Sample Fugitive Particulate Matter Emissions Survey and Fugitive Particulate Matter Emissions Prevention Implementation Plan

The following Sample Fugitive Particulate Emissions Survey and Fugitive Particulate Emissions Prevention Implementation Plan were developed by EPA to assist the regulated community in understanding what form these documents might take. Your facility may be able to comply with the requirements of 40 C.F.R. § 49.126 without adhering to the format of this sample document. The scope and content of your survey should take into account site specific factors as well as the regulatory requirements of 40 C.F.R. § 49.126.

The information provided in this document is provided for compliance assistance purposes only and it may not address all of the legal requirements applicable to your facility. This document does not replace or amend any statutory or regulatory requirements that may apply to your facility. Following the information in this document will not shield a facility from enforcement. This document does not constitute rulemaking by the EPA and may not be relied on to create a substantive or procedural right or benefit enforceable at law or in equity, by any person.
FUGITIVE PARTICULATE MATTER EMISSIONS SURVEY

ABC LUMBER COMPANY
OREGON OPERATION

2008 ANNUAL SURVEY

Conducted by: John B. Jamison, Plant Manager
Robert Thomson, Safety Coordinator

ABC Lumber Company

Survey Date: 8/28/08

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This sample fugitive particulate matter emissions survey is being provided for compliance assistance purposes only. It does not replace or revise the requirements of 40 C.F.R. § 49.126.
FUGITIVE PARTICULATE MATTER EMISSIONS SURVEY

ABC LUMBER COMPANY
OREGON OPERATION

INTRODUCTION

ABC Lumber Company operates a saw mill and planer facility in Pendleton, Oregon. The facility is located on the Umatilla Reservation and regulated by the Environmental Protection Agency (EPA). It is subject to the requirements of 40 C.F.R. Part 71.

ABC Lumber Company is also subject to the requirements of 40 C.F.R. Part 49 and must conduct an annual survey of the facility to determine the sources of fugitive particulate matter emissions and develop a plan to minimize those emissions pursuant to 40 C.F.R. §49.126.

DESCRIPTION OF SURVEY AND RESULTS

John B. Jamison, Plant Manager and Robert Thomson, Safety Coordinator conducted the fugitive particulate matter survey on Thursday August 28, 2008 between 7:30 am and noon. The facility was operating normally during the survey and the weather conditions were clear skies with light breeze and temperatures of 75 to 80 degrees Fahrenheit. These were typical operating and meteorological conditions for the facility conducive to producing fugitive dust.

The Survey was conducted by walking throughout the operating facility as indicated on the Facility Layout map and identifying any sources of emissions not identified as point sources in the Statement of Basis to the Title V permit. Point sources identified in the permit were as follows:

- Hog Fuel-Fired Boiler
- Oil-Fired Boiler
- Bark Hog
- Chip Truck Bin Target Box
- Sawdust Truck Bin Target Box
- Shavings Truck Bin Cyclone
- Planer Shavings Cyclone
- Planer Chipper Cyclone
- Used Oil-Fired Heater
- Diesel Fuel Tank
- Gasoline Fuel Tank
Most of the planer operations and the sawmill operations occur within the confines of a building structure. The following observations of activities outside the buildings were made during the facility fugitive particulate matter survey:

**Planer Operations:**
No fugitive emissions were observed as we walked adjacent to the truck load out shed, the planer building and the storage dry lumber building. Some sawdust was on the ground near the truck load out but truck loading did not occur during the survey. The sawdust may be generated during off-loading, before the storage bin is contained or from the truck itself as it draws away.

**Precautions:** Ensure that the storage bin door is completely closed and the truck cover secure before the truck leaves the load-out building.

**Boiler Building:**
The hogged fuel reclaim conveyor is located at the east end of the fuel shed and a loader delivered a load of shavings during the survey. A slight amount of particulate matter emissions were observed leaving the area. However this area has a potential risk for being a larger source of wind blown particulate emissions. The fuel storage area is protected by buildings on three sides.

**Precautions:** Keep fuel piles within the confines of the fuel storage area and below the height of the surrounding buildings to avoid windblown emissions of particulate matter.

**Sawmill:**
A small amount of particulate matter emissions were observed exiting the building through the overhead doors. The hog conveyor was not running during the survey but transfer to the hog stockpile as well as windblown dust from the hog stock pile would be potential emissions from the sawmill area. In addition, windblown dust from other stockpiles in the area are a potential source of particulate emissions, as winds were light (0-2 mph) only a small amount of emissions were observed.

**Precautions:** Keep sawmill piles adequately wet, by using water sprays, to prevent windblown emissions,

**Log Yard:**
Fugitive particulate matter emissions were observed when the loaders and haul trucks traveled throughout the log yard. Ground level sprinkler systems have been installed at the top of the log yard and near the scale. Sprinkler systems have been established as needed on the log piles to prevent windblown particulate matter emissions. Particulate matter emissions were not observed leaving the property boundary in a horizontal direction.

**Precautions:** Keep water sprinklers in good working order and adjust flow rates to the ground level sprinklers as necessary to minimize road dust and tracking.
**Storage Shed:**
The building is enclosed with overhead doors, no emissions were observed during the survey.

**Storage Bins:**
No fugitive emissions were observed as we walked adjacent to the storage bins. Some sawdust was on the ground near the storage bins load out buildings but truck load out did not occur during the survey. The sawdust may be generated during off-loading before the storage bin is contained or from the truck as it draws away.

**Precautions:** Ensure that the storage bin door is completely closed and the truck cover secure before the truck leaves the load-out building.

**Access Roads:**
There are three access roads within the property boundaries leading from the main highway and they were observed during the facility survey – one to the scales, one to the office and one to the log yard. A fourth access road dead ends at the southwest corner of the log yard and does not provide business access to the site. No fugitive emissions were observed although several trucks entered and left the site during the survey. There was some evidence of drag-out tracks from the log yard access road on the highway.

**Precautions:** If drag out is excessive engineering controls such as grated track or a wheel wash may be required to stop mud being transferred from the facility on to the highway. If the initial control method is inadequate a new solution will be installed and any deposits from the facility transferred to the highway will be cleaned up until a satisfactory method is implemented.

**No other sources of fugitive emissions were identified during the annual site survey.**
ABC LUMBER COMPANY
OREGON OPERATIONS

2008 Fugitive Particulate Emissions Prevention Implementation Plan

The annual survey conducted on 8/28/08 identified sources of fugitive particulate matter from the facility as follows:

a) Planer Operations: Sawdust was observed lying on the ground near the truck load out storage bins this could lead to airborne dust on a windy day. This was determined to be due to either the storage bin door not being closed prior to the truck leaving or the truck cover not being secured prior to departure.

b) Boiler Building: Emissions were observed leaving the boiler hog fuel reclaim area when a loader delivered a load of fuel.

c) Sawmill: A small amount of emissions were observed exiting the building through the overhead doors, in addition there is a potential for windblown fugitive particulate matter when windy conditions are present.

d) Log Yard: Fugitive particulate emissions were observed coming from the loaders and haul trucks travelling through the log yard.

e) Storage Bins: Some sawdust was observed on the ground near the sawdust storage bins load out buildings.

f) Access Roads: There was some evidence of drag-out tracks from the log yard access road on to the main highway.

Procedures that the facility will perform to minimize fugitive particulate matter emissions:

a) Planer Operations: In order to ensure that the spillage of sawdust is kept within acceptable limits the door of the load out storage bin will be completely closed and the truck cover secured prior to the truck leaving the load out area.

The supervisor of this area will check daily for any spillage and ensure that a clean up crew cleans the area as necessary to prevent windblown particulate matter emissions.

The supervisor of this area will ensure that all operators and truck drivers are educated about the procedures described above and will periodically verify that they are being followed.

The supervisor will verify that the procedures are being implemented and
b) **Boiler Building:** The hogged fuel storage area is protected by buildings on three sides which help to control airborne dust due to wind action.

The supervisor of this area will ensure that all relevant personnel working in the area are trained in the procedures and will take appropriate steps to ensure the fuel piles are kept within the confines of the fuel storage area and below the height of the surrounding buildings.

The supervisor will verify that the procedures are being implemented and record this in a log book.

b) **Sawmill:** Water sprays will be installed and operated to wet down the sawmill piles as necessary to minimize fugitive emissions.

The supervisor of this area will have water sprays installed and inform the necessary personnel that sprays should be turned on at the start of the shift to ensure the sawdust piles are kept damp to minimize fugitive particulate matter.

The supervisor of this area will verify that the procedures are being implemented and record this in a log book.

d) **Log Yard:** In order to minimize the fugitive emissions from the log yard the sprinkler system will be used effectively.

The supervisor of this area will ensure that the water sprinklers are kept in good working order and that water flow rates are adjusted to the ground level sprinklers and used daily to minimize road dust and tracking.

The supervisor will verify that the procedures are being implemented and record this in a log book.

e) **Storage Bins:** In order to ensure that the spillage of sawdust is kept within acceptable limits the door of load out storage bin will be closed and the truck cover secured prior to the truck leaving the load out area.

The supervisor of this area will ensure that all operators and truck drivers are educated about the procedures described above and will periodically verify that they are being followed.

The supervisor will check each shift for spillage and if present he will arrange for this to be promptly cleaned up by the clean up crew.

The supervisor will verify that the procedures are being implemented and enter this information in a log book.
f) **Access Roads:** In order to avoid drag out of material from the log yard on to the main highway appropriate action will be taken by the facility.

The supervisor of the area will take action to keep the access roads clean and dry immediately before exiting on to the highway. If the drag out is excessive alternative methods of controlling the dust are available for use. Rather than using water to control the dust which can lead to muddy conditions, dust suppressant chemicals can be applied in liquid form which dries to a water resistant surface.

The supervisor will verify that the procedures are being implemented and enter this information in a log book.