



*Planning and Designing for
the Future*

*USDA Forest Service
Perspective*

Peter Bolander

- 
- *current FS management practices*
 - *current barriers*
 - *how overcome barriers*

Forest Service



- 175 national forests and grasslands*
- 43 states*
- 193 million acres*
- 375,000 miles road*
- 6700 miles potentially dust abate*

Current FS Dust Management Practices

- ☞ guiding principles:*
 - maintain access in safe and efficient manner while protecting environment and adjacent resources*

Current FS Dust Management Practices

☞ *guiding principles:*

- *> 100 vpd*
- *< 100 vpd*

☞ *decision at local level, case by case*

- *past experience*
- *FS publication and/or studies*
- *product toxicity tests*
- *potential impacts to local environment*
- *FHWA dust palliative specs + Pacific Snowfighters Association specs*

United States
Department of
Agriculture

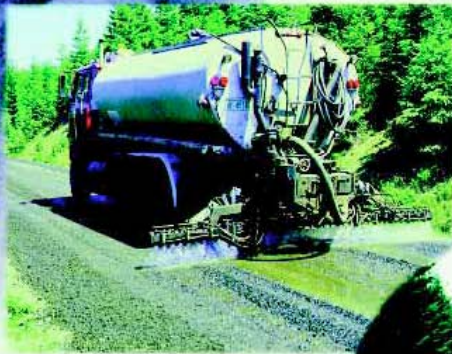
Forest Service

Technology &
Development
Program

7700—Transportation System
2500—Watershed and Air Management
November 1999
9977 1207—SDTDC



Dust Palliative Selection and Application Guide



U.S. Department
of Agriculture

Forest Service

National Technology
and Development
Program

677 1805—SDTDC

7700—Transportation
Management

December 2006



Surface-Aggregate Stabilization with Chloride Materials



Barriers



☞ *budget*

- *sign replacement, ditch cleanout, road grading, vegetation control*

☞ *technology transfer*

- *economics*
- *product selection*
- *toxicity*
- *potential impacts to local environment*
- *quality and quality assurance*

Resolve Barriers

☞ budget

- ha...reduce road miles and/or reduce road standard*

☞ technology transfer

- aggregate road web links in FHWA and LTAP*
- good aggregate surfacing criteria*
- summary of past efforts, studies, and research*
- dust abatement economics*
- palliative properties*
- impacts of dust to user safety and environment*
- impacts of dust palliative to environment*

Resolve Barriers

☞ *manufacturers*

- *provide chemical properties and toxicity reports*

☞ *researchers*

- *determine "when to dust abate" criteria*
- *simple standard tests to verify application rate, quality, toxicity*

☞ *users*

- *develop best management criteria*
- *training in best management criteria and selection*
- *implement aggregate management system*
- *develop standard risk assessment protocol*
- *work with Canadian users, deicer users, and EPA*