

“AN ALTERNATIVE CHLORIDE APPLICATION”



WHAT SHERIDAN COUNTY HAS DONE IN THE PAST



ADVANTAGES OF TOP-APPLIED CHLORIDE

- FAST MOVING – 10 MILES OR MORE PER DAY
- LOWER COST – \$3200 – 5000/MILE

DISADVANTAGES OF TOP-APPLIED CHLORIDE

- USES A CONSIDERABLE AMOUNT OF WATER



DISADVANTAGES OF TOP-APPLIED CHLORIDE

- USES A CONSIDERABLE AMOUNT OF WATER
- **VERY SUSCEPTIBLE TO RAIN UNTIL CURED**



DISADVANTAGES OF TOP-APPLIED CHLORIDE

- USES A CONSIDERABLE AMOUNT OF WATER
- VERY SUSCEPTIBLE TO RAIN UNTIL CURED
- MOSTLY GONE AFTER THE FIRST GRADING

DISADVANTAGES OF TOP-APPLIED CHLORIDE

- USES A CONSIDERABLE AMOUNT OF WATER
- VERY SUSCEPTIBLE TO RAIN UNTIL CURED
- MOSTLY GONE AFTER THE FIRST GRADING
- DOES IT PENETRATE AND HOW DEEP

DISADVANTAGES OF TOP-APPLIED CHLORIDE

MESSY FOR RESIDENTS



THE ALTERNATIVE – INJECT (MILL) IT INTO THE TOP 2” – 2.5”



ADVANTAGES TO THE MILLING METHOD

- USE UP TO 1/3 LESS WATER

pre-water ahead – 3500 gal/mile



inject into grinder – 3500 gal/mile



ADVANTAGES TO THE INJECTION METHOD

LITTLE MESS FOR THE RESIDENTS



ADVANTAGES TO THE INJECTION METHOD

LITTLE EFFECT BY RAIN IF ROLLER STAYS
CLOSE TO GRINDER



ADVANTAGES TO THE INJECTION METHOD

CAN BE BLADED 2 – 3 TIMES AND STILL HAVE
CHLORIDE RESIDUAL



ADVANTAGES TO THE INJECTION METHOD

- NO GUESSING HOW DEEP THE CHLORIDE PENETRATES
- WORKS WITH LIQUID MgCl OR CaCl MINI-PELLETS

PITFALLS TO GRINDING

- SLOWER APPLICATION RATE – 5 TO 6 MILES/DAY
- MORE EXPENSIVE THAN TOP APPLIED – \$5900 TO \$6200/MILE

LONGEVITY

KNOWN — TWO YEAR CYCLE WITH A LIGHT TOP APPLICATION OF LIQUID MgCl (.15 GAL/SQYD) THE SECOND YEAR

- FIRST YEAR - \$6,000/MILE
- SECOND YEAR - \$3,200/MILE
- TWO YEAR COST — \$9,200/MILE = \$4,600/MILE/YEAR

LONGEVITY

HOPED FOR – THREE YEAR CYCLE WITH THE LIGHT TOP APPLICATION THE TWO YEARS FOLLOWING MILLING

- FIRST YEAR – \$6,100/MILE
- SECOND YEAR - \$3,200/MILE
- THIRD YEAR – \$3,200/MILE
- THREE YEAR COST - \$12,500/MILE = \$4,166/MILE/YEAR

SUMMARY

INJECTED

Uses less water

Not as susceptible to rain

Longer residual for grader

Determined penetration

No mess for residents

Slower application rate

Initially more expensive

TOP APPLIED

Uses more water

Rain affected until cured

Short residual for grader

Questionable penetration

Messy for residents

Faster application

Initially cheaper

QUESTIONS/COMMENTS