

FLAGSTAFF COUNTY POLICY

Title:	Dust Suppressant	Policy: PW 002
Section: Public Works		

ACCOUNTABILITY TO VISION STATEMENT

The use of dust suppressant minimizes the driving hazards created by dust and potentially reduces road maintenance costs. It also mitigates the impact of dust on the quality of life of citizens on gravel roads as well as on vegetation, wildlife habitat and water bodies.

POLICY STATEMENT

Flagstaff County will have an affordable dust suppressant program that is environmentally responsible, contributes to a safe road network and minimizes the impact of dust on the environment and the quality of people's lives.

DEFINITIONS

Dust Suppressant: A product or a process that reduces dust on gravel roads and is listed on Alberta Transportation's Dust Abatement Product List, including Proven Products, Trial Products, and Potential Products.

GUIDELINES

1. Specific roads/locations will be designated, in policy, to be maintained with a road surface or subgrade stabilization product to help reduce the frequency of maintenance.

A. Oil

- 1. The following roadways will be dust free utilizing an oil-based product:
 - Strome East: Rge Rd 151, North for 0.4 miles from Hwy 13;
 - Airport Road (Hardisty): Rge Rd 103, south for 2.75 miles from Hwy 13;
 - Shop Road West: Twp Rd 442, East for 2.1 miles from Rge Rd 130;
 - Shop Road East: Twp Rd 442, East for 0.4375 miles from SH 869.
- 2. The following streets in Galahad and Strome will be dust free utilizing cold mix with no seal coat:
 - · Hamlet of Galahad:
 - Sir Galahad Street (Main Street) from Guinevere Avenue West to SH 861
 - Lady Helen Avenue East (Health Care Centre) from Sir Galahad Street to King Arthur Street
 - · Hamlet of Strome:
 - o 50th Street (Main Street) from 50th Avenue north to 52nd Avenue
 - Highway Access Road from Hwy 13 north to 50th Avenue
 - 52nd Avenue from Rge Rd 151 west to the west boundary of the hamlet
- 3. Public Works will maintain the oil roads utilizing the most cost-effective procedures to ensure a safe driving road surface. To this effect the following activities are to be incorporated into the planning and budgeting process:
 - Pothole Patching
 - Rip and Relay
- 4. The intent of Section #3 is that maintenance activity should be performed first. When maintenance activity can no longer be viewed as effective (safety/cost) the re-application process must be initiated as soon as possible.

GUIDELINES continued

B. MG 30

- MG 30 is a refined dust suppressant and road surface stabilization product that minimizes loose gravel, increases grade strength, and helps reduce washboard, grader maintenance and loss of gravel.
- 2. MG 30 will be applied to strategic locations, intersections and hills. Public Works will determine the strategic locations that are causing maintenance issues and concerns.
- 3. MG 30 is utilized for residential dust suppressant applications. Please refer to policy PW 013 Residential Dust Suppressant.

C. Pavement

- 1. The following roadways are currently designated pavement roads:
 - ATCO Power Plant Road: Rge Rd 154, south for 1.75 miles from Twp Rd 410
 - County Airport Road: Rge Rd 131, north for 0.75 miles from Hwy 13
 - Galahad Access Road: Twp Rd 412, west for 4.0 miles from Hwy 36

2. Testing of New Products

Dust suppressant products are tested to determine whether they are effective, affordable, and environmentally suitable.

The following dust suppressant products have been tested:

Product	Year(s) Tested	<u>Outcome</u>
Formula 35	2018 – 2019	In the testing phase, not tested in 2020 to 2021, will resume testing in 2022 and 2023.
No Dust Enviro**	2016	Less effective than MG 30. The application process is labour intensive and the product is more expensive.
No Dust**	2016	Less effective than MG 30. The application process is labour intensive and the product is more expensive.
MG-30	2013 - 2015	Positive results; successful in providing surface stability as well as a dust suppressant. Approved by Council to be used exclusively for all dust suppressant applications starting 2017.
DustLynx**	2014 - 2015	Less effective than Calcium Chloride and MG 30 and application process was labour intensive.
Magnesium Chloride**	2012 - 2014	Less effective than Calcium Chloride and product is more expensive.
Earth Glue**	2013	Negative results as a dust suppressant and application process was labour intensive.
Canola Oil**	2010 - 2011	Positive results as a dust suppressant but allowed moisture to penetrate the sub-grade which softened the sub-grade over time.
DuraSoil**	2010	There was a lack of product supply and allowed moisture to penetrate the sub-grade which softened the sub-grade over time.

^{**}No further testing or utilization of the dust suppressant product will occur.

Council Approved: November 10, 2021	Resolution #:
Reference:	FC20211110.1003

Review Cycle:	Next Review Year:	
Every three (3) years	2024	