

Proposed Amended Rules

Rule 361: Boilers, Steam Generators, and Process Heaters (Between 2 – 5 MMBtu/hr)

Rule 342: Boilers, Steam Generators, and Process Heaters (5 MMBtu/hr and greater)

Board of Directors

Santa Barbara County

Air Pollution Control District

Our Mission: To protect the people and the environment of Santa Barbara County from the effects of air pollution.

Aeron Arlin Genet
Director / APCO

Timothy Mitro, Air Quality Engineer

June 20, 2019



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SANTA BARBARA COUNTY

Ozone Plan Background

- Santa Barbara County is Nonattainment-Transitional for the state ozone standard.
 - District is required to adopt all feasible measures.
- The 2016 Ozone Plan has a commitment to amend Rules 361 and 342.
- NOx reductions from the rule amendments will help attain and maintain the ozone standard.



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2016 OZONE PLAN
October 2016

Santa Barbara County Air Pollution Control District
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Aeron Arlin Genet
Air Pollution Control Officer

Rule 361 Background

- Adopted in January 2008
- Applies to units rated between 2 – 5 MMBtu/hr
- Approximately 150 units in the District
 - Located at hospitals, schools, oil & gas facilities
- Current Emission Standards
 - New/Modified units: 30 ppm NO_x
 - Existing units: 30 ppm NO_x by January 2020



Rule 342 Background

- Adopted in March 1992
- Applies to units rated at 5+ MMBtu/hr
- Approximately 60 units in the District
 - Located at hospitals, oil & gas facilities, and manufacturing facilities
- Current Emission Standards
 - Gaseous fired units: 30 ppm NO_x



Proposed Rule Amendments – Ozone Plan

Emission Limits for Units Installed On or After January 1, 2020

Rule #	Rated Heat Input (million Btu/hr)	Fuel Type *	NO _x Limit (ppm at 3% O ₂)
361	Between 2 - 5	Natural Gas & Field Gas	9 or 12
342	5 - 20	Natural Gas & Field Gas	9
342	> 20	Natural Gas & Field Gas	7

* Higher limits are allowed for propane, landfill gas, and digester gas.

- Emission limits required upon installation – not a retrofit requirement.

Proposed Rule Amendments – Ozone Plan

- **Emission Limits are comparable to:**

- | | |
|--|-----------------|
| • South Coast AQMD Rule 1146 & 1146.1 | Adopted in 2008 |
| • San Joaquin Valley APCD Rule 4307 & 4320 | Adopted in 2008 |
| • Ventura County APCD Rule 74.15.1 | Adopted in 2015 |

- Added new definitions
- Updated the Tune-up Procedures
- Reorganized sections and removed obsolete language

Rule Impacts

- **Emission Reductions**

- Reduces NOx by approximately 16 tons per year at full implementation.

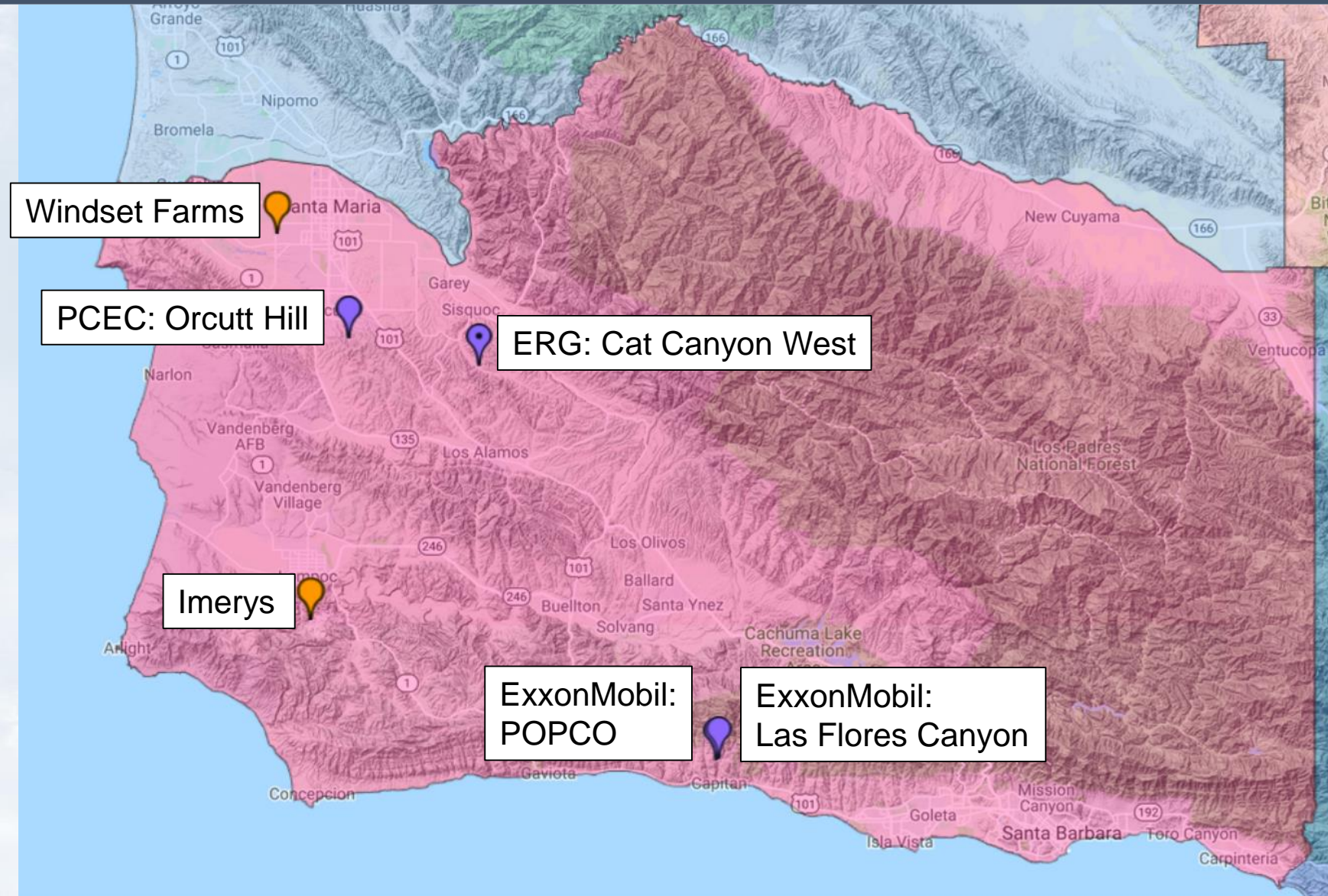
- **Cost-Effectiveness**

- Includes capital costs, operating costs, and maintenance costs.

- Data Sources:

- Contacted boiler and burner manufacturers for costs
 - Looked at published cost data from other air districts
 - Reviewed the age and operational loads of affected units
 - Ranges from \$12,000 - \$20,800 per ton of NOx reduced, depending on the size of the unit.

Proposed Rule Amendments – BARCT



Proposed Rule Amendments – BARCT

- Best Available Retrofit Control Technology (BARCT) requirements apply to each industrial source subject to the state Cap & Trade program.
 - As of January 1, 2017, facilities that emitted greater than 25,000 metric tons of greenhouse gases (GHGs).
- AB 617 BARCT prioritizes permitted units that have not been modified for the greatest period of time.
- Rules 361 and 342 were identified on the District's BARCT rule development schedule, as adopted in Dec. 2018.

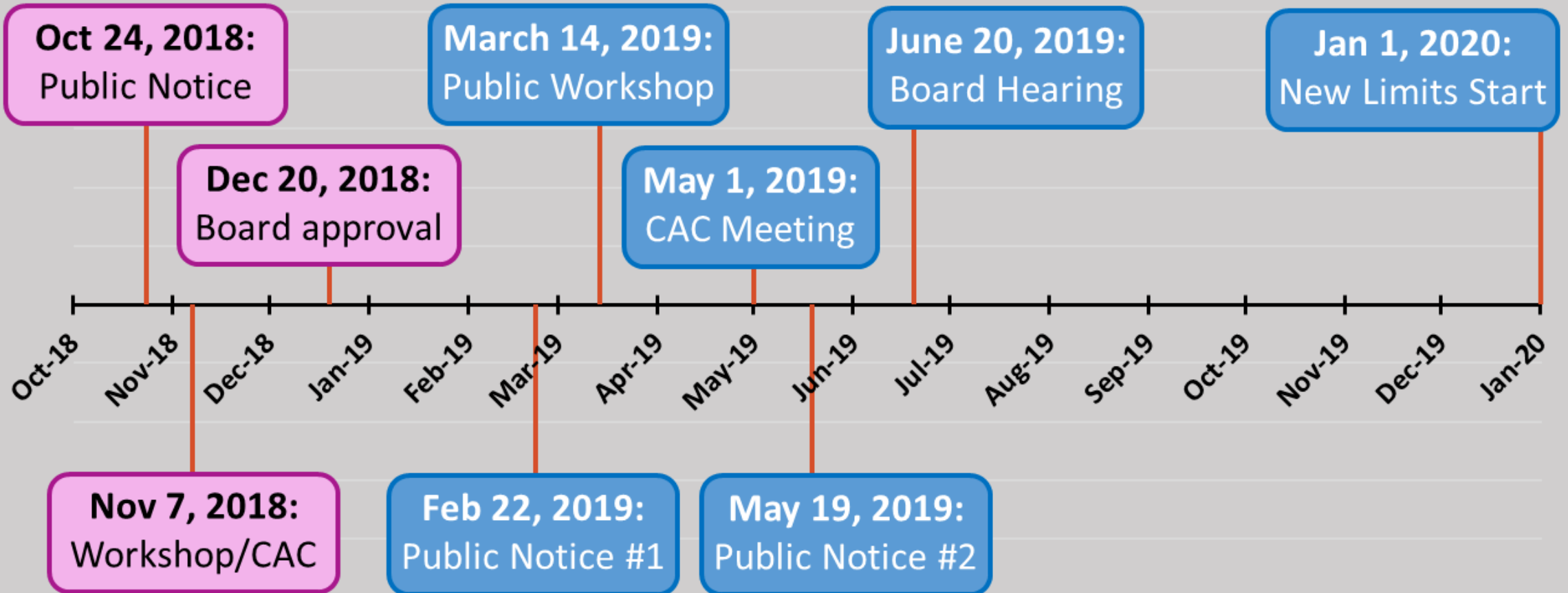
Proposed Rule Amendments – BARCT

- **Rule 361 BARCT:** Proposed revisions require BARCT (9 or 12 ppm NO_x) no later than 1 year after rule adoption. [June 2020]
 - Affects 4 permitted units, located at: *Imerys & ERG*
- **Rule 342 BARCT:** Proposed revisions require BARCT (9 or 7 ppm NO_x) no later than December 31, 2023.
 - Affects 4 permitted units, located at: *Imerys & Exxon Mobil*
 - 6 units already comply with BARCT: *ERG & PCEC*
 - Separate BARCT for CO₂ dosing process: *Windset Farms*

Timeline

BARCT Rule Schedule

Rule 361 and Rule 342 Schedule



Public Review Process

- **CARB & EPA Review:** No comments
- **Rule Workshop:** Attended by VAFB, HVI Cat Canyon, ERG Resources, Exxon Mobil, Windset Farms, City of Santa Maria, and County of Santa Barbara
- **Public Comments:** Windset comments incorporated into Rule 342 BARCT analysis
- **CAC Review & Meeting:** CAC recommended approval of the rule amendments
- **Post-CAC Meeting:**
 - Reformulations of words to say the equivalent of the same thing as had been circulated to the public
 - ERG comment about Rule 361 BARCT cost-effectiveness

Staff Recommendation

- Hold a public hearing to receive testimony on the proposed amendments to Rules 361 and 342
- Adopt the Board Resolution for Rules 361 and 342
 - Adopt the CEQA Findings
 - Adopt the Health & Safety Code General Rule Findings
 - Adopt the amendments to Rules 361 and 342

Contact Information

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