

Adipic Acid Production Protocol V1.0

Workgroup Meeting 3 June 30, 2020

Housekeeping



- Workgroup members have the opportunity to actively participate throughout the meeting
- We will ask and take questions throughout the session
- All other attendees/observers are in listen-only mode
- Observers are free to submit questions in the GoToWebinar question box
- We will follow up via email to answer any questions not addressed during the meeting
- The slides and a recording of the presentation will be posted online

Purpose



 To present and solicit feedback from workgroup members on key issues pertaining to the *DRAFT* Adipic Acid Production Protocol Version 1.0

Agenda



- I. Introductions
- II. Process Overview
- III. Overview of Key Issues
- IV. Open Discussion
- V. Next Steps



INTRODUCTIONS

Climate Action Reserve



Reserve Staff:

- Craig Ebert, President
- Sami Osman, Senior Policy Manager
 - Protocol development lead
- Heather Raven, Senior Project Coordinator
 - Development process coordinator
- Sarah Wescott, Senior Forest Program Manager
 - Protocol development support
- Jon Remucal, Senior Forest Policy Manager
 - Protocol development support

Workgroup Members



Name (alphabetical)	Organization
Seth Baruch	Carbonomics, LLC
Phillip Cunningham	Ruby Canyon Environmental, Inc
William Flederbach (Lauren Mechak)	ClimeCo Corporation
John McDougal	Element Markets
Lambert Schneider	Öko-Institut

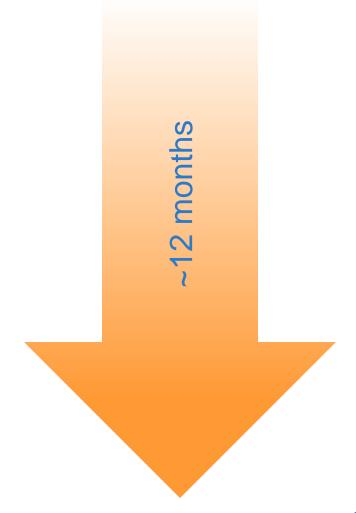


PROCESS OVERVIEW

Protocol Development Timeline



- 1. Scoping meeting (Sep 17, 2019)
- 2. Issue paper (Oct 4, 2019)
- 3. Workgroup process (Sep Present)
 - Formation (Sep Oct 2019)
 - Meeting 1 (Oct 8, 2019)
 - Meeting 2 (Nov 13, 2019)
 - Further research (Nov 2019 Apr 2020)
 - Updated draft released to workgroup (Apr 2020)
 - Workgroup discussions (Apr Jun 2020)
 - Meeting 3 (Today, Jun 30, 2020)
 - Updated draft to workgroup and workgroup review
- 4. 30-day public comment period (TBD Jul-Aug)
- 5. Board adoption (TBD Sep 30, 2020)





OVERVIEW OF KEY ISSUES

Overview of Key Issues



Baseline

- Static approach to quantifying baseline
- Dynamic approach to quantifying baseline

Leakage

- Mechanism to ensure conservative accounting for potential market-shifting leakage
- Other?



BASELINE APPROACHES

Background



- Regulatory Background
 - Different regulatory requirements for EU facilities
 - Different regulatory requirements for each facility within U.S.
 - One of two facilities in U.S. has legal requirements to abate N₂O
 - One of two facilities in U.S. has no legal requirements to abate N₂O
- U.S. industry changes
 - Historically three facilities in U.S.
 - 2003-2008 one facility in U.S. going through bankruptcy
 - 2009 current owner takes ownership of second U.S. facility
 - 2015 one of three U.S. facilities closes production shifts to other two facilities
 - Market demand also increased
 - 30% increase in production between 2015-2017

Static Baseline Options



- Previous proposal in draft protocol: 3 year average using annual AE
 - Using all available data points develop annual average AE values for each of 3 years prior to start date
 - Workgroup feedback
 - Insufficient historical period unlikely to be representative
 - Requiring use of highest AE over shorter periods (i.e., monthly, weekly, etc.) results in AE close to 100%
 - High AE reflects only times TRU is operating; down time and NOx constraints, among other factors, makes regular achievement unattainable
- Current proposal: 5 year average using annual AE
 - Using all available data points develop annual average AE values for each of 5 years prior to start date use average of those
 - Workgroup feedback
 - Should seek more conservative option
 - Insufficient historical period
 - Alternative proposals from workgroup members
 - Proposal from two workgroup members: Use single highest annual average AE over 5 year baseline period
 - Proposal from one workgroup member: Use single highest point over 10 year historical baseline period

Dynamic Baseline Options



- Previous proposal in draft protocol: 3 year average using annual AE
 - Using all available data points project developer develops correlation analysis unspecified statistical significance

 flexible allowance for project developer to set time period over which correlation to be developed Reserve studies
 and approves in writing
 - Prospective project developer unable to develop correlation to satisfaction of Reserve

Workgroup feedback

- Should not allow project developer to set time period over which correlation developed
- Dynamic option would be good to keep
- Should designate specific period over which correlation to be developed
- Should specify statistical significance for correlation
- Should expand historical period over which correlation assessed

Current proposal:

- Move to 5 year historical baseline specify statistical significance for correlation fix period over which correlation developed (propose quarterly)
- If project developer adopts dynamic approach cannot go back to static approach for remainder of crediting period



LEAKAGE

Approach to Leakage



- Previous proposal in draft protocol:
 - Require max production be fixed at facility permitted production level
 - Workgroup feedback
 - Could still allow for production shift from facility with higher AE to given facility which may have lower AE thus
 resulting in increased N₂O
 - May unnecessarily restrict production increases where there is no real threat of leakage i.e., if production increases at all facilities, no need to limit production increase at project facility
 - Instead should require study of factory loading at project facility relative to factory loading at global facilities would allow us to detect shift in production from lower AE facility to project facility
- Current proposal:
 - Adopt proposal as set out above



OPEN DISCUSSION – OTHER ISSUES?

Next Steps



- Submit comments/feedback by COB Wednesday, July 8
- Protocol revisions by Reserve staff (pre-public comment)
 - 1:1 or further group discussions welcome
 - Draft protocol to workgroup for consideration
- Public comment period: TBD, July August 2020
 - Public comment webinar: mid-July
- Protocol revisions by Reserve staff (post-public comment)
- Submit protocol to Board: TBD, September 30, 2020

Key Contacts



General questions or assistance:

Policy@climateactionreserve.org

Protocol development lead:

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