide

(From WDNR supplemental submittal to EPA re: 2015 ozone area designations, April 20, 2017)

