



Fugitive Dust

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- What is Fugitive Dust?
- What is the new “Fugitive Dust” Ordinance?
 - Why are we concerned?
 - Definitions
- What is required?
 - 12 Dust Generating Activities
- How will the ordinance be enforced?
- How to prepare

What is fugitive dust?

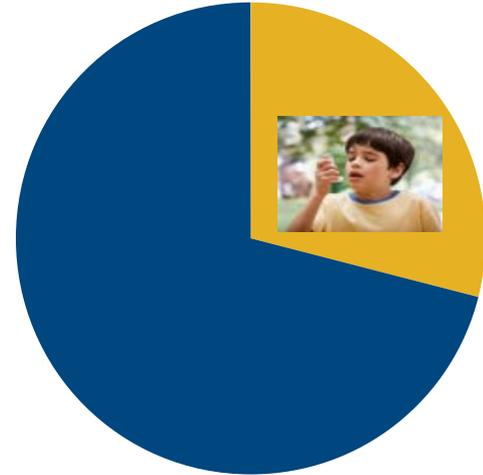
Solid particles (particulate matter) suspended in the air by wind or human activity that doesn't pass through a stack, chimney, or vent...



Dirt soil leaves
silica asbestos soot
molds fungi pathogens bacteria
manure pollen ash
pesticides heavy metals brake linings

Why are we concerned?

- Health Effects
 - Aggravates respiratory issues
 - Silicosis (e.g., from concrete cutting)
- Nuisance & Aesthetics
 - Deposited dirt on homes, property
 - Obstructs views
- Safety / Visibility Hazard
 - Obstructed visibility for workers, pedestrians, and vehicles



Over 1/4 of Fort Collins' households report having a family member with respiratory ailments

Fugitive Dust Ordinance

Ordinance NO 044, 2016 related to preventing, mitigating and minimizing particulate matter emissions from dust generating activities or sources - adopted unanimously by City Council on May 3, 2016 and effective November 1, 2016 (effective for City contractors March 22, 2016)

Applies to:

*“Any person who conducts or is an owner or operator of a **dust generating activity or source**”*

Where:

*“A **dust generating activity or source** shall mean a process, operation, action or land use that creates emissions of fugitive dust or causes **off-property or off-vehicle transport**”*

Manual adopted by ordinance, containing:

- Required Best Management Practices (BMPs)
 - Required best practice or process to prevent or mitigate the emission of fugitive dust into the air
- Additional BMPs
 - Extra steps to take if required BMP wasn't enough to mitigate dust
- Additional requirements
 - Other requirements that may apply

Dust Prevention and Control Manual



Adopted by Ordinance No. 44, 2016

- Complaint received regarding dust
- Investigation/evidence shows off-property/off-vehicle transport
- Environmental services may respond with outreach
 - Prior to enforcement on Nov. 1
- City field staff may respond with a warning
 - If site <5 acres, and owner/operator has not already received additional warnings
- City code compliance staff may respond with a Notice of Violation

IMPORTANT NOTE: A source is NOT subject to a violation if there is dust, but they are using the BMPs as defined in the Dust Prevention and Control Manual

1. Earthmoving Activities
2. Demolition and Renovation
3. Stockpiles
4. Street Sweeping
5. Track-out/Carry-out
6. Bulk Materials Transport
7. Unpaved Roads and Haul Roads
8. Parking Lots
9. Open Areas and Vacant Lots
10. Saw Cutting and Grinding
11. Abrasive Blasting
12. Mechanical Blowing



Required BMP

- Minimize disturbed area
- Reduce vehicle speeds
- Minimize drop height
- High winds restrictions
- Restrict access



Additional BMP

- Wet suppression
- Wind barrier
- Vegetation
- Surface roughening
- Cover
- Soil retention

Additional Requirements

- Dust Control Plan
- Construction sequencing

Required BMP

- Asbestos and lead containing materials
- Restrict access
- High winds restriction
- Minimize drop height

Additional BMP

- Wet suppression
- Wind barrier

Additional Requirements

- Building permit compliance



Required BMP

- Minimize drop height

Additional BMP

- Wet suppression
- Cover
- Surface roughening
- Stockpile location
- Vegetation
- Enclosure

Additional Requirements

- Stockpile permit compliance
- Erosion control plan compliance



Required BMP

- Uncontrolled sweeping prohibited

Additional BMP

- Wet suppression
- Vacuum system
- Other method



Required BMP

- Contracts and standards
- Remove deposition

Additional BMP

- Install rails, pipes, or grate
- Install a gravel bed track-out apron
- Install and utilize on-site equipment washing station
- Install a paved surface that extends at least 100 ft. from the intersection
- Manually remove dirt and debris from equipment



Required BMP

- Cover Loads
- Minimize drop height

Additional BMP

- Wet suppression
- Other technology



Covered load at Hoffman Crushing Facility

Required BMP

- Reduce vehicle speeds
- Restrict access

Additional BMP

- Wet suppression
- Surface improvements
- Access road location



Required BMP (use at least one)

- Surface improvements
- Vegetation
- Wet suppression
- Wind barrier
- Reduce vehicle speeds
- Restrict access



Required BMP (use at least one)

- Maintenance
- Mechanical sweeping
- Reduce vehicle speeds
- Restrict access



Definition: Open area = 0.5 acre or larger. Stabilize soil when exposed for 30 or more days

Required BMP (use at least one)

- Vegetation
- Cover
- Surface roughening
- Soil retention
- Wet suppression
- Wind barrier



Required BMP

- Restrict access
- High winds restriction
- Equipment and work area clean up
- Slurry clean up

Additional BMP

- On-tool local exhaust ventilation
- On-tool wet suppression
- Vacuuming
- Wet suppression
- Enclosure



Required BMP

- Restrict access
- High winds restriction
- Equipment and work area clean up
- Slurry clean up

Additional BMP

- Enclosure
- Wet suppression blasting
- Vacuum blasting
- Abrasive media



Right: This photo illustrates abrasive blasting without dust mitigation in place.

Required BMP

- Low speed
- Operation
- High winds restriction

Additional BMP

- Alternative method
- Prevent impact
- Minimize use on dirt
- Wet suppression
- Remove debris



- Have a pre-project meeting
 - Subcontractors, staff
- Introduce yourselves to your neighbors
 - Give your contact information to the businesses and residents in the area and ask them to let you know if there are any issues
- Take immediate action when notified
 - Whether from your neighbors or an inspector
- Your work is your business card
 - Earn a reputation for running clean projects

City of Fort Collins – Environmental Services Department contacts:

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