

Chat: How to Handle and Minimize Fugitive Dust

What is fugitive dust?

Fugitive dust is solid airborne particulate matter emitted from any source other than a stack or chimney. In other words, if you can see a dust cloud generated when loading or moving dirt or chat, that is fugitive dust.

Why are we concerned about fugitive dust from chat?

When dealing with chat, fugitive dust is the fine particles of rock (which includes traces of lead) mixed with the air that stays airborne and leaves the property. When the chat dust is inhaled by people in the area, the dust/chat particles can enter their lungs and cause persistent coughing, wheezing and breathing discomfort. Since the chat dust contains lead, there is an additional potential hazard of lead exposure, which can lead to very serious health concerns, especially to young children.

Can a contractor get in trouble for creating fugitive dust?

Yes. You are violating an Oklahoma Air Quality standard if you create fugitive dust that crosses a property boundary (Oklahoma Administrative Code 252:100-29, Control of Fugitive Dust). There will probably be dust in the chat loading area, but the dust should not leave the defined chat loading area. If the dust were to leave the defined chat loading area, then it will be classified as fugitive dust and a violation of the Oklahoma Administrative Code may occur.

If you think you are creating fugitive dust, you most likely are. Take precautions to eliminate the airborne dust, and stop loading chat if you can't keep the dust clouds to a minimum when loading or hauling chat.

Who can be contacted if I have a question or concern about fugitive dust?

Contact DEQ's Air Quality Division at (405) 702-4100 or DEQ's Complaint Hotline at (800) 522-0206.

Important Phone Numbers

DEQ Complaint Hotline: (800) 522-0206

Regional DEQ Field Office: (918) 293-1600

EPA Contact-Rafael Casanova: (214) 665-7437



EPA Guidelines for Preventing Fugitive Dust from Site Activities

The site operator is responsible for complying with the Federal/State Air Quality program for Fugitive Dust Mitigation and implementing site engineering controls, as necessary.

It is the responsibility of the operator to prevent off-site emissions of dust from site activities. To minimize emissions of fugitive dust associated with chat processing, the site operator should ensure compliance with the following procedures:

1. Water trucks, mist curtains, and/or foam blankets should be utilized to minimize dust generated from chat operations on the property. Water for dust suppression should be available at the site during all chat operations. Activities that may require dust mitigation may include clearing the site, moving or loading equipment operation, and on-site truck traffic.
2. Unpaved roads and chat operation areas on the property should be sprayed with water or a petroleum-based emulsion commonly referred to as Tack Coat. Tack Coat should be applied to these areas monthly or more frequently, as needed, for dust suppression during chat operations. Tack Coat should be applied at the end of each sale period to minimize blowing dust from the property or the chat pile once operations cease.
3. To minimize blowing dust from the excavation and loading of chat, areas identified for excavation should be sprayed with water before they are excavated, during excavation, and at the end of each day.
 - a. During windy periods, if dust is visible leaving the site boundary and wetting of the operations area is not effective, the operator should either cease operations, or move the operations to an area less affected by wind (i.e. to the opposite side of the chat pile).
 - b. If unable to control visible dust leaving the site boundary after wetting the excavated areas, the operator should shut down operations. Operations may commence when no visible dust is observed.
4. To prevent release of fugitive dust, trucks hauling chat should be covered with tarps.
5. Trucks should be inspected and washed, if necessary, prior to leaving the site to prevent tracking of soil or chat onto public roads. Large gravel should be placed at the property exit to the public road to help control tracking of chat from truck wheels. Trucks on unpaved surfaces should not exceed 10 mph.
6. If homes or businesses are located within 100 feet of the chat processing area, more frequent wetting with water may be required to prevent blowing dust.

The EPA or its representative will randomly conduct air monitoring at the site during chat processing to assess air quality and the effectiveness of dust mitigation measures implemented by the operator.

