

# SO2 SIP Wayne County

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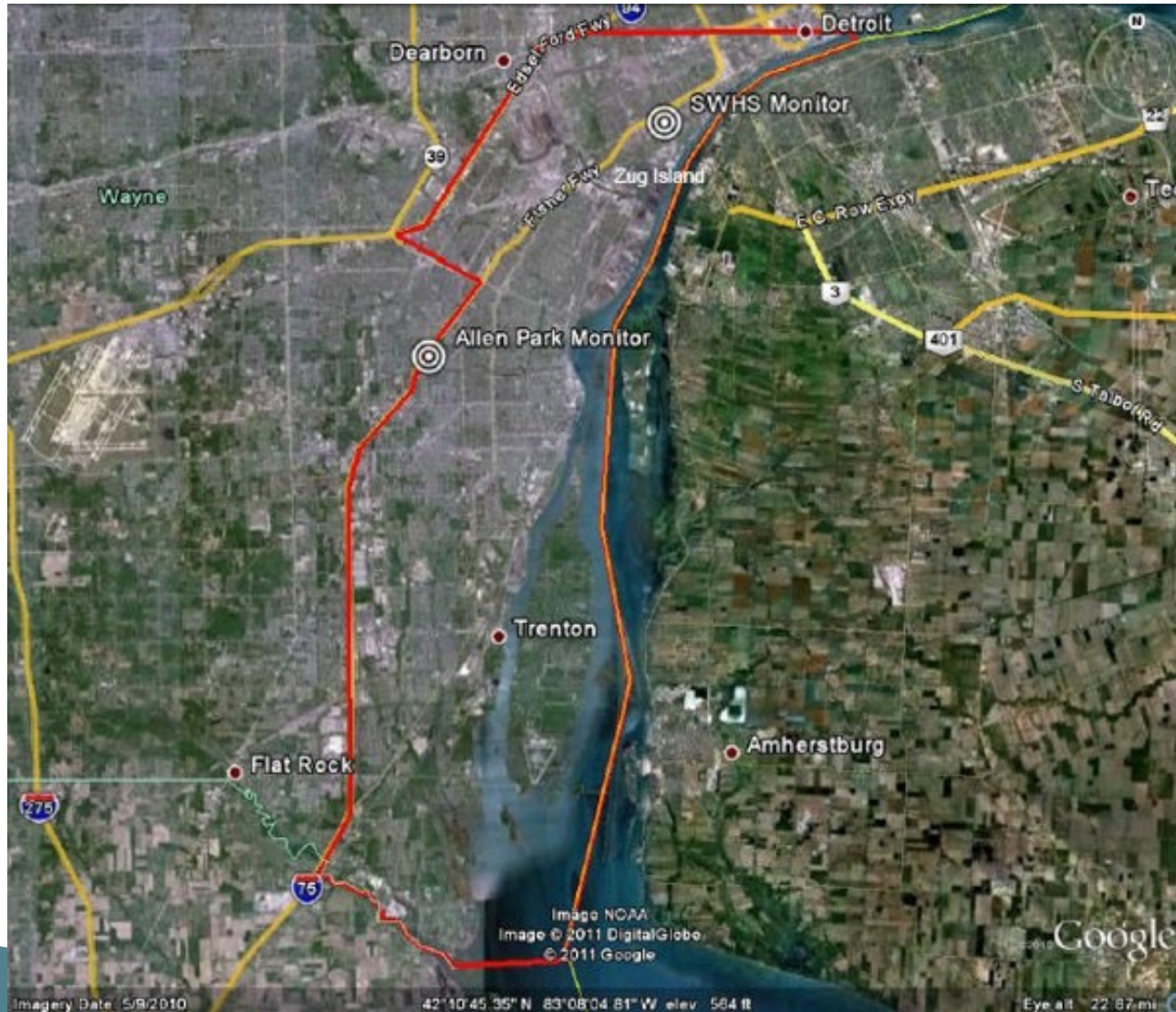
# Regulating SO<sub>2</sub>

- SO<sub>2</sub> is one of 6 NAAQS.
- SO<sub>2</sub> can cause respiratory problems.
- EPA established annual and 24 hr NAAQS.
- EPA replaced these with 1 hour standard in 2010, set at 75 ppb.
- Compliance = 99<sup>th</sup> percentile of daily max 1 hr SO<sub>2</sub> value, averaged over 3 consecutive years.

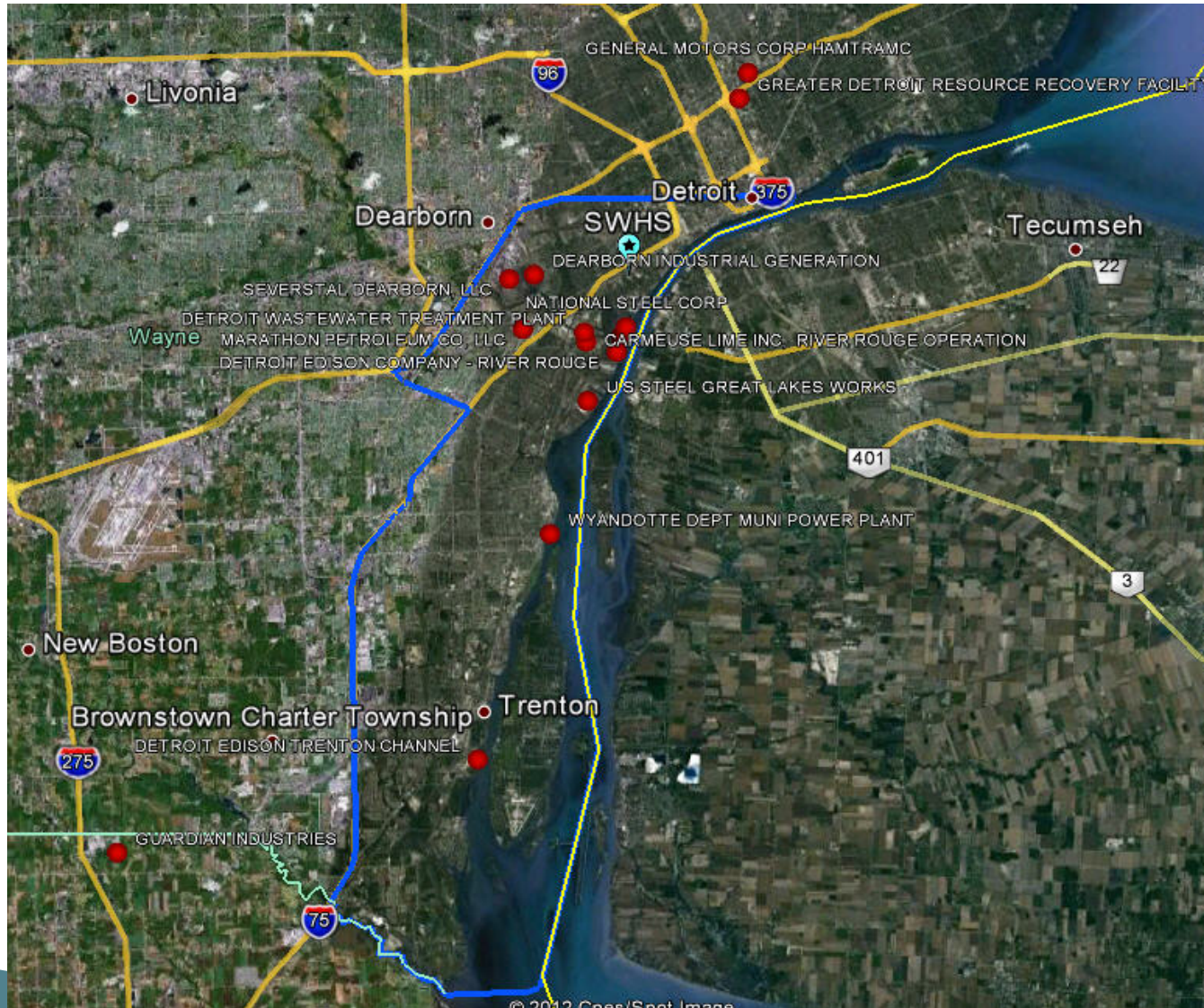
# AQD SO2 SIP Process

- SWHS monitor violating new 75 ppb in years prior to 2014.
- EPA designates area nonattainment in fall 2013.
- AQD must submit SIP in 18 months; by April 2015.
- SIP must provide for compliance in 5 years; by fall 2018.

# 1-Hour SO<sub>2</sub> Nonattainment Area



# Facilities with > 100 tpy SO2

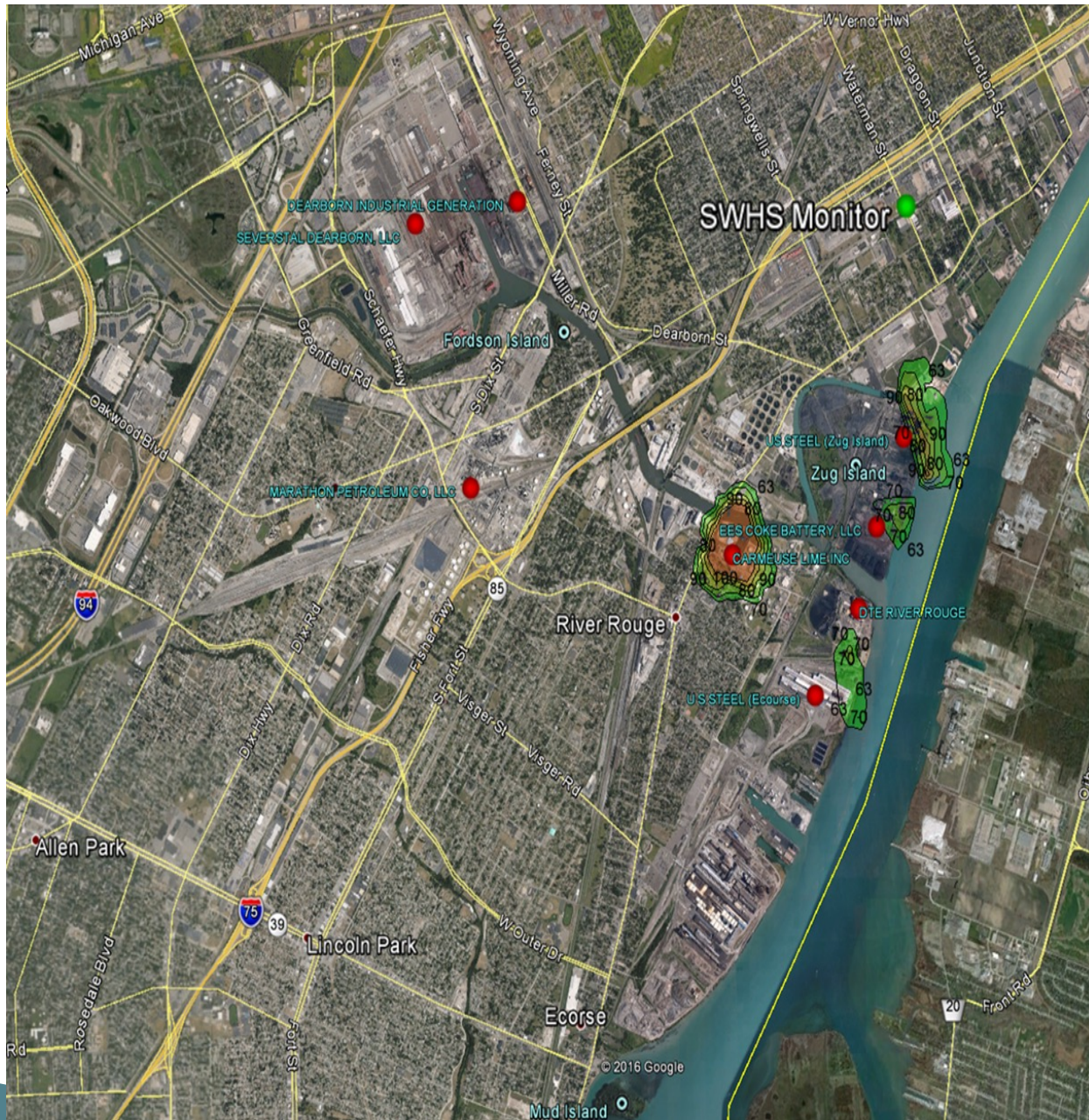


## AQD SO2 SIP Process (cont.)

- 2013 – 2015 AQD does extensive engineering/modeling evaluations, negotiations, rule 430 promulgation.
- AQD submits SIP May 2016.

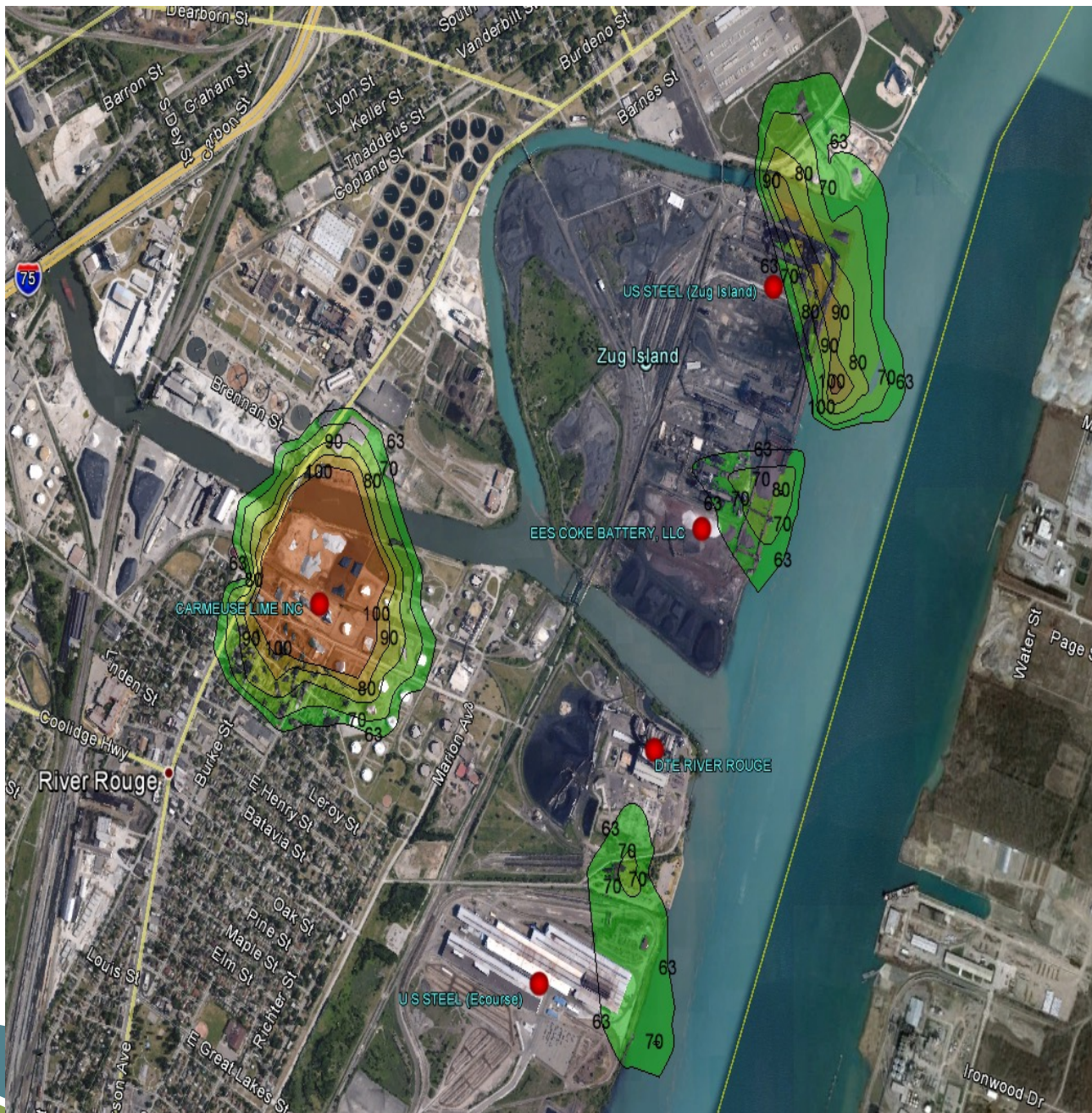
# Sources Needing Control in SO<sub>2</sub> SIP

- Carmeuse Lime – Coal burned in 2 lime kilns
- US Steel – COG burned in 5 reheat furnaces and COG & BFG burned in 10 boilers
- DTE River Rouge – Coal burned in boilers #2 and #3
- DTE Trenton Channel – Coal burned in 4 high pressure boilers and in boiler #9A



## Modeling of 2014 SO<sub>2</sub> Emissions (MAERS)





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# AQD SO2 SIP Process (cont.)

- USS sues EGLE for Rule 430 in July 2016
- AQD and USS pursue mediation for 12 months, with no resolution
- Judge rules in favor of USS in October 2017
- EPA says SIP not approvable without Rule 430
- EPA begins Federal Implementation Plan (FIP) process summer 2018
- EPA issues partial approval/partial disapproval April 2021 (Sanction clock starts)

# SO2 SIP Status in 2023

- EPA completes FIP in November 2022
- AQD revises SIP, submits to EPA December 2022
- EPA gives Conditional Approval in March 2023
- FIP/SIP require permit revisions for 3 facilities
- AQD to approve permits by end of September and submit to EPA October 2023
- EPA will remove Conditional provision of SIP with final approval of SIP winter 2024, and FIP ends

# Wayne Co. Redesignation to Attainment

- AQD must submit redesignation request to EPA, documenting: monitoring/modeling show attainment, maintenance plan with contingency measures, show other CAA req met.
- EPA cannot act on the redesignation request until all provisions of the SIP are met.
- Construction and operation of BH2 stack by 11/24

## Status of the 4 Sources

- Carmeuse Lime – New taller stack installed 2022
- US Steel – No steelmaking, boiler house 2 operating for EES Coke, FIP/SIP requires new taller stack by November 2024
- DTE River Rouge – Shut down 2021
- DTE Trenton Channel – Shut down 2022

# Questions?

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