



Fugitive Dust Control Best Management Practice Program

The objective of the Fugitive Dust Control Best Management Practice Program (FDC- BMPP) is to prevent or reduce the amount of fugitive dust generated by activities at the Lafarge Exshaw Cement Plant.

Implementation:

The FCD-BMPP is an inspection and work order driven process. Two Fugitive Dust Plan managers implement the FD BMPP and manage records. The Lafarge shift and shipping foremen are trained as Fugitive Dust inspectors and execute inspections, and trigger work orders that address fugitive dust issues.

The fugitive dust categories and areas that are inspected:

- **Inactive Areas:** Areas that are not currently used for plant activities and are bare and devoid of vegetation
- **Paved Roads:** Paved roads at the Plant
- **Tracking Areas:** Tracking areas refer to the segments of paved roads that are part of the transition area from unpaved to paved roads
- **Unpaved Roads:** Unpaved roads lead around the storage hall, to the CKD landfill, and quarry
- **Piles and Outside Storage Areas:** These are material stockpiles
- **Material Transfer Points:**
 - Exposed Transfer Points - Extracting from piles and storage areas with loaders (e.g. Additive Hopper, CKD Landfill)
 - Enclosed Transfer Points - Tube Conveyors, building or other equipment that is designed to be an effective enclosure for fugitive dust (e.g., loading spouts in shipping areas)

Results from inspections are used to assess the effectiveness of operational dust control methodologies and trigger corrective actions where necessary. Fugitive Dust Inspections reports include:

- Weather conditions
- If dust control system performance is working properly
- Detailed description of locations, if dust is evident
- Action taken (e.g. a work order is generated, or sweeping and/or watering is requested to address the problem.)
- Completed inspection forms are recorded in a Lafarge database and are shared with our regulator, Alberta Environment and Sustainable Resource Development

What new improvements has Lafarge made to manage dust?

- Daily Plant Performance Meetings on Fugitive Dust Assessments
- GPS on sweepers and water truck, to track operating hours and route: currently conducting trial on the water truck
- Plant Management reviews on FDC- BMPP effectiveness

Road improvements:

- Paved contractors road
- Paved the contractors entrance
- Recycled asphalt now in place just west of shipping to 4-way stop
- Installing a cattle guard along contractors road
- Crushed limestone over the lay down and parking area
- Plan to pave the area in front of the main building, Spring 2015
- Sand on roads in winter
- Dust Stop / DL10 Trial: use on unpaved roads, particularly quarry area (weather dependent)

New fugitive dust control equipment:

- 45000 liter water truck
- Sweeper, Tymcom “dustless”
- Existing sweeper retained
- Project water truck and power-broom skidsteer sweeper for Expansion area
- Investigating new technologies to address potential dust issues in the truck shipping area

Improving our “Environment” Culture internally:

- Plant wide communications: increased integration of Environmental presentations into plant wide presentations with a goal to gain plant-wide buy-in on dust management
- Incorporation of our safety slogan “See something – Do something”
- Exshaw’s Goal: “No Cement Truck Tires Hit Unpaved Roads”