

Navigating Serious Non-Attainment

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Presented at AWMA Lunch Meeting

November 20, 2019

global **environmental** and **advisory** solutions



Disclaimer

- My opinion not SLR's opinion
- Based on best available data at the time of the presentation
- Each project is different and should be evaluated individually
- Potential non-attainment new source review (NA-NSR) projects should be discussed with permitting expert, legal counsel, and/or CDPHE prior to moving forward

AWMA New Source Review Manual



<https://www.awma.org/nsrmanual>

What Should I be doing now

- Apply for permits to reduce existing facility potential to emit below 50 tpy VOC and NO_x
- Apply for permits for modifications and new facilities prior to re-classification
- Establish baseline actual emissions (BAE) and generate VOC and NO_x offsets
- Plan for modifications and new facilities >50 tpy VOC and NO_x in 2020 and beyond

What Do I Need to do After Re-Classification

- Sites 50-100 tpy NO_x or VOC
 - Submit Initial Title V no later than 9 months after Re-Classification
 - Evaluate modifications for applicability to NA-NSR
 - Establish BAE and generate offsets
- Sites <50 tpy NO_x or VOC
 - Evaluate modifications for applicability to NA-NSR
 - Establish baseline actual emissions and generate offsets
- New Facilities
 - Evaluate for applicability to NA-NSR

NA-NSR Applicability

Modification of Existing Major Source (>50 tpy)

- 5 year net emission increases >25 tpy VOC or NO_x

Modification of Existing Minor Source (<50 tpy)

- Project emissions in and of itself >50 tpy VOC or NO_x

New Major Source

- Facility PTE >50 tpy VOC or NO_x

NA-NSR Applicability

- Modification
 - Physical or operational change that resulting in an emission increase and net emission increase
- Applicability Test
 - Modifications to existing emission units: BAE-to-projected actual emission (PAE) test
 - Construction of new emission units: BAE-to-potential test
 - Hybrid test
- Excludes
 - Routine Maintenance, Repair and Replacement
 - Use of alternative fuel or raw material
 - Increases in Operating Hours or Production rate

NA-NSR Conditions of Approval

- Lowest Achievable Emission Rate (LAER) limitation
- Certification of compliance with all applicable requirements of the SIP for all existing major sources owned and operated by the applicant
- Emission reduction offsets for
 - 1.2:1 for VOC
 - 1:1 for NO_x
- Analysis of alternative sites, sizes, production processes and control techniques for proposed source
- Demonstration that emissions from the proposed source will not adversely impact visibility in a Class I area

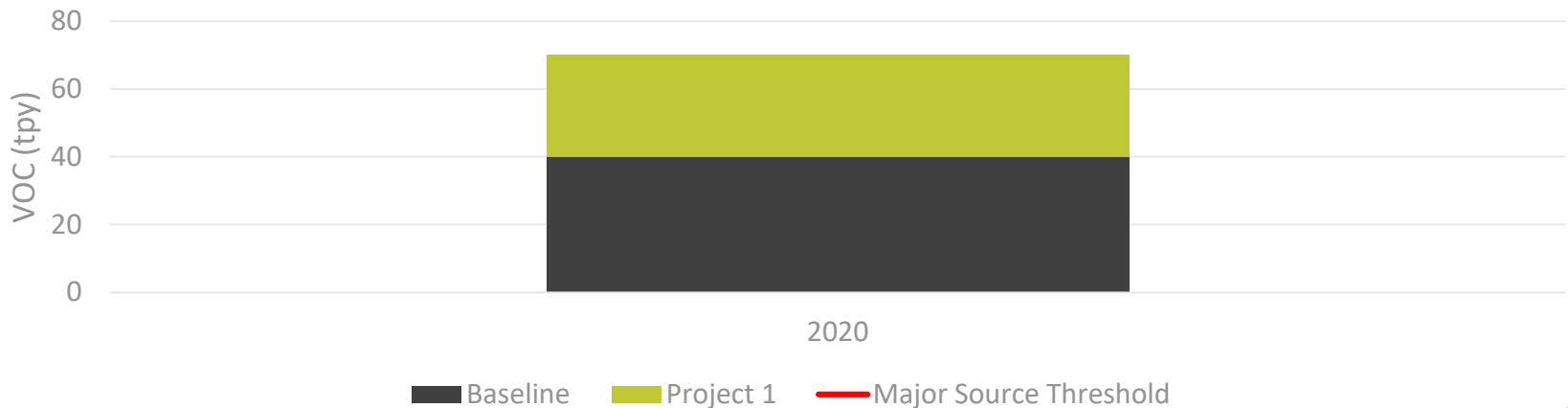
NA-NSR Avoidance

- Can project fit within confines of modification exclusions
- LAER and Alternatives Analysis
- Look for ways to reduce emissions at facility to net out
- Maximize projects at minor sources
- Obtain permits prior to re-reclassification

Project 1

Q: An existing facility in 2020 (i.e. after re-classification) with PTE of 40 tpy VOC in the DFR NAA. Planned a project that would result in a VOC PTE increase of 30 tpy. Subject to NA-NSR?

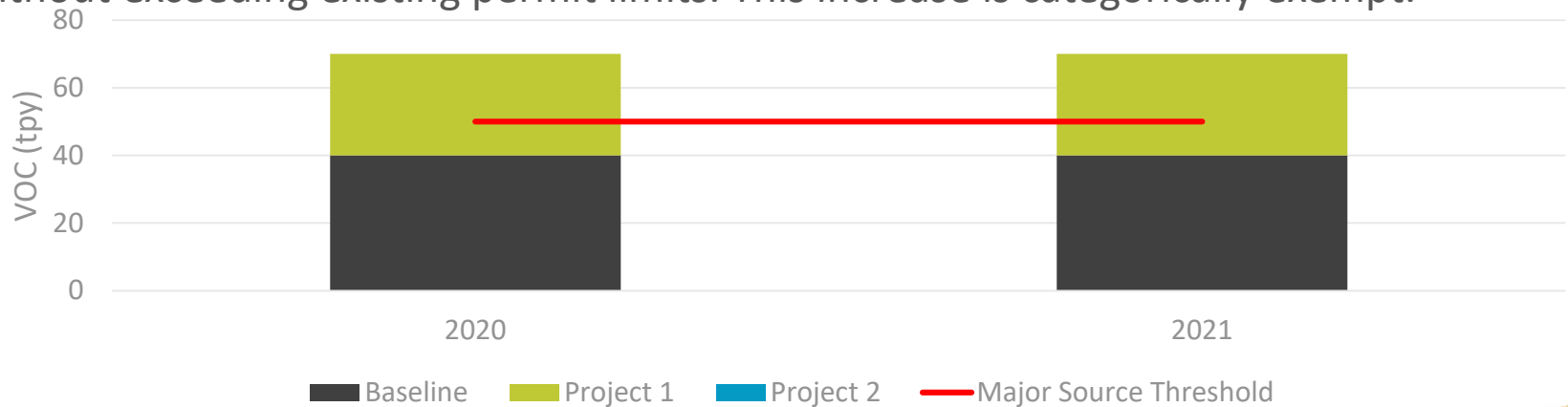
A: No. The facility is an existing minor source and the project is not major in and of itself (>50 tpy). This would be the facility's last "free project." After this project it becomes an existing major source. Future projects would have to be less than 25 tpy net emission increase threshold.



Project 2

Q: Actual emissions from Project 1 were less than ½ the PTE. So that same facility in 2021 plans to increase throughput and projected actual emissions are expected to increase by 15 tpy VOC over baseline actual emissions. The facility can handle the increased throughput without having to add or modify the existing equipment. The new throughput and emissions are projected to be less than existing permit limits. Subject to NA-NSR?

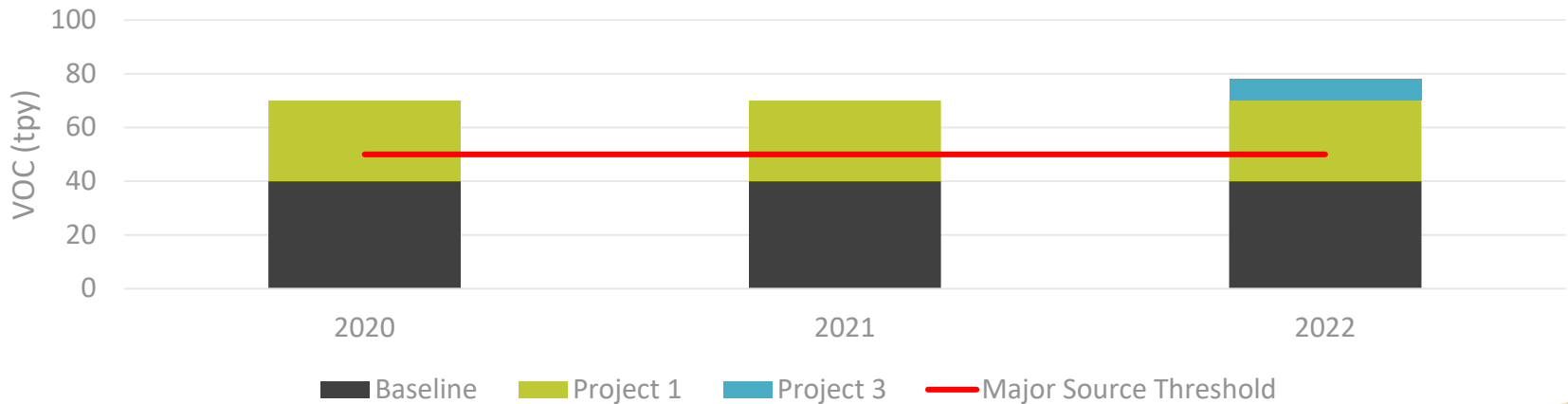
A: No. The throughput increase can be accomplished with existing equipment and without exceeding existing permit limits. This increase is categorically exempt.



Project 3

Q: That same facility in 2022 plans to add equipment which has a PTE of 8 tpy VOC. Subject to NA-NSR?

A: Yes. Net emission increases over the last 5 years will be 38 tpy VOC (30 tpy in 2020 and 8 tpy in 2023)



Offset Calculation

Option 1: Reduce at Another Owned Facility

$$8 \text{ tpy} \times 1.2 \times \frac{1}{0.8} = 12 \text{ tpy}$$

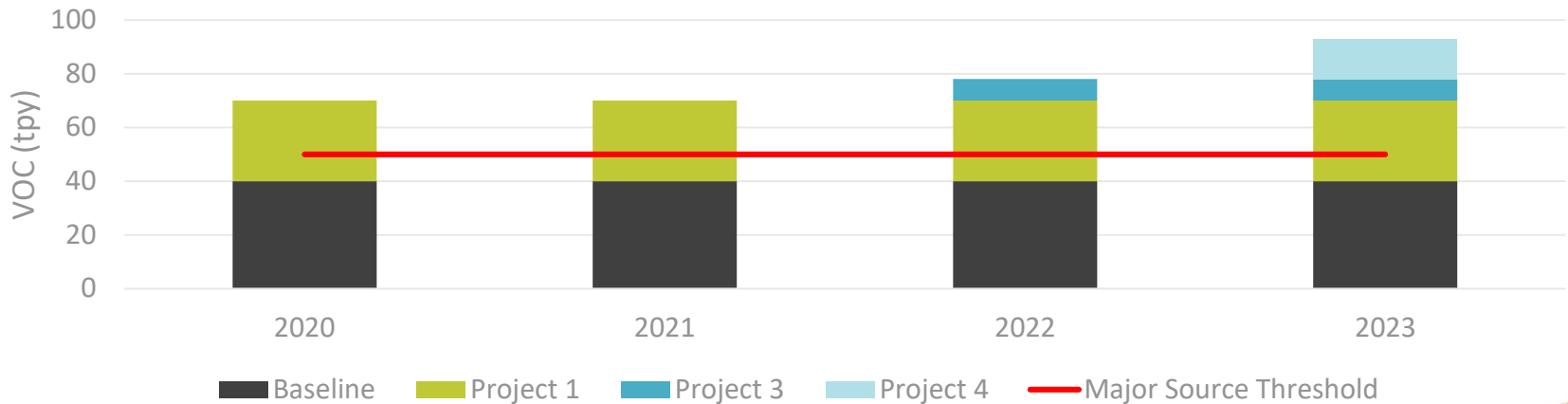
Option 2: Purchase

$$8 \text{ tpy} \times 1.2 = 9.6 \text{ tpy}$$

Project 4

Q: That same facility in 2023 plans to debottleneck a process by replacing some equipment which would result in an increase of 15 tpy of VOC and 30 tpy and CO (PAE-BAE). Subject to NA-NSR?

A: No. CO is not a ozone precursor the significant level is 100 tpy. VOC net increase is less than 25 tpy which just includes this project. VOC from Projects 1 and 3 are not included since they were relied upon for the NA-NSR project in 2022.



General Permits

- Can be used at major sources but only if approved before re-classification
 - Must be incorporated into Title V Permit
- Facility wide limits in NAA for registrations after re-classification are 45 tpy for VOC and NO_x
- GP01 limit is dropping to 10 tpy VOC in the NAA
- GP02 and GP06 do not have AOS provisions for permanent replacement

Questions?



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