Santa Barbara County
Air Pollution Control District

Updating District Guidelines

TO ADDRESS GREENHOUSE GAS EMISSIONS UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

PUBLIC WORKSHOP DECEMBER 2014

Overview

Refresher - Project Description

Summary of Public Input Received

Threshold Options from the Public

Threshold Options under Consideration

Next Steps

Questions/Open Discussion

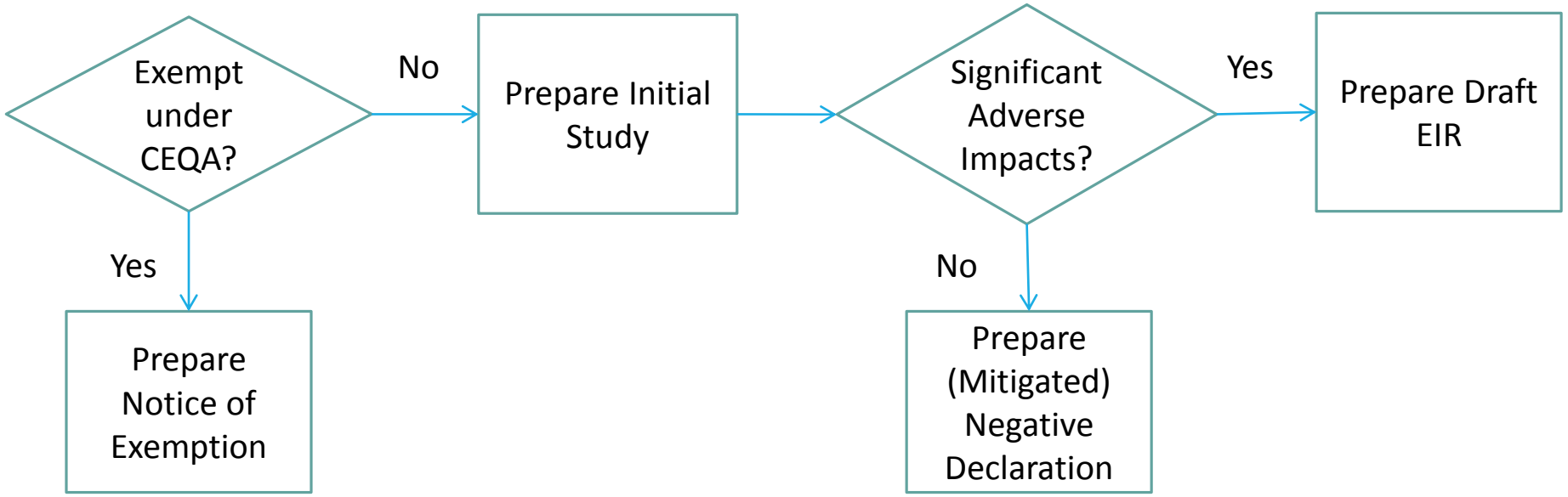
Santa Barbara County APCD

Our mission is to protect the people and the environment of Santa Barbara County from the effects of air pollution.

Background

California Environmental Quality Act (CEQA)

- Purpose: Public disclosure, inform decision-makers, provide for an analysis of alternatives to avoid impacts
- A CEQA determination is required for all “discretionary projects” in California
- Level of review depends on the level of environmental impacts:



Project Statement:
Consider revisions to the APCD Environmental Review Guidelines

- Add GHG threshold to significance criteria for cumulative impacts
  - Applicable to new or modified stationary source projects
- Update Appendix A exemptions list[1]
- Other minor updates to reflect current CEQA practice
- Thresholds apply to projects where APCD is the lead agency (other agencies may choose to use them)

[1] Appendix A of APCD's Environmental Review Guidelines is APCD list of exempt projects.

Assessing Impacts from Greenhouse Gases

When assessing the significance of greenhouse gas impacts under CEQA, a lead agency should consider the following factors, among others (*CEQA Guidelines § 15064.4*):

- The extent to which the project may increase or reduce GHGs compared to the existing environment;
- Whether project emissions exceed a threshold of significance that a lead agency has applied to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHGs.

Public Process and Input

Public Involvement

- Held two public workshops in May 2014 (one in Santa Maria and one in Santa Barbara)
- Held two stakeholder meetings at APCD offices that were open to public observation
- Solicited verbal and written input
- Received several phone calls, emails, and letters
- Input posted on our website

General Statements

- The District is the appropriate agency to adopt a GHG threshold.
- A formal threshold will add an element of certainty to the environmental analysis; this benefits both applicants and lead agencies.
- The District needs to have substantial evidence for whatever threshold is chosen.
- The District is urged to coordinate with the County on their GHG threshold effort.
- Support the need to ensure thorough analysis and disclosure of GHG emissions, and identification and implementation of mitigation to the maximum extent feasible.
- Threshold should consider that there are potentially large projects on the horizon.

General Statements

- Support a threshold that will capture the most potential new GHG emissions in the County.
- District should aim for as low a threshold as feasible.
- The threshold should consider the impact on minor, small projects that may be forced into a CEQA analysis based only on a GHG emissions impact but no other issue area.
- The District's guidance should clarify the full scope of emissions that will be subject to quantification and assessment (i.e. indirect and fugitive emissions as well as combustion emissions).
- In terms of mitigation, purchasing credits should only be allowed if the applicant demonstrates that they cannot achieve emissions reductions in any other feasible manner.

Statements Regarding a Non-Zero Threshold

- If the State's 2050 goal is an 80% reduction in emissions from 1990 levels, new projects should go beyond net zero emissions and reduce their emissions by more than their share if we are aiming for climate stabilization.
- If a non-zero threshold is chosen, projects should be required to mitigate to a level that is consistent with Executive Order S-3-05 targets (reduce GHG emissions by 90 percent below business-as-usual) or capture of 95% of new emissions, and smaller projects that don't trigger the adopted threshold should be required to use Best Available Technology.
- The District should conduct a new capture analysis that looks at current and possible capture rates based upon estimated projects seeking permits at current and future rates, and determine what threshold level would capture 95% of new emissions in the county.

Statements Regarding a Zero Threshold

- A zero threshold is ideal and preferred; a zero threshold has scientific basis, community support, and has been utilized by other agencies.
- There is ample opportunity for smaller projects to fully mitigate their emissions; a zero threshold will not force projects into environmental review based solely on GHG emissions.
- Recent science supports a determination that any net increase in GHG emissions will have a significant effect on global climate change and therefore a “zero emission” threshold should be used to evaluate project impacts. Any additional contribution of CO2 would be a step further from acceptable target levels.
- The potential consequences of global warming underscore the need for a zero emission threshold.
- A zero threshold has practical considerations; a somewhat higher threshold would be acceptable (i.e. proposed 10,000 metric tons per year as an upper limit).
- A zero threshold is an extreme approach that is entirely inconsistent with State legislation and could have dramatic detrimental impacts to all local governments in the region.

Statements Regarding a Bright Line Threshold

- A 10,000 bright line would be acceptable.
- Bright line not objectionable but not best option.
- A bright line threshold is intended to capture as much of the emission source as possible.
- If there is a bright line threshold chosen it should be much lower than 10,000.
- Potential for piece-mealing with a bright line threshold; projects can be divvied up into smaller projects to escape significance. Emissions from all project phases should be combined and accounted for when assessing significance.
- If the District ultimately adopts a 10,000 MTCO2e significance threshold, then it should not count GHG emissions covered by the Cap and Trade program against the significance threshold.

Statements Regarding Consistency with AB 32 Scoping Plan Threshold

- A project's incremental contribution to global climate change should be based on the programs and percent reductions identified in the AB 32 Scoping Plan.
- Support threshold based on consistency with AB32 Scoping Plan and Goals because it is consistent with State mandate, spreads burden of reduced emissions across most projects, and may be most adaptable to a new threshold for 2050 if the State elects to enact one.
- An AB32 target is inadequate because it only address emissions until 2020 and it's based on out-of-date data that assumed that out global target for GHG emissions was 450 ppm.
- Threshold should be a hybrid policy with the following steps: Step 1: Establish 10,000 MT/yr bright line screening level, Step 2: Evaluate compliance with adopted statewide GHG reduction plan or GHG mitigation program (AB 32 Scoping Plan), Step 3: Demonstrate consistency with 15% reduction from BAU required by AB 32. Step 4: Emissions deemed significant, and mitigation to level of insignificance is necessary or Statement of Overriding Considerations.
- A 10,000 metric tons CO2e significance screening level should be set by the District to avoid causing unnecessary review of projects with limited emissions.

Statements Regarding Cap-and-Trade

- Cap and Trade does account for new sources and new sources are also subject to the cap. It's a declining cap that includes new sources that should yield substantial reductions.
- The San Joaquin Valley Air Pollution Control District has a policy wherein projects subject to Cap-and-Trade (covered entities) are considered to have a less than significant impact on global climate change under CEQA. This approach is consistent with the CEQA Guidelines.
- The lack of a formal extension (beyond 2020) of the Cap and Trade Program does not prohibit the District from relying on the Cap and Trade program when determining the significance of a project's GHG emissions or requiring mitigation of GHG emissions. With regard to mitigation, the District could impose a back-up mitigation measure that would be triggered in the event the Cap and Trade program is not extended.

Threshold Options Submitted by the Public

Threshold Options Submitted by the Public

- Zero
- Numeric Bright Line 10,000 MT/yr
- Consistency with AB 32 Scoping Plan and Goals
- Hybrid/Step-Wise with Business-As-Usual (BAU) Reduction

Zero

All projects would be required to quantify and mitigate all of their greenhouse gas (GHG) emissions.

Projects unable to meet the zero-emission threshold would be required to prepare an EIR, and develop justification for a statement of overriding considerations.

Pros	Cons
• Provides mitigation of all project GHG emissions.	• Practicality and implementation issues (for example, annual monitoring/reporting/mitigation).
• Addresses scientific community's input that significant action is needed for climate stabilization.	• Large administrative burden, inefficient use of resources (all projects with net increase in GHG emissions, or with mitigation requirements, require MND at minimum).
• Prevents small sources from going unmitigated.	• Mitigation feasibility and cost for small and large sources.
• "Nexus and proportionality" of impacts to mitigation.	• For small projects, large administrative burden and costs relative to small amount of GHG reduction achieved.

Numeric Bright Line

Sets a threshold at a defined amount of metric tons per year CO2 equivalent.

Establishes a strictly numeric emissions threshold and requires mitigation to below the numeric threshold to make a finding of less than significant.

Pros	Cons
• Simple, easy to explain with straightforward implementation.	• Mitigation requirements may exceed AB 32 requirements.
• Manageable administrative burden, more efficient use of agency and applicant resources.	• Potential for "piecemealing" of projects if an applicant proposes multiple smaller projects that are below the numeric threshold and are considered less than significant.
• Has been applied in SB County and elsewhere with no legal challenges.	• Smaller sources go unmitigated.
• Consistent with other air districts' adopted thresholds.	• Cost and feasibility of mitigation for sources that require mitigation.
• "Nexus and proportionality" of impacts to mitigation.	

Consistency with AB 32 Scoping Plan and Goals

Requires all discretionary projects to achieve 15.3% percent reduction target from projected business-as-usual emissions; this is the percent reduction needed to meet AB 32's goal of reducing California-wide GHG emissions to 1990 levels by 2020.

Pros	Cons
• Grounded on existing mandate and regulatory scheme.	• No GHG emissions targets codified yet for post-2020.
• Results in emissions reductions from all projects at same percentage rate.	• Scoping Plan reduction goals change over time (mitigation is fixed at time of project decision).
• CEQA case law has given deference to agencies to apply this approach and further defines how it should be done.	• "Nexus and proportionality" of impacts to mitigation is more challenging to demonstrate.
• Utilized by other air districts.	• Potentially a time consuming and costly process (for agency and for applicant).
	• "Straw man" project concept.

Hybrid/Step-Wise with Business-As-Usual Reduction

"Hybrid" policy approach with a step-wise threshold application:

→ Below 10,000 MTCO2e/yr screening threshold?

→ Comply with an adopted statewide GHG reduction plan (*projects subject to Cap-and-Trade requirements are deemed consistent with a Qualified GHG Reduction Plan*)?

→ Achieve 15.3 % percent reduction target from projected BAU emissions?

Pros	Cons
• By applying a bright line screening level, avoids the administrative burden and cost to small sources.	• In using a bright line screening level, potential for "piecemealing"; small projects go unmitigated.
• Sources subject to Cap-and-Trade are mandated to reduce emissions; utilizes existing regulatory scheme.	• Sources not subject to Cap-and-Trade are then analyzed under a BAU approach (see cons in "Consistency with AB 32" table).
• Relates to AB 32 goals; reduction based on most current emission inventory to meet 2020 goal.	• AB 32 BAU projections might change over time, necessitates reevaluation of reduction goals; creates uncertainty.
• Does not discourage larger projects (mitigation requirements more achievable for large emitters).	• Some projects may be deemed less than significant yet have high emissions.

Threshold Options Under Consideration

Threshold Options Under Consideration

To assess significance of greenhouse gas emissions from stationary sources

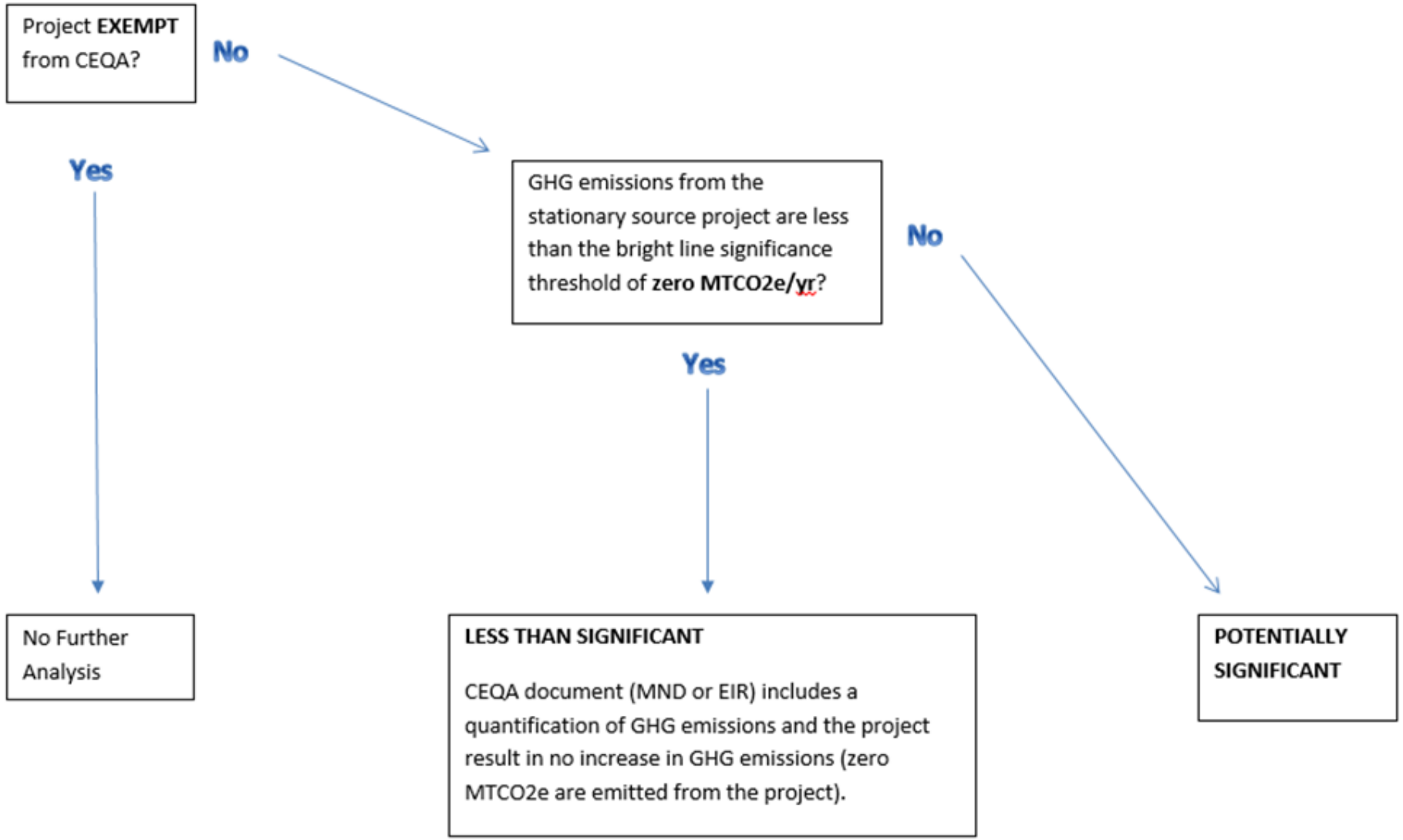
- Zero
- Numeric Bright Line 10,000 MT
- Performance-Based Measures and Percent Reduction Consistent with AB 32 Goals
- Percent Reduction from Business-As-Usual (BAU)

Option 1:

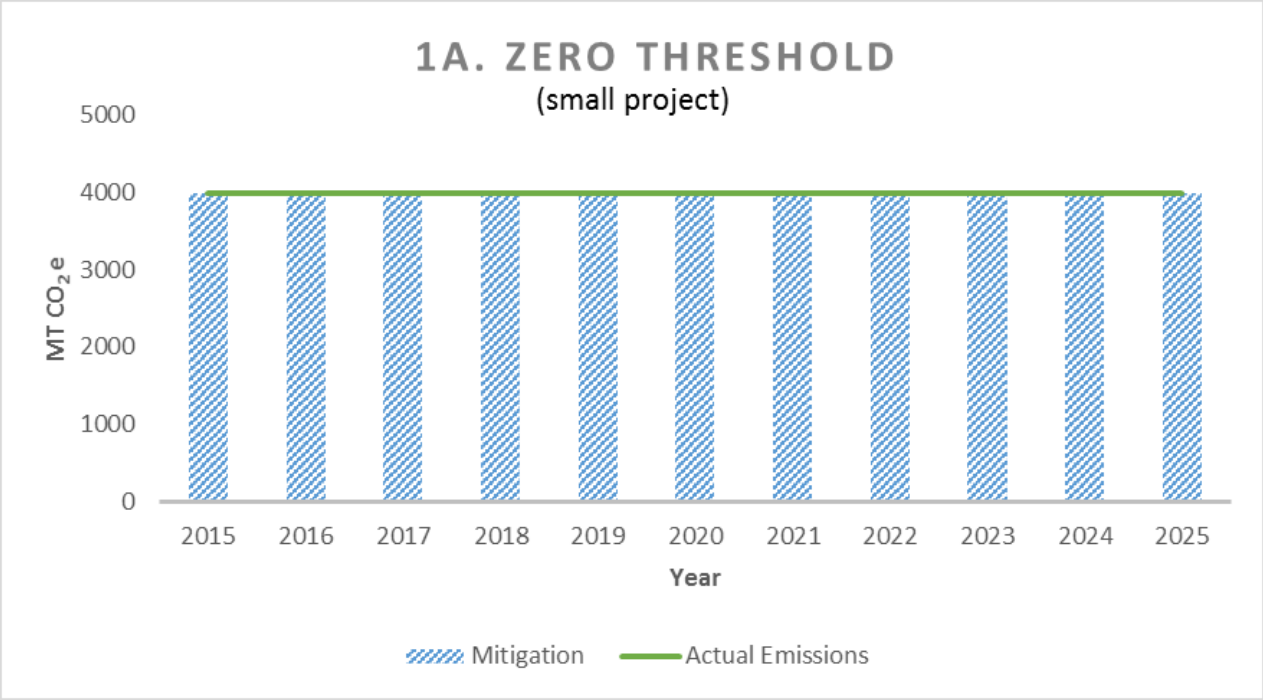
Zero

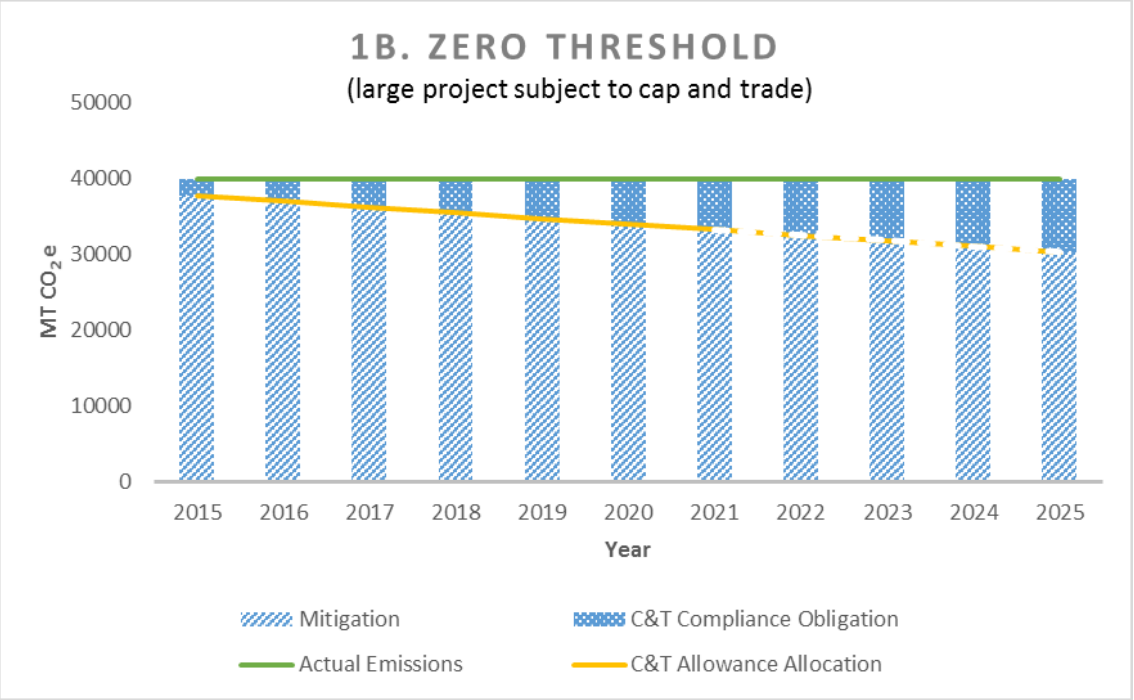
- All greenhouse gas emissions contribute to climate change and could be considered significant.
- All projects are required to quantify and mitigate all of their GHG emissions.

Option 1: Zero



Examples of Potential Mitigation Scenarios





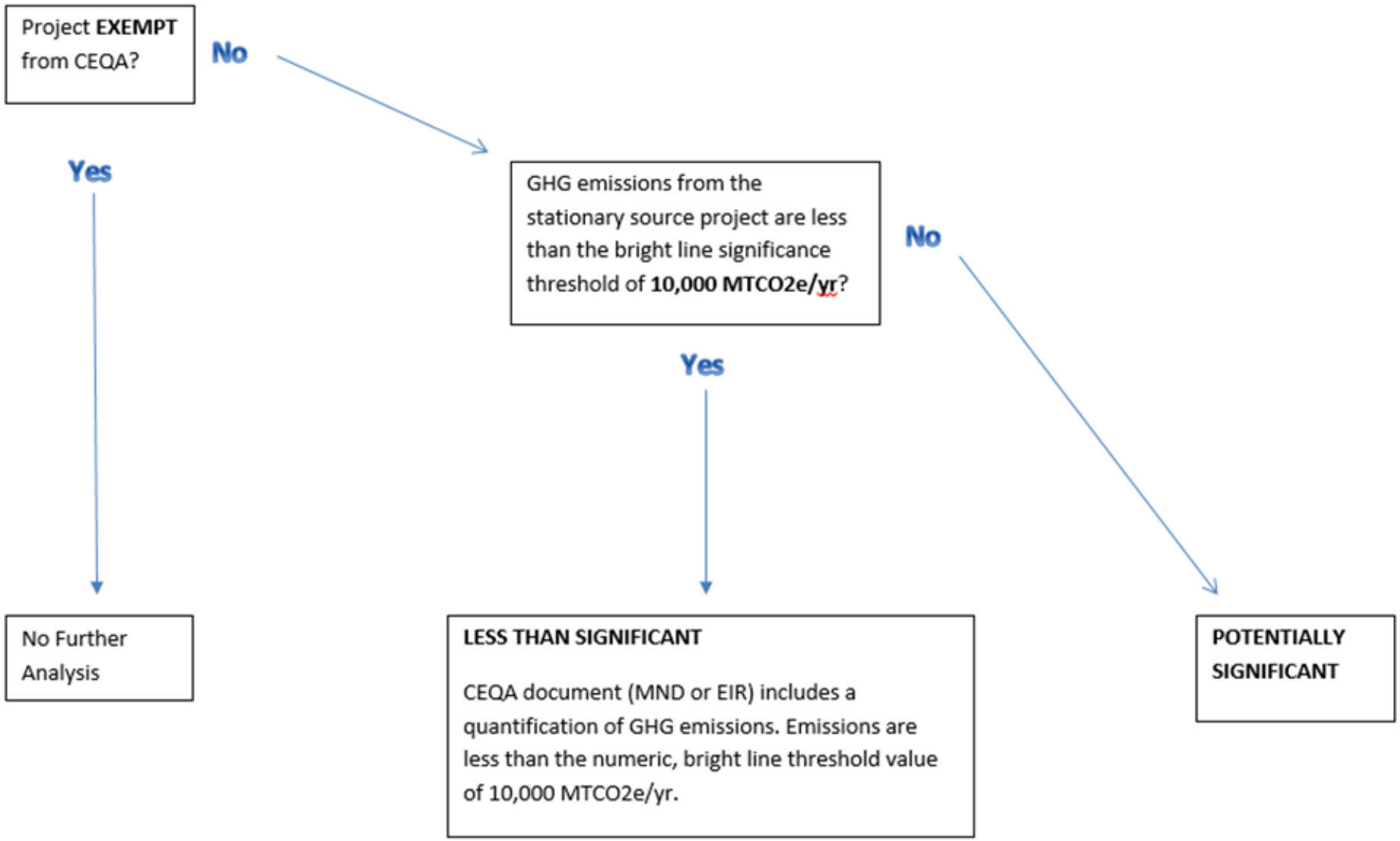
Option 2:

Bright Line

10,000 MTCO2e/yr

- Establishes a strictly numeric emissions threshold (defined amount of MTCO2e/yr) and requires mitigation to below the numeric threshold to make a finding of less than significant.
- Sets the emission threshold low enough to capture a substantial fraction of future emissions, while setting the emission threshold high enough to exclude small projects.
- May be based on a capture rate analysis that looks at the distribution of stationary source GHG emissions within a specified region.

Option 2: Bright Line



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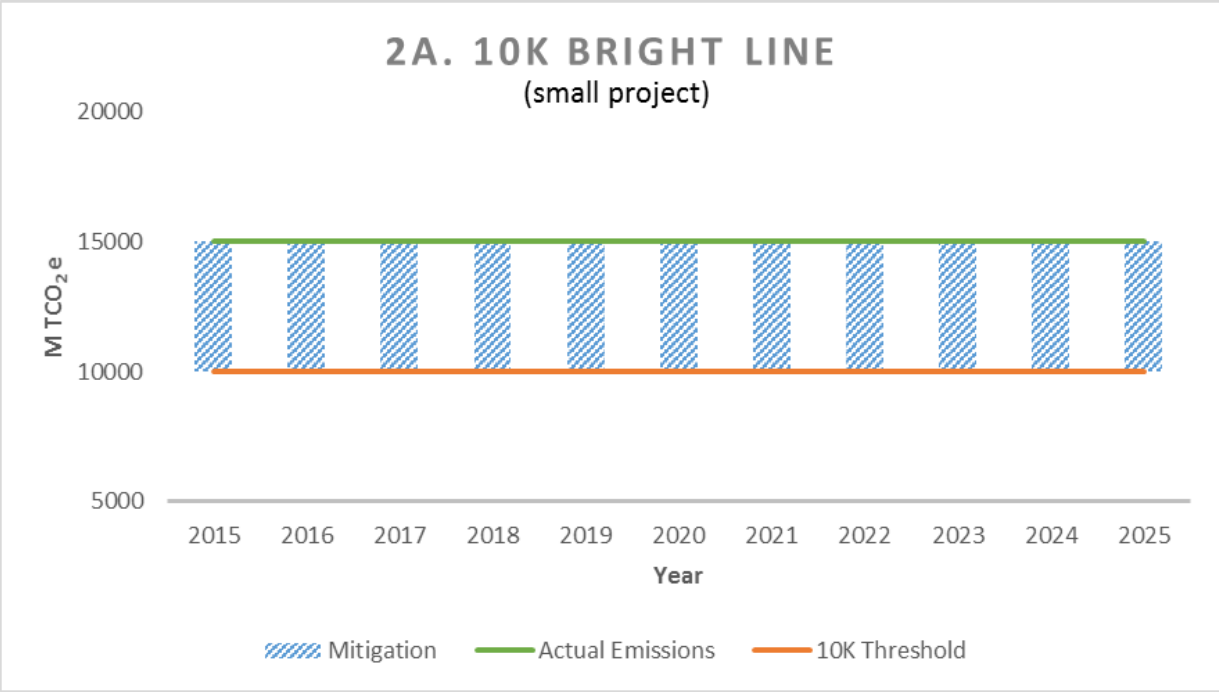
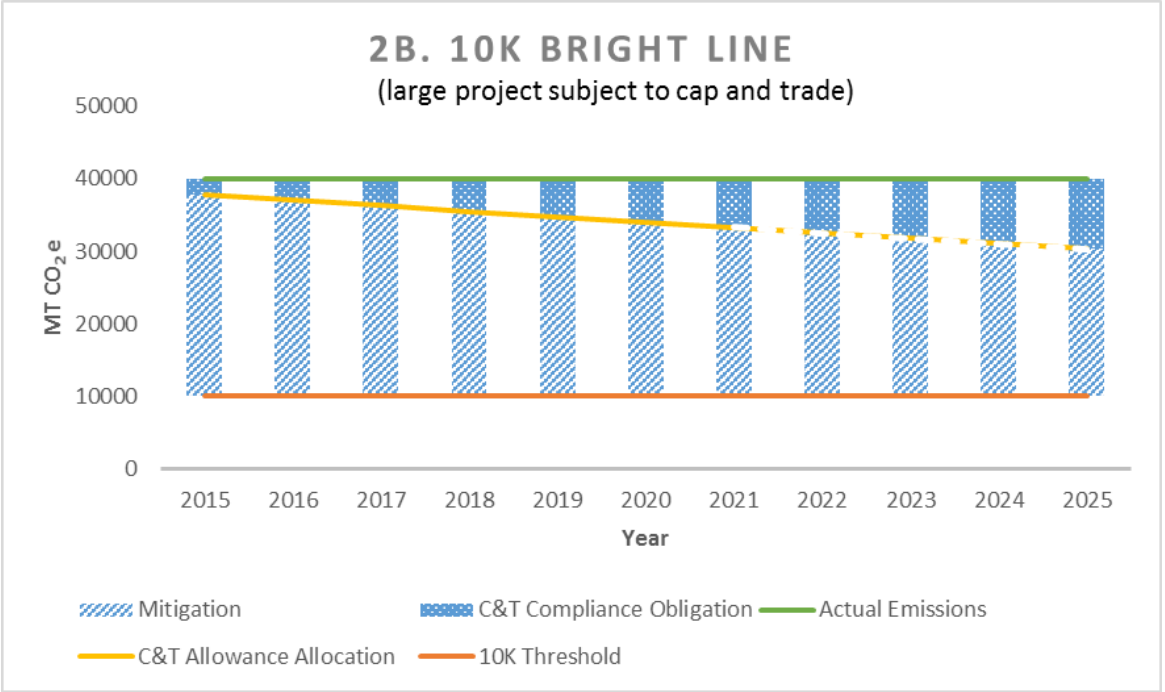




Option 3:

Performance-Based Measures and Percent Reduction Consistent with AB 32 Goals

- For sources with emissions over a 10,000 MTCO2e/yr "screening threshold", a significance threshold would be established based on a percent reduction below a "best practices emissions" (BPE) level.
- The BPE level would be computed based on the application of "efficiency benchmarks".
- A percent reduction would be applied on top of the BPE level.
- Two options for a percent reduction are 15.3% and 35%:
  - The 15.3% reduction correlates with emissions reductions necessary to meet the Updated Scoping Plan 2020 goal.
  - The 35% reduction is an estimate that is tied to the 2050 goal set by the Governor in Executive Order S-3-05.

Benchmarks

The benchmarks to be applied in this option have already been developed by CARB and incorporated into the Cap and Trade regulation.

These benchmarks are measures of GHG emissions efficiencies, and are considered performance standards.

Two categories of established benchmarks by CARB:

1. Product-based benchmarks - are specific to various industries, but do not exist for all industries.
2. Energy-based benchmarks - will be used only in the case when no product benchmark has been established.

Application

Example: Thermal Enhanced Oil Recovery (Steam Generator) Oil Extraction Project

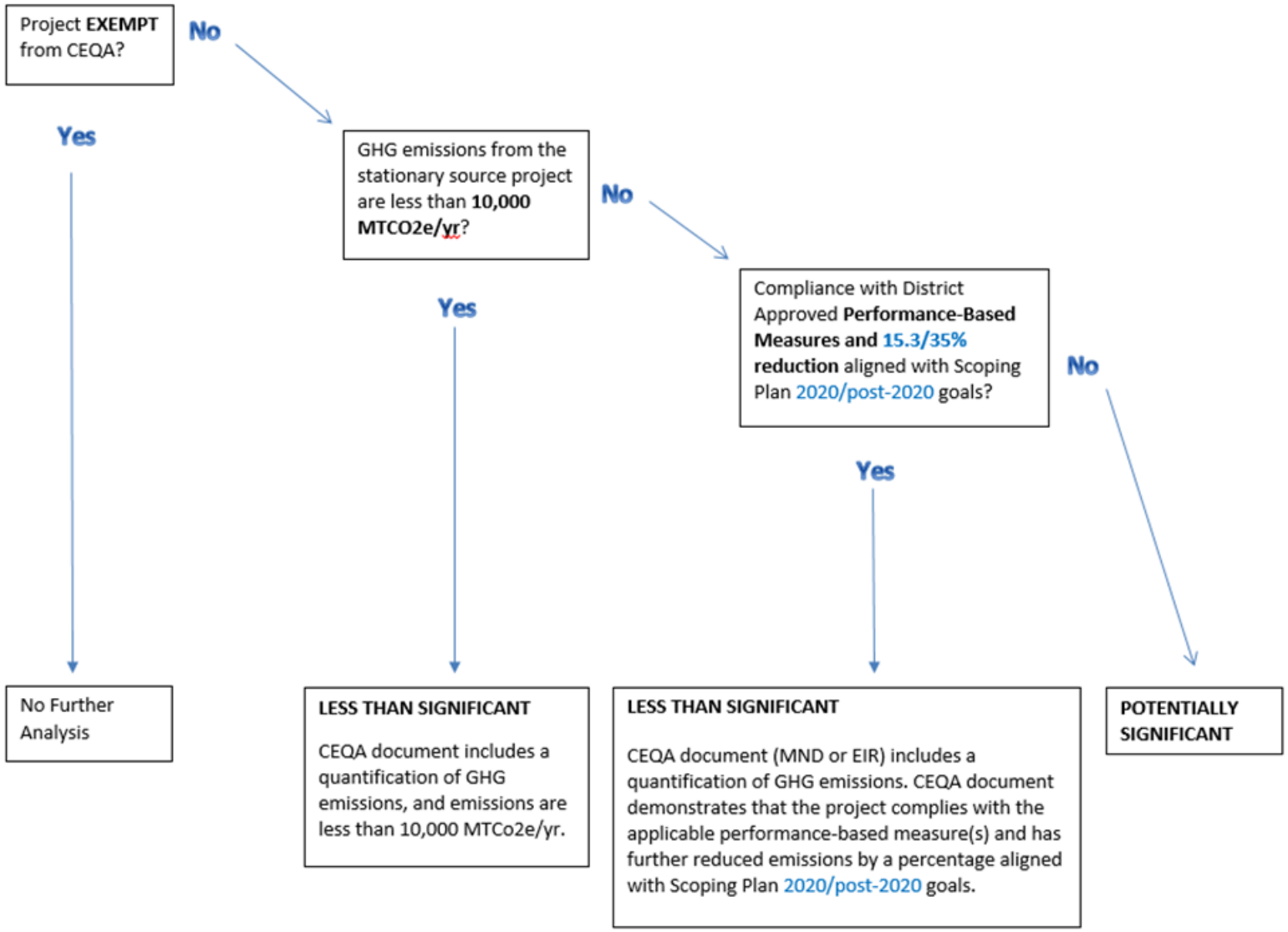
Significance Threshold
15.3% below BPE

YEAR	PRODUCTION (BBLS/YR)	BENCHMARK (CO2E/BBL)	BPE (CO2E)	SIG. THRES. (CO2E)	ACTUALS (CO2E)	MITIGATION REQ. (CO2E)
2016	200,000	0.0811	16,220	13,738	22,000	8,262
2020	250,000	0.0811	20,275	17,173	23,000	5,827
2030	175,000	0.0811	14,193	12,021	20,000	7,979

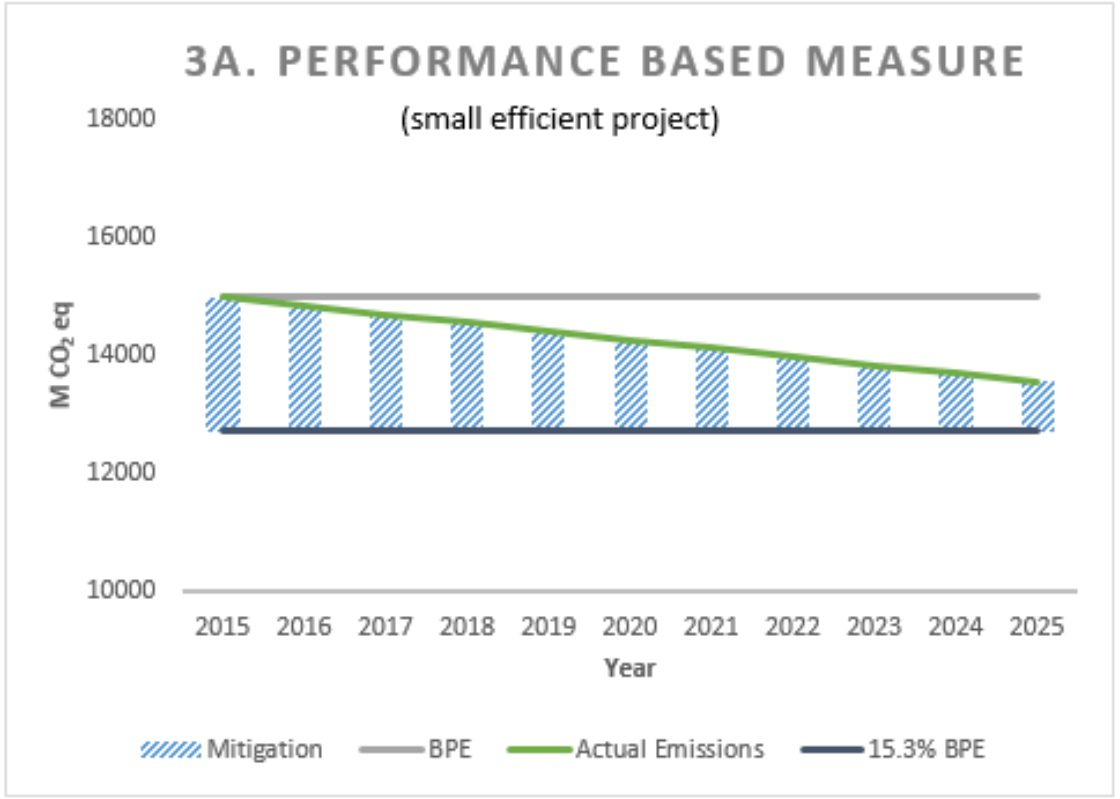
Significance Threshold
35% below BPE

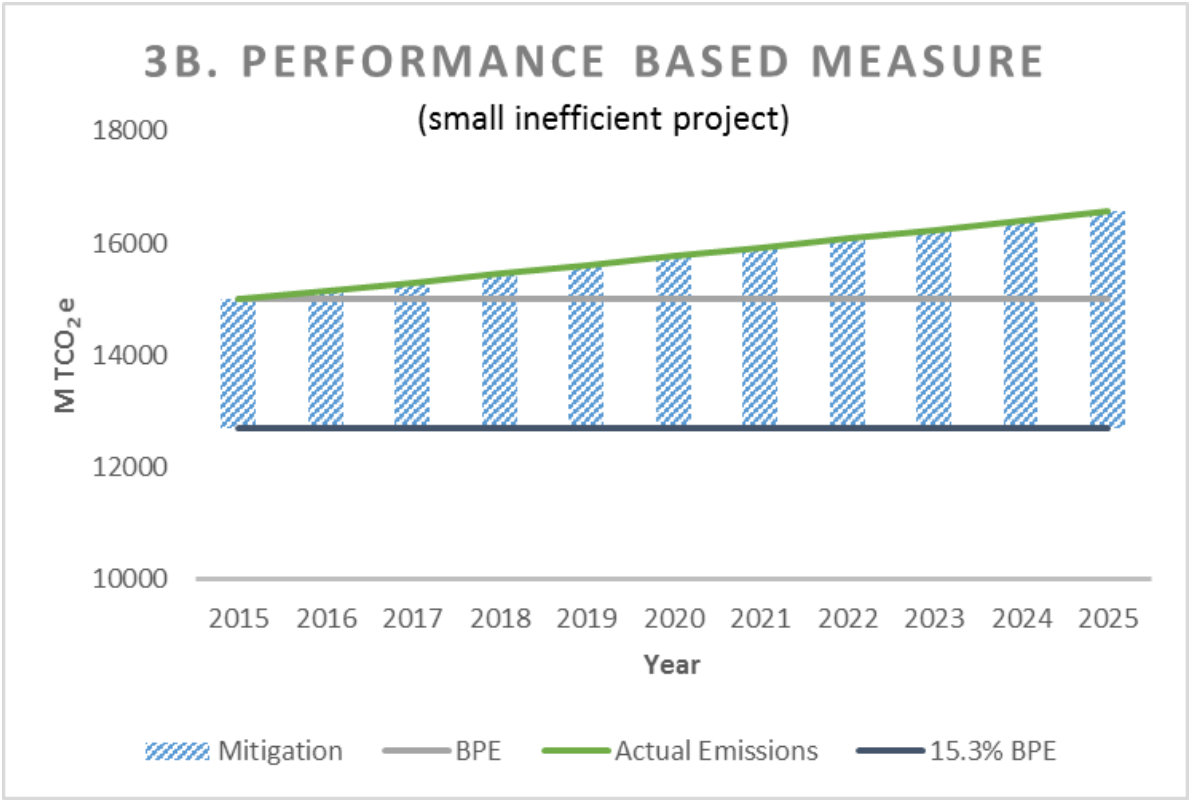
YEAR	PRODUCTION (BBLS/YR)	BENCHMARK (CO2E/BBL)	BPE (CO2E)	SIG. THRES. (CO2E)	ACTUALS (CO2E)	MITIGATION REQ. (CO2E)
2016	200,000	0.0811	16,220	10,543	22,000	11,457
2020	250,000	0.0811	20,275	13,178	23,000	9,822
2030	175,000	0.0811	14,193	9,225	20,000	10,775

Option 3: Performance-Based Measures & Percent Reduction Consistent with AB 32 Goals



Examples of Potential Mitigation Scenarios





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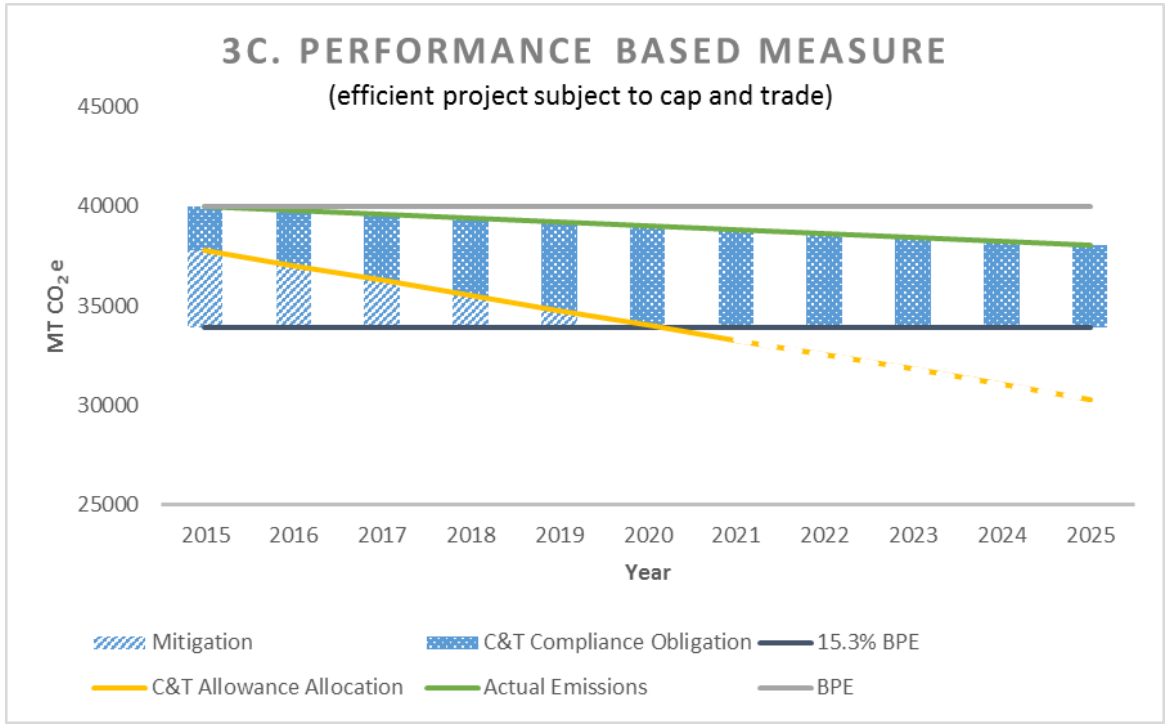
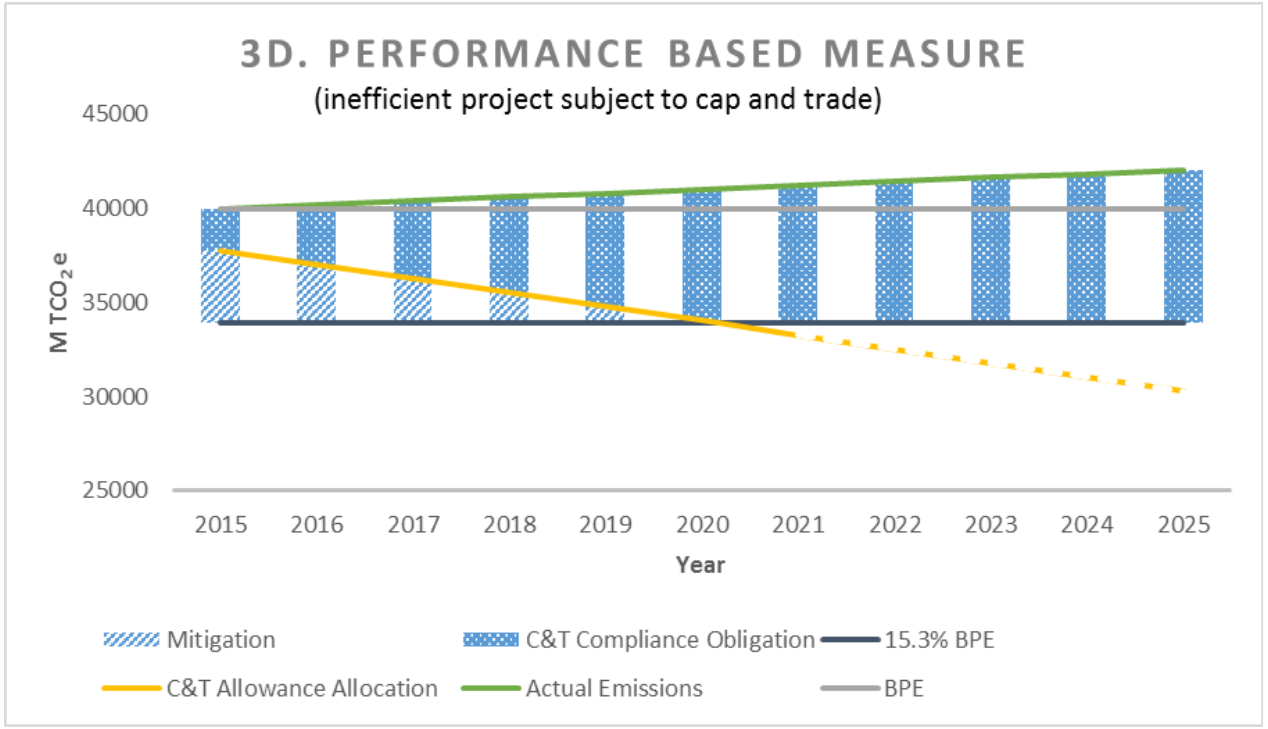


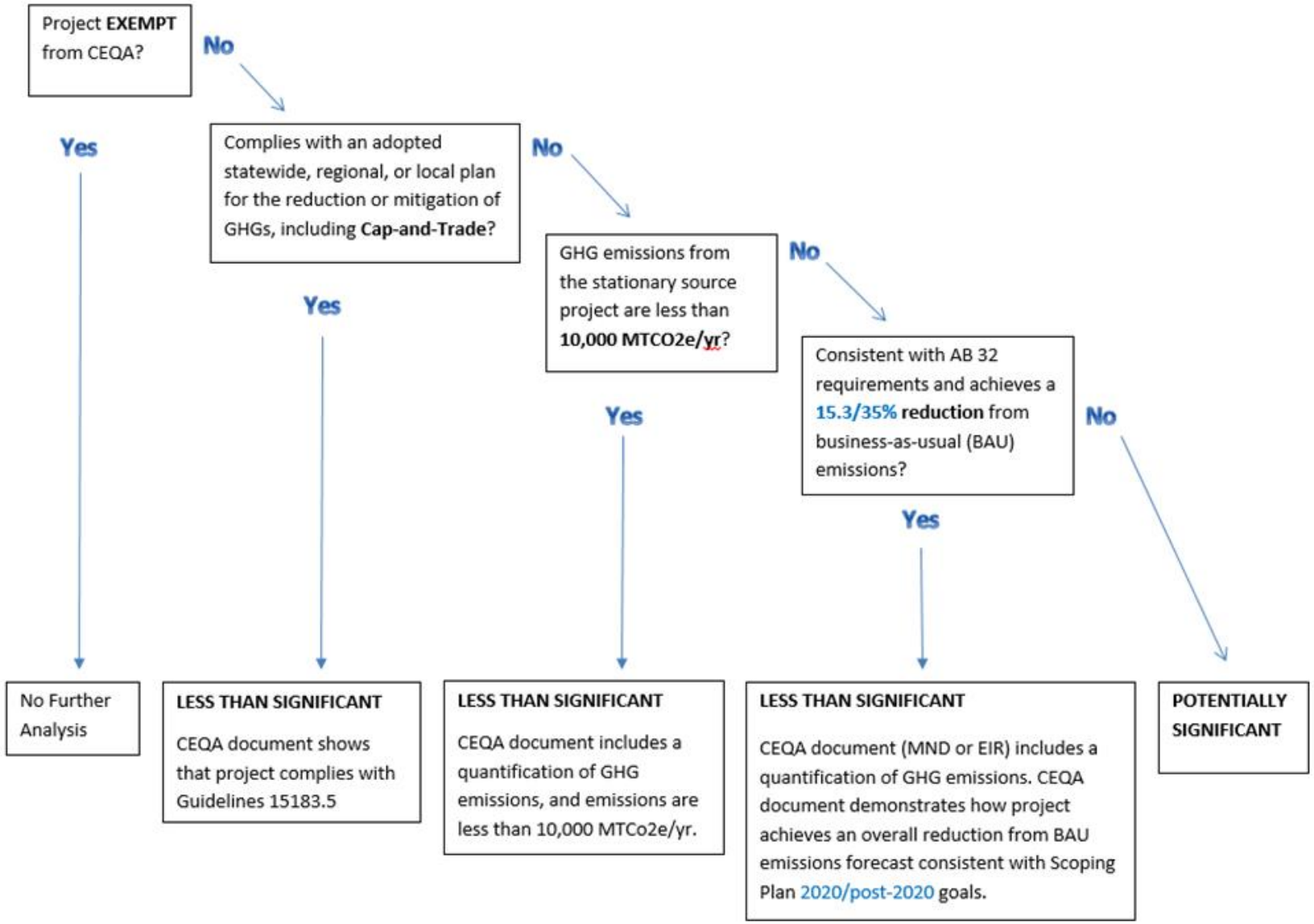


Option 4:

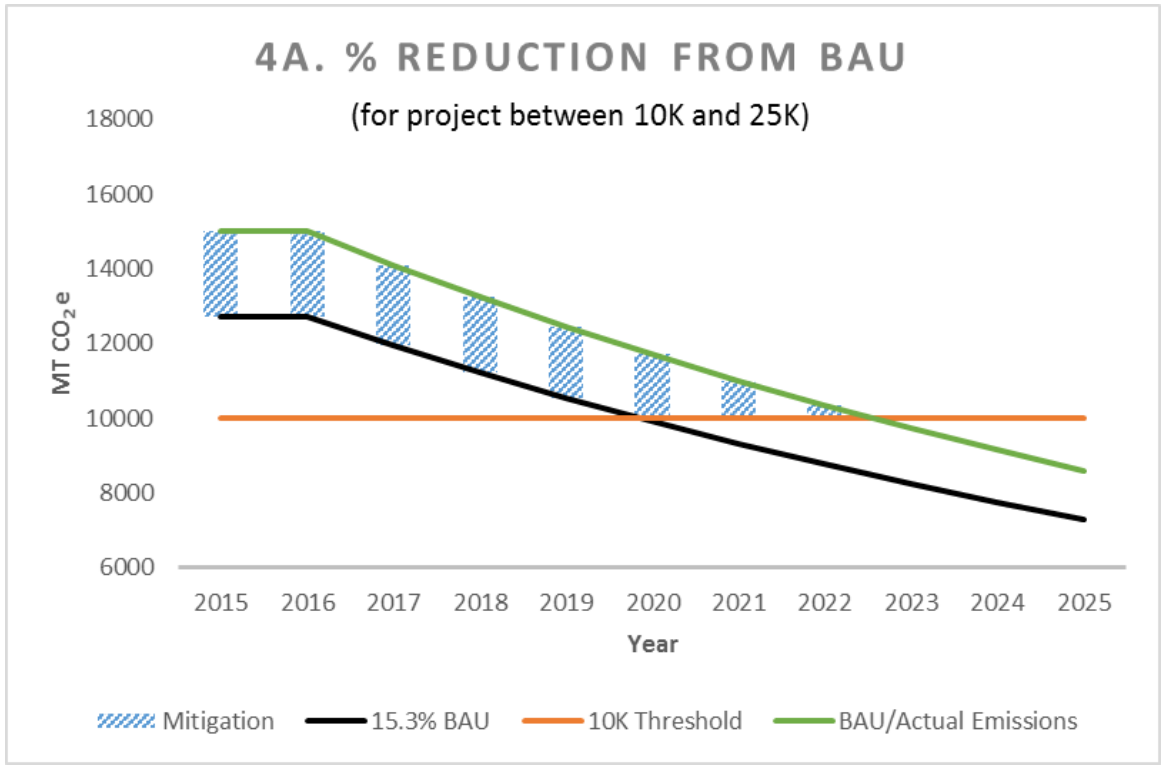
Percent Reduction from Business-As-Usual

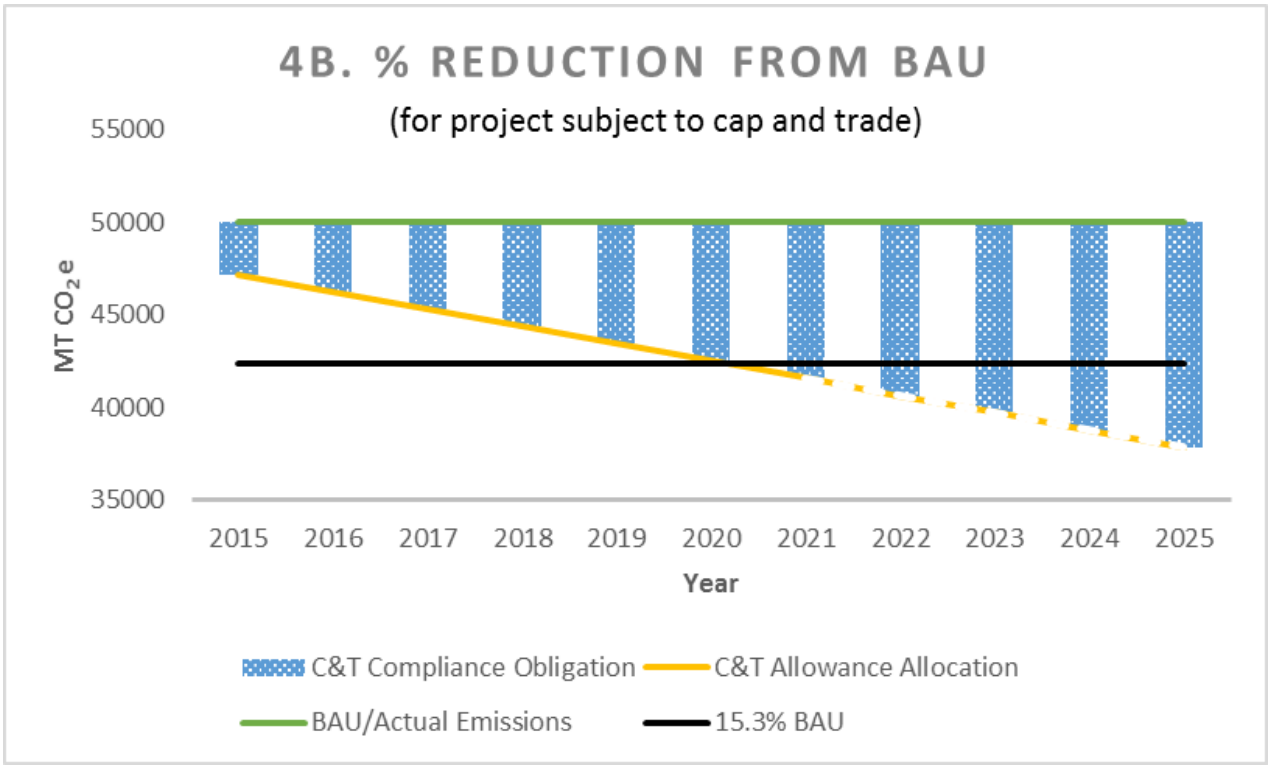
- This approach utilizes a 10,000 MTCO2e/yr screening threshold and considers Cap-and-Trade as a Qualified Greenhouse Gas Reduction Plan.
- Required projects to achieve a percent reduction target from projected stationary source business-as-usual (BAU) emissions.
- The BAU emissions scenario should equate to the project GHG emissions as proposed in the permit application.
- Two options for a percent reduction are 15.3% and 35%:
  - The 15.3% reduction correlates with emissions reductions necessary to meet the Updated Scoping Plan 2020 goal.
  - The 35 percent reduction is an estimate that is tied to the 2050 goal set by the Governor in Executive Order S-3-05 and the AB 32 Scoping Plan goals and targets.

Option 4: Percent Reduction from BAU



Examples of Potential Mitigation Scenarios





Notes on Mitigation

- Preference for onsite mitigation.
- Potential obligation to monitor, report, and mitigate annually.
- Under an annual reporting scenario, actual project emissions would be reported yearly, and compared to the significance threshold on an annual basis. If reported actual emissions exceed the significance threshold, then mitigation would be required for that year below the significance threshold.
- If APCD is the lead agency (e.g. permit for a new boiler), sources may not be required to mitigate indirect source emissions (i.e. emissions from electricity use and motor vehicles).
- Under all options, allowances purchased under Cap and Trade would apply towards mitigation.

Decisions for Discussion

For option 3 & 4, should the percent reduction be based on 2020 or post-2020 goals?

Should the percentage be the 15.3% needed to reach the State's 2020 goal?

Should the percentage be a higher percentage (e.g. 35%) that sets us on a trajectory to meet the State's 2050 goal?

Should the District revise the percent reduction if the State revises its inventory or establishes new targets?

Process & Next Steps

Process

- Gather input from the public on options under consideration
- Make refinements to options as necessary
- Release proposed Guideline revisions to the public, and present to Community Advisory Council (CAC) for consideration
- Proceed to Board with Guidelines in accordance with CAC recommendation

Next Steps

- Provide written input by **January 9, 2015**.
- Email to ceqa@sbcapcd.org or mail to:

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Santa Barbara, CA 93110

- Questions? Contact Molly Pearson at (805) 961-8838