“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

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• 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
<table>
<thead>
<tr>
<th><strong>INJECTED</strong></th>
<th><strong>TOP APPLIED</strong></th>
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<tbody>
<tr>
<td>Uses less water</td>
<td>Uses more water</td>
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<tr>
<td>Not as susceptible to rain</td>
<td>Rain affected until cured</td>
</tr>
<tr>
<td>Longer residual for grader</td>
<td>Short residual for grader</td>
</tr>
<tr>
<td>Determined penetration</td>
<td>Questionable penetration</td>
</tr>
<tr>
<td>No mess for residents</td>
<td>Messy for residents</td>
</tr>
<tr>
<td>Slower application rate</td>
<td>Faster application</td>
</tr>
<tr>
<td>Initially more expensive</td>
<td>Initially cheaper</td>
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QUESTIONS/COMMENTS