Cap-and-Trade Adaptive Management Discussion Guide

Draft Process to Monitor Emissions from California Cap-and-Trade Facilities

Air Resources Board

11/5/2015

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Overview

This document describes the proposed Cap-and-Trade Adaptive Management Process (Proposed Process) for monitoring and responding to emission trends occurring under Cap-and-Trade. The Proposed Process will monitor changes in emissions at:

- Individual Cap-and-Trade Facilities, and
- California Communities with Multiple Cap-and-Trade Facilities (Clusters)

The Proposed Process will also monitor emissions over multiple years (Trends) at individual facilities, in California communities, and across industrial sectors.

Introduction

Cap-and-Trade works with other complementary measures at local, State, and federal levels to reduce emissions across California, benefitting all State residents. On October 20, 2011, the Air Resources Board (ARB or Board) approved an Adaptive Management Plan to closely monitor any localized and forest effects occurring under the Cap-and-Trade Program.

Adaptive Management is ARB's formal process for monitoring and responding to any changes in emissions occurring under the Cap-and-Trade Program.

Development of Process

The Proposed Process was developed in collaboration with staff from California's Air Pollution Control and Air Quality Management Districts. ARB staff is presenting the proposed process in regional meetings throughout California and before the Board in November, 2015. Both the regional meetings and public Board Hearing are opportunities for stakeholders and members of the public to provide comments on the Proposed Process.

Methodology

Individual Facility Analysis

ARB will monitor emission trends at Cap-and-Trade facilities located in California. In this analysis, staff will compare the most recent report year greenhouse gas emissions data to the previous year. Staff will also consider any increases or decreases of emissions specifically reported by facility operators. Facility operators are required to annually report increases or decreases of more than five percent in greenhouse gas emissions compared to the previous year and the reason for the change.

Community Analysis

ARB will track greenhouse gas emissions trends in California communities with multiple Cap-and-Trade facilities (Clusters) using the interactive Greenhouse Gas Emissions Mapping Tool. The Greenhouse Gas Emissions Mapping Tool is available at: http://www.arb.ca.gov/ei/tools/ghgfacilities/.

Staff will conduct the community analysis by:

- Positioning a defined shape, such as a circle, in a California community with multiple Cap-and-Trade facilities;
- Collecting the most recent report year aggregate greenhouse gas emissions for the specific area; and
- Comparing the aggregate emissions collected above with the previous report year cumulative emissions for the same specific area.

The above process will be repeated for each California community with multiple Cap-and-Trade facilities.

Multiple Year Trend Analysis

ARB will also monitor emissions over multiple years (Trends) at individual facilities, in California communities, and across industrial sectors. To conduct this analysis, staff will collect multiple years of emissions data reports for individual facilities, community clusters, and industrial sectors. Staff will calculate a trend line (slope trajectory) for

each series of collected emissions data reports to monitor general changes across multiple years.

Results

ARB will consider a combination of factors to identify and evaluate emission trends occurring under the Cap-and-Trade Program. ARB will establish an Adaptive Management Working Group to recommend criteria to be used to interpret the results from the proposed analyses.

Adaptive Management Working Group

ARB is proposing to convene an Adaptive Management Working Group consisting of the following participants:

- Environmental Health Representatives
- Public Health Experts
- Air District Officials
- Environmental Justice Representatives
- Industry Stakeholders

Responses

ARB's long-standing approach to implementing programs, policies, and regulations includes periodic reviews to ensure that the goals of the respective action are being met. Potential responses if adverse impacts are identified include:

- Air Monitoring Studies
- Health Risk Assessments
- ARB Sponsored Research Study
- Changes to local air district permits
- Amendments to District Rules
- Cap-and-Trade Regulatory Amendments

Public Process

ARB has released the interactive Greenhouse Gas Emissions Mapping Tool to allow stakeholders to conduct their own analyses and work collaboratively with ARB staff to monitor greenhouse gas emissions changes at individual facilities, in California communities, and across industrial sectors.

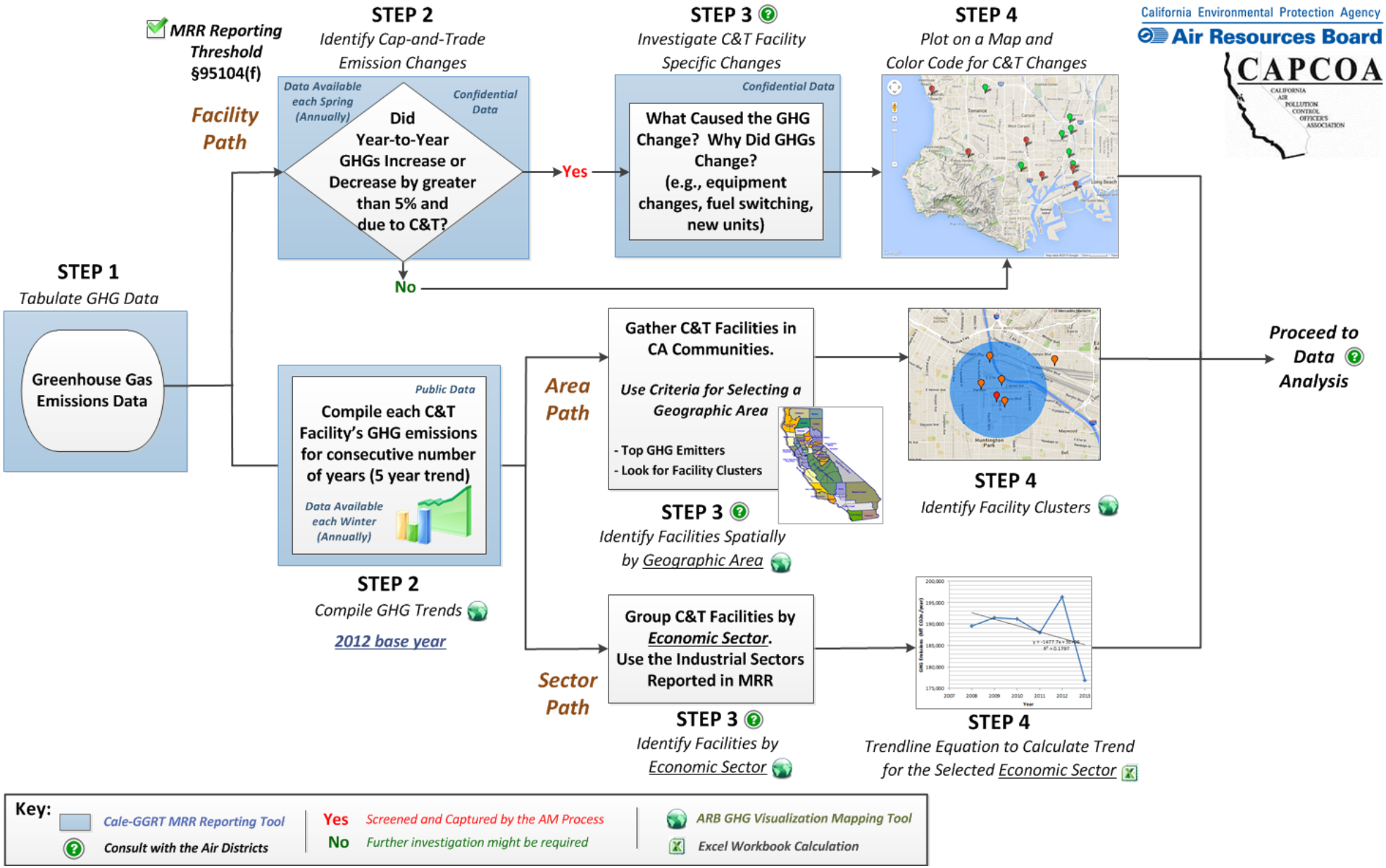
On an annual basis, ARB is committing to:

- Release Adaptive Management Findings
- Present Findings at Public Board Hearing
- Consider Public Comments Received
- Continue Seeking Input from Working Group Participants and Local Air District Partners

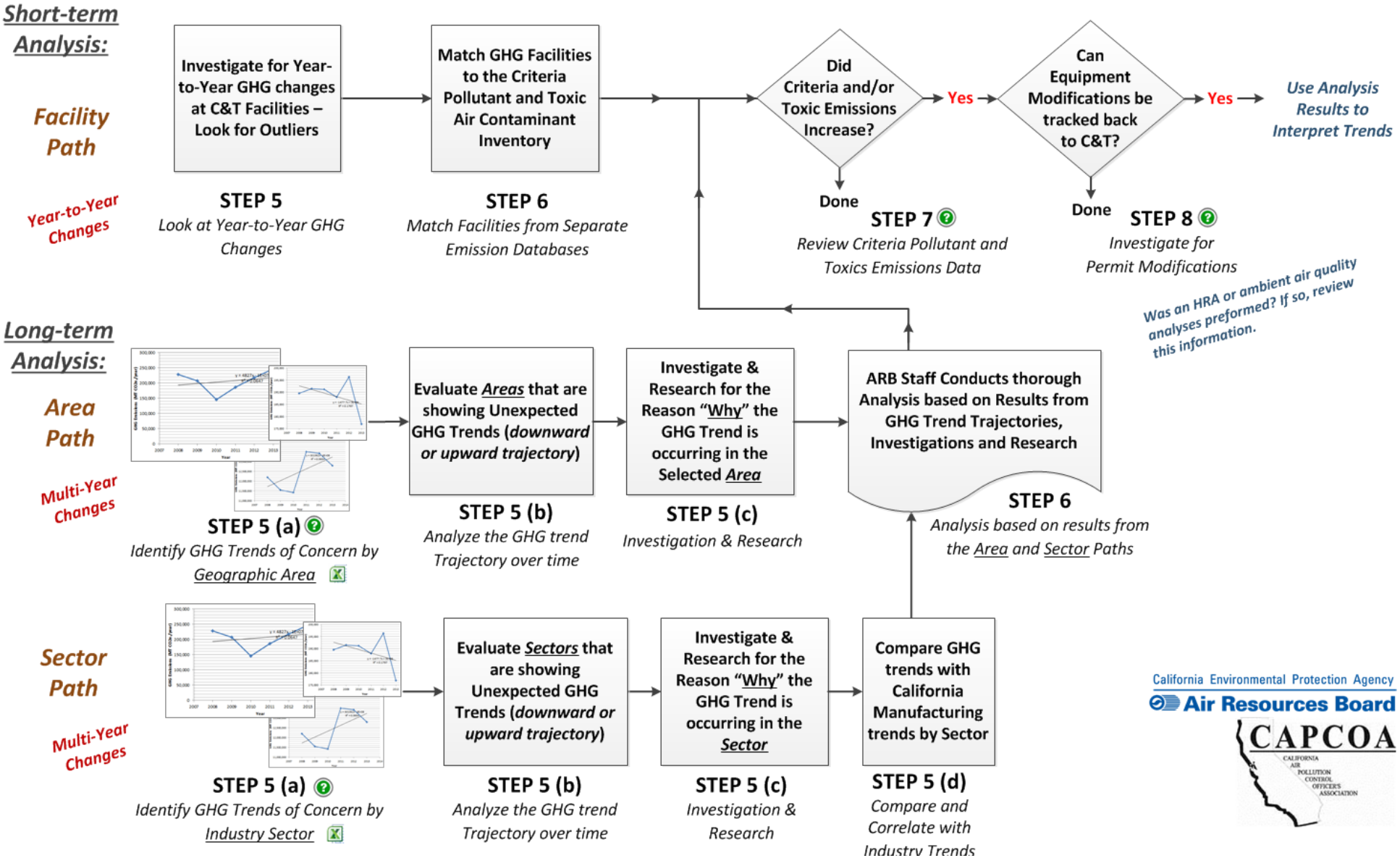
Appendix A – Proposed Process Flowchart

ARB has developed the following proposed Adaptive Management Process Flowchart that details the steps staff intends to take to monitor emissions changes at individual facilities, in California communities, and across industrial sectors.

Data Collection, Screening and Review Process:

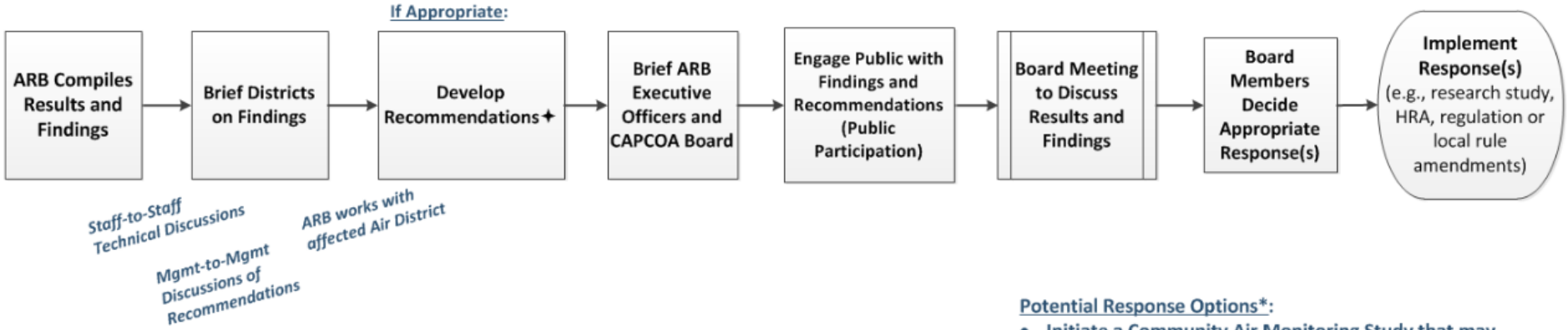


Data Analysis Process:



Periodic Updates to the ARB Board.

Decision Making Process:



Potential Response Options*:

- Initiate a Community Air Monitoring Study that may include fence line monitoring ✦
- Fund a Research Study done by a University
- Conduct a Health Risk Assessment (HRA) ✦
- Amend Cap-and-Trade Regulation
- Work with Districts to Evaluate:
  - Appropriate changes to District air permits ✦
  - Amend existing, or propose new Air District Rules ✦

Periodic Updates to the ARB Board.

✦ *Recommendations and/or Potential Response Options may impact Air District Resources.*

* *Any potential response would go through a full public process.*