



Dust Management Plan Guidelines Application for Approval

The Yukon Department of Environment requires operators of commercial dust-generating activities that require a permit under the Yukon's Air Emissions Regulations to submit a Dust Management Plan for approval.

The Dust Management Plan should demonstrate how appropriate management techniques will reduce the potential for any dust-related adverse effect to public health or the environment, and describe the measures that will be undertaken to control dust generated by the operation. This could include dust produced by bulk materials handling, storage activities, earth-moving, construction, demolition or vehicular movements.

It is the responsibility of the operator to ensure dust emissions are managed effectively at all times. **If primary or contingency control measures do not result in effective control, as determined by the Environmental Programs Branch, the Dust Management Plan must be revised and resubmitted for approval.**

Have you applied for an Air Emissions permit for this activity?

- Yes

Permit #: _____

Contact & Business Name: _____

If you have applied for a permit, and the contact information shown in that application is the same for the operator responsible for dust management at the site, then continue on to Part 1.2, otherwise complete Part 1.1.

- No - Please complete an application for an Air Emissions Permit (http://www.env.gov.yk.ca/air-water-waste/air_emissions_regs.php) and submit with this form.

The original completed and signed permit application form and Management Plan application should be mailed or delivered to:

Environment Programs Branch (V-8)
Environment Yukon
Box 2703
10 Burns Road
Whitehorse, Yukon Y1A 2C6

For additional information:

Phone: (867) 667-5683 or 1-800-661-0408 ext. 5683

Web: <http://environmentyukon.gov.yk.ca/monitoringenvironment/>

Fax: (867) 393-6205

Email: envprot@gov.yk.ca

Updated: June 2014

1. CONTACT INFORMATION

A. Name and address of operator

Business name or government agency/branch/department Phone #

Contact name and position title Fax #

Mailing Address Email Address

B. Who is directly responsible for dust management at the site location?

same as (A) above, or: *(For multiple contacts, list on a separate sheet).*

Business name or government agency/branch/department Phone #

Contact name and position title Fax #

Mailing Address Email Address

C. Where is the site located? *(For multiple site locations, list on a separate sheet).*

Street Address (Civic Address)

Legal Address

Geographic Coordinates

2. MONITORING AND COMPLAINTS

A. How will you ensure dust emissions are closely monitored and controlled at all times:

B. Describe a complaint management system to ensure that complaints are recorded and acted on promptly:

3. RECORD KEEPING

Records must be kept of dust events, complaints and action taken. Describe the record-keeping system for Dust Generation Occurrences:

4. TRAINING

Describe how employees will be trained to become prepared to deal with Dust Management Practices:

5. DUST MANAGEMENT PLAN

It is the responsibility of the applicant to be aware of the release points and the control measures in effect, and as such is required to submit a Dust Management Plan which should:

1. Identify all sources of dust generated by the operation;
2. Describe dust control measures to be taken for all sources, including, but not limited to:
 - The primary dust control measures (the first approach that is to be implemented to control dust emissions) to be taken for all sources. This may include measures such as applying dust suppressants, paving roadways and work areas, installing engineered controls within areas that could be affected by dust generation, or by reducing traffic by considering different scheduling and routing options.
 - The contingency control measure (ie. backup strategy to be used when the primary control measure is not effectively controlling dust emissions). This may include any of the above measures and/or ceasing operations.
3. Identify the thresholds/triggers that will be used to determine when the primary or contingency measures will be activated.

A sample plan is attached as an indicator of the type of detail that is required. Information in the sample plan would be applicable to asphalt, quarrying, and contaminated soil handling related activities.

Name of Applicant: _____

DUST MANAGEMENT PLAN

Source Description	Primary Dust Control Measures	Thresholds / Triggers for Management	Contingency Dust Control Measures

SAMPLE DUST MANAGEMENT PLAN

Source Description	Primary Dust Control Measures	Thresholds / Triggers for Management	Contingency Dust Control Measures
Haul Trucks and Vehicle Traffic	<ul style="list-style-type: none"> Add water or calcium chloride to unpaved road surfaces Implement a speed limit of 30 km/h to slow vehicles and therefore reduce fugitive dust emissions Where access roads adjoin public highways, there is the potential for material to be tracked onto the paved public highway. If material is tracked onto public highways, and is creating dust, the road will be cleaned (ie. tracked material will be removed from the paved road surface using a wet vacuum sweep). Signage and barriers to reduce movement on off pavement travel. 	<ul style="list-style-type: none"> If haul or vehicle traffic emissions are occurring that may impact air quality beyond the property boundary: <ul style="list-style-type: none"> If visible dust is being generated from haul trucks or vehicle traffic; and/or If the weather forecast indicates dry conditions and strong winds are likely. Visual cues would be the primary trigger for mitigative action to be taken with respect to fugitive dust emissions. If the weather forecast indicates dry weather and strong winds are likely, this is also a trigger for preventative dust management action to be taken. Visual monitoring during site activities will be conducted by the environmental consultant to determine if contingency control measures should be implemented. Spot checks will be conducted using a portable particulate monitor. If measured concentrations are approaching an Environment Yukon Air Quality Standard, contingency control measures will be implemented. Initially, the threshold level will be 90% of the standard; however this may be refined with additional monitoring. Complaints by nearby residents 	<ul style="list-style-type: none"> Apply water to roadways that are being used and producing dust. Apply gravel to roadways approaching access points. Cover haul trucks on windy days if dust control measures are not sufficiently preventing dust movement. Cease activities during high wind events or when dust emissions cannot be adequately controlled.
Vehicle Fleet Operation	<ul style="list-style-type: none"> Avoid engine idling. Ensure construction fleet vehicles are maintained according to manufacturers' guidelines. 	<ul style="list-style-type: none"> Periodic maintenance of construction vehicles. In addition, excessive or consistently black exhaust is a signal that an engine is not operating optimally. 	<ul style="list-style-type: none"> Replace worn or malfunctioning equipment. Consider different scheduling and routing options
Baghouse fines (asphalt)	<ul style="list-style-type: none"> Contain fines and re-introduce into mix. Baghouse components are maintained as per manufacturers specifications, company policy and in accordance with codes and regulations. 	<ul style="list-style-type: none"> Visual cues will be the primary trigger for mitigative action to be taken with respect to fugitive dust emissions. 	<ul style="list-style-type: none"> Service components as per manufacturer's specifications.
Debris on returning belts (asphalt)	<ul style="list-style-type: none"> Contain and recycle debris. 	<ul style="list-style-type: none"> Visual cues will be the primary trigger for mitigative action to be taken with respect to fugitive dust emissions. 	<ul style="list-style-type: none"> Use Belt scrapers are used regularly.
Drag conveyor start up (asphalt)	<ul style="list-style-type: none"> Conveyor releases contained in drop chute and ground enclosure. 	<ul style="list-style-type: none"> Visual cues will be the primary trigger for mitigative action to be taken with respect to fugitive dust emissions. 	<ul style="list-style-type: none"> Service components as per manufacturer's specifications.
Leaking drum components	<ul style="list-style-type: none"> Drum seals are monitored regularly. Drum components are maintained as 	<ul style="list-style-type: none"> Visual cues will be the primary trigger for mitigative action to be taken with respect to fugitive dust emissions. 	<ul style="list-style-type: none"> Service components as per manufacturer's specifications.

Source Description	Primary Dust Control Measures	Thresholds / Triggers for Management	Contingency Dust Control Measures
<p>(asphalt)</p> <p>Loading and Unloading from Front-end Loader and Haul Trucks</p>	<p>per manufacturers specifications.</p> <ul style="list-style-type: none"> • Keep drop height of front-end loaders onto stockpiles and haul trucks to a minimum. • Empty loader bucket and haul trucks (end dump) at rate to limit dust emissions. • Haul trucks will not be loaded above the sides of the trucks. • Material removed from downwind side of stockpiles. 	<ul style="list-style-type: none"> • If crushing, screening or conveying emissions are occurring that may impact air quality beyond the property boundary: <ul style="list-style-type: none"> ○ If visible dust is being generated from crushing, screening or conveying activities; and/or ○ If the weather forecast indicates dry conditions and strong winds are likely. • Visual cues will be the primary trigger for mitigative action to be taken with respect to fugitive dust emissions. • If the weather forecast indicates dry weather and strong winds are likely, this is also a trigger for preventative dust management action to be taken. • Visual monitoring during site activities will be conducted by the environmental consultant to determine if contingency control measures should be implemented. • Spot checks will be conducted using a portable particulate monitor. If measured concentrations are approaching an Environment Yukon Air Quality Standard, contingency control measures will be implemented. Initially, the threshold level will be 90% of the standard; however this may be refined with additional monitoring. • Complaints by nearby residents 	<ul style="list-style-type: none"> • Increase frequency of water spray usage. • Installation of engineered controls such as dust covers or collection mechanisms. • Cease activities during high wind events during high wind events or when dust emissions cannot be adequately controlled. • Enclose or cover the crusher, screen and conveyor.
<p>Contaminated Soil Handling (Excavators and Bulldozers)</p>	<ul style="list-style-type: none"> • Move as little material as possible. While excavating, this translates to keeping drop heights as low as possible • Use a front-end loader where possible to place material instead of a bulldozer. • Progressive site stripping will be used to reduce moisture content loss and to retain soil integrity. 	<ul style="list-style-type: none"> • If material handling activities are occurring that may impact air quality beyond the property boundary: <ul style="list-style-type: none"> ○ If visible dust is being generated by material handling activities; and/or ○ If the weather forecast indicates dry conditions and strong winds are likely. • Visual cues will be the primary trigger for mitigative action to be taken with respect to fugitive dust emissions. • If the weather forecast indicates dry weather and strong winds are likely, this is also a trigger for preventative dust management action to be taken. • Visual monitoring during site activities will be conducted by the environmental consultant to determine if contingency control measures should be implemented. • Spot checks will be conducted using a portable particulate monitor. If measured concentrations are approaching an Environment Yukon Air Quality Standard, contingency control measures will be implemented. 	<ul style="list-style-type: none"> • Wet the material when it is being handled. • Cease material handling operations during high wind events or when dust emissions cannot be adequately controlled.

Source Description	Primary Dust Control Measures	Thresholds / Triggers for Management	Contingency Dust Control Measures
<p>Stockpiled Materials (including aggregate piles or contaminated soil)</p>	<ul style="list-style-type: none"> • Orient piles to be parallel with the predominant wind direction. • Keep stockpile height to a minimum. • Reduce the exposed and active area of the stockpiles. • Conduct soil turning during low wind conditions. • Minimize drop height of conveyor to the stockpile. 	<p>Initially, the threshold level will be 90% of the standard; however this may be refined with additional monitoring.</p> <ul style="list-style-type: none"> • If stockpiles of LTF soil emissions are occurring that may impact air quality beyond the property boundary: <ul style="list-style-type: none"> ○ If visible dust is being generated from the stockpiles or the LTF soil areas; and/or ○ If the weather forecast indicates dry conditions and strong winds are likely • Visual cues will be the primary trigger for mitigative action to be taken with respect to fugitive dust emissions. • If the weather forecast indicates dry weather and strong winds are likely, this is also a trigger for preventative dust management action to be taken. • Visual monitoring during site activities will be conducted by the environmental consultant to determine if contingency control measures should be implemented. • Spot checks will be conducted using a portable particulate monitor. If measured concentrations are approaching an Environment Yukon Air Quality Standard, contingency control measures will be implemented. Initially, the threshold level will be 90% of the standard; however this may be refined with additional monitoring. 	<ul style="list-style-type: none"> • Wet the stockpiles and LTF soil. • Cease activities at the stockpiles during high wind events or when dust emissions cannot be adequately controlled. • Cover the temporary stockpiles. • Construct a wind barrier (berm).