Background on Dust Issue

Our power generation facilities and surface coal mines have the potential to generate dust. Dust comes from mine traffic on the haul roads, exposed mining areas, the coal handling plant area, and the ash dump. Sometimes dust in the area comes from non-TransAlta activities such as traffic on county roads, farming activities and gravel mining operations. TransAlta recognizes that dust is a nuisance, and it endeavours to minimize dust from its operations.

Commitment

TransAlta uses many strategies to minimize the effects of dustfall from its operations. We will continue to work at identifying sources of dust and finding solutions to reduce the amount of dust that leaves our property. We ensure that our dust emissions meet Alberta Environment’s Alberta Ambient Air Quality Objectives.

Strategies for Controlling Dust

Watering Roads and Using Dust Suppressants
During dry or windy conditions, haul roads and areas in the mine and plant are sprayed with water to reduce dust emissions. The mine operators dispatch water trucks according to the existing conditions and forecasted weather. In extremely dry conditions, dust suppressant products are sprayed on haul roads.

Vegetation and Mulch Cover
Vegetation is planted on topsoil, subsoil and dead coal stockpiles to minimize wind exposure and reduce dust emissions. Areas that have been newly reclaimed with topsoil are vegetated as soon as possible to minimize the risk of wind erosion. Dust is controlled on all ash dumps and ash lagoons using water, mulch, and/or vegetation.

Minimize Disturbance Area
In the area of the active mine pit, clearing, grubbing and topsoil strip areas are kept to a minimum. Inactive areas are sometimes seeded to grass to reduce the risk of wind erosion.

Fly Ash Dust Prevention
Fly ash storage and loading areas are regularly wetted to reduce dust emissions. Fly ash is mixed with water prior to disposal to prevent loss to the atmosphere. Fly ash that is sold and moved off site is loaded into closed box containers to prevent dust emissions. A washing station has been installed to wash trucks and rail cars before they leave the site.

Coal Handling Plant
TransAlta continues to evaluate technologies and implement strategies to minimize the exposure of the coal to wind throughout the handling processes. As an example, the height of the Keephills stacker is adjusted to minimize the distance to the coal pile, reducing the effect of wind exposure during operation. Opportunities to reduce dust emissions will receive
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high priority when changes to the coal handling plant are being planned and implemented.

Suspend/Modify Operations
If wind conditions are extreme and there is potential to create a dust event off-site, all dust management strategies are implemented up to and including suspending or modifying certain operations until dust can be controlled if our operations are making the dust situation worse.

Monitoring
TransAlta voluntarily monitors dustfall at over 20 stations located in and around our operating area. TransAlta uses the information collected at these stations to determine the effectiveness of our dust control measures, improve our dust control strategies, and ensure that the dust emissions from our operations comply with provincial air quality objectives.

If You Have a Concern About Dust
If dustfall on your property is an on-going concern, we will work with you collaboratively to determine the source of the dust and make use of our dust management strategies to control dust from our operations. We will review with you the information collected at our dustfall monitoring stations in your area. On request, we will set up a dustfall monitoring station for a period of time to measure the dustfall on your property.