

# National Association of Clean Air Agencies Fumigation Workshop

Fumigation in New Jersey – What is happening?

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May 21, 2024



# Agenda

- New Jersey Fumigation Rule
- General Permits
- Potential Methyl Bromide Substitute
- Environmental Justice Considerations



# New Jersey Fumigation Rule Provisions

Adopted February 2022 – 245 page adoption document

Clarified that Fumigation Activities are covered by Air Regulations

- Any source with over 0.1 pounds per hour of certain toxics
- List includes Sulfuryl Fluoride, Methyl Bromide, Phosphine

Emergency Provisions

- One time allowance
- Pre notification Requirement
- Minimum standards
- Post notification reporting

Added Sulfuryl Fluoride as a NJ HAP



# Types of Permits Needed in NJ

- Major Sources – 1
- Minor Sources – Many!
  - Some Individual Permits
  - General Permits Adopted and in the Works

# General Permits - Fumigation

- Indoors Fumigation Operations of Cocoa Bean Products  
Adopted 11/2023  
[gp-021a.pdf \(nj.gov\)](#)
- Outdoor Fumigation Operations of Containerized Commodities  
Proposed 4/15/2024  
Public Comment Closed 5/14/2024  
[Microsoft Word - Proposed GP-021B 03-05-24 \(nj.gov\)](#)

# Cocoa Bean Fumigation General Permit

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- Limited to Sulfuryl Fluoride
  - 300 Lb/day
  - 4.5 TPY
- Limited to fumigating Cocoa Bean Products
- Limiting Constraints
  - Stack Height (18 ft. or greater)
  - Flow Rate & Stack Diameter (300 ACFM & 4 in. OR 5,000 ACFM & 18 in.)
  - Minimum property Distance (10 ft.)
- Modeled to be negligible risk
- Volume of Enclosed Fumigation Area  $\leq 200,000 \text{ ft}^3$



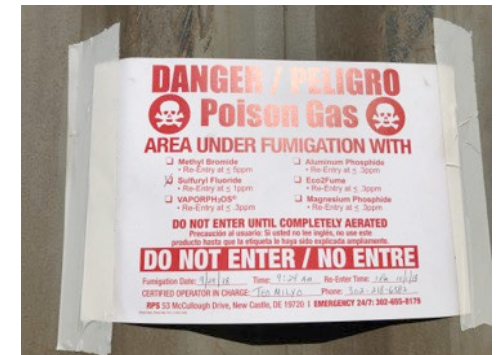
# Cocoa Bean Fumigation General Permit (cont)

- Plot Plan
  - Commodity Fumigation Locations
  - Stack(s) Location with Distance to Property Line
- Sealed Building (Negative Pressure)
- Tarp Inspection Requirements (Repair)
- Robust Recordkeeping Requirements
- Minimum Aeration Time



# Outdoor Container Fumigation General Permit

- Large Outdoor Containers – limited to trailers, box trucks, rail cars, or cargo containers
- Limits Fumigant Usage
  - Sulfuryl Fluoride 984 lbs/day, 4.5 TPY (9,000 lbs/yr)
  - Methyl Bromide 14 lbs/day (3.5 lbs/hr over 4 hours), 0.8 TPY (1,600 lbs/yr)
  - and/or Phosphine 16.32 lbs/day, 0.04 TPY (80 lbs/yr)
- No restriction on what can be fumigated
- Limiting Constraints
  - Stack Height (18 ft. or greater)
  - Flow Rate & Stack Diameter (3,500 ACFM & 18 in. OR 9,200 ACFM & 22 in.)
  - Minimum property Distance (10 ft.)
- Modeled to be negligible risk
- No Volume Enclosure Limitation – much smaller than indoor fumigation









# Outdoor Container Fumigation General Permit (cont)

- Plot Plan
  - Commodity Fumigation Locations
  - Stack(s) Location with Distance to Property Line
- Sealed Container
  - Many containers leak – holes, gaps
  - Required secondary tarping to ensure capture
- Tarp Inspection Requirements (Repair)
- Robust Recordkeeping Requirements
- Minimum Aeration Time



# Possible Replacement being Proposed for Methyl Bromide

- The process for alternate fumigation labels is challenging
- One facility releases close to 100 TPY of Methyl Bromide and up to 1200 pounds per hour
- Short and Long term risk is an issue
- Mentioned in Fumigation 101 – this is the facility with the 70 ft stack and the fence line monitoring

# Environmental Justice Considerations

- Where are these facilities located?
  - Anywhere is the answer.
- BUT, a higher density of these facilities are in and around ports which coincides with being in and around cities which coincides with being in and around environmental justice areas
- See next slide shared during our rule stakeholder process
  - These were the known facilities based on our enforcement information requests at the time.

Location of  
Known  
Fumigation  
Locations in  
NJ



Created 1/11/2019



**Thank you!**

