Biochar in the Woods Webinar / Permitting & Insurance
SEC/SLOAPCD/CAPCOA Emissions Testing Proposal
January 27, 2022
2019  Assisted Sonoma County forester Dan Falk in purchase of a Tigercat Carbonator

2020  Received North Coast Resource Partnership grant to purchase 5 Ring of Fire Kilns and work with RFFI and Potter Valley Tribe on their use in forest environments

2020-Current  Consulting with Mendocino County RCD on Biomass Energy Project

2020-Current.  Working with CAPCOA, SLOAPCD, and Forest Service Fire Science Lab on kiln emissions proposal

2021-Current  Received Cal Fire Urban Forestry grant to purchase Biochar Pyrolysis processor from ARTi to divert landfilled wood chips and convert into biochar. Partner: A Plus Tree

2021  Concluded 4-year DWR Biochar Vineyard Field Trial with excellent science

2022  Working with San Bernardino Valley Water District to provide biochar and Ring of Fire kiln training to crews working in their watershed.
Conservation Burn/Ag  40 Trainings since 2013
Conservation Burn/Forestry
2019
THE COUNTY OF HUMBOLDT
REGIONAL FOREST AND FIRE CAPACITY
SUB-GRA nt
FOR THE PROJECT ENTITLED:
USE OF PORTABLE FIELD KILNS TO
PROCESS BIOMASS AND MAKE BIOCHAR

Usal Redwood Forest Company
Redwood Forest Foundation
The Potter Valley Tribe
Ring of Fire Flame Cap Kilns

Resistance to Permitting
Burn Barrels, Illegal in California
Draft Proposal to Quantify Life Cycle GHG & Criteria Pollutant Reductions and Carbon Sequestration Potential from Low Emissions Agricultural Burn Techniques Relative to Traditional Open Burning
CAPCOA Emissions Testing Proposal

OPTION 1
10 Days Field Testing, 19 Replicates
5 Days Lab Testing, 9 Replicates

OPTION 2
10 Days Field Testing, 19 Replicates
10 days Lab Testing 18 Replicates (2 moisture levels)
CAPCOA Emissions Testing Proposal

- Measure Carbon/Moisture Content of Vines
- Consistent Weight and Volume of All Pile Replicates
- Measuring GHG, Criteria Pollutants & Particulate Emissions from Conservation Burns, Kilns & Control
- Quantity and Quality Analysis of Biochar Produced
- Life Cycle Analysis of These Burns vs Many Alternate Fates of the Material—Jim Amonette.
USFS Missoula Fire Lab’s Combustion Chamber floor and sampling hood that will be used for this study’s emissions testing in the laboratory.

Missoula Fire Lab and Sonoma Ecology Center will do field tests using a similar emissions test process (shown above: field testing at CALFIRE Alta Forestry & Fire Protection Station, CA).
Hi Raymond,

The operation of these portable kilns is subject to the requirements of Regulation 5, Open Burning, and exempt from permitting requirements per the exclusion in Regulation 110.5. The fire would have to be set for a purpose that is allowable in Regulation 5-501 and meet all applicable requirements. If you have any questions about open burns and/or Regulation 5, please contact Patrick Wenzinger (pwenzinger@baaqmd.gov) from the Air District’s Compliance and Enforcement Division.

Thanks,

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Good afternoon Raymond,

Thanks for meeting with us this afternoon. As we discussed, the South Coast AQMD’s position is that this type of unit, Ring of Fire Kilns, does not require a traditional type of permit and will be covered under Rule 444, Open Burning. When issuing smoke or burn plans under the rule, or authorizing other types of burning where fuel reduction or other permissible burning may occur using these devices, their operation will be included in the permission to burn pursuant to Rule 444 requirements. We look forward to seeing the upcoming demonstration, and appreciate the efforts that the Sonoma Ecology Center is achieving with respect to the Sonoma Biochar Initiative.

Regards,

David De Boer
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Compliance & Enforcement
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Insurance Issues
Sonoma Biochar Initiative
Growing Healthy Soils
Redirecting Carbon

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