

MAINTENANCE PLANNING GUIDELINES		2006																																																
ACTIVITY: Bridge Preventative Maintenance (R322) MAJOR & MINOR	ACTION: Linseed Oil & In-Deck Seals (SY) <i>A. Linseed Oil</i>																																																	
DEFINITION: The time and expenses incurred with maintaining bridges on the state highway system. Examples include bridge seal coats, linseed oil and in-deck seals.																																																		
PURPOSE: To reduce penetration of moisture and chemicals into the deck by the application of a mixture of linseed oil and mineral spirits to B-2, low slump or silica fume concrete decks.																																																		
SCHEDULING: Schedule when the humidity is low and the temperature is hot. The first application should be one year after the contractor's initial treatment.	<table border="1" style="width: 100%; text-align: center;"> <tr> <td>J</td><td>F</td><td>M</td><td>A</td><td>M</td><td>J</td><td>J</td><td>A</td><td>S</td><td>O</td><td>N</td><td>D</td> </tr> <tr> <td>A</td><td>E</td><td>A</td><td>P</td><td>A</td><td>U</td><td>U</td><td>U</td><td>E</td><td>C</td><td>O</td><td>E</td> </tr> <tr> <td>N</td><td>B</td><td>R</td><td>R</td><td>Y</td><td>N</td><td>L</td><td>G</td><td>P</td><td>T</td><td>V</td><td>C</td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td style="background-color: black;"></td><td style="background-color: black;"></td><td></td><td></td><td></td><td></td> </tr> </table>		J	F	M	A	M	J	J	A	S	O	N	D	A	E	A	P	A	U	U	U	E	C	O	E	N	B	R	R	Y	N	L	G	P	T	V	C												
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RECOMMENDED EQUIPMENT: <ul style="list-style-type: none"> • Dump Truck/Cinderbed • Truck or Trailer Distributor • Traffic Control (See EPG 616.23 Traffic Control for Field Operations) 	RECOMMENDED PROCEDURE: <ol style="list-style-type: none"> 1. Place traffic control devices as needed. 2. Mix linseed oil and mineral spirits together so that the mixture is 50% linseed oil and 50% mineral spirits. 3. The deck should be completely clean and dry. Remove any loose dirt or dust immediately prior to the application of the mixture. 4. Stop traffic while the material is applied to prevent over spray on vehicles. 5. Apply mixture to as much of the previously cleaned deck as traffic control requirements will allow, using the following application rates: <table style="margin-left: 40px; border-collapse: collapse;"> <tr> <td style="text-align: left;"><u>Deck Surface Concrete</u></td> <td style="text-align: left;"><u>Application Rate</u></td> </tr> <tr> <td style="padding-left: 20px;">B-2</td> <td>0.03 gal./SY</td> </tr> <tr> <td style="padding-left: 20px;">Low Slump</td> <td>0.02 gal./SY</td> </tr> <tr> <td style="padding-left: 20px;">Silica Fume</td> <td>0.02 gal./SY</td> </tr> </table> 6. Apply mixture to the inside face and top of the barrier curbs. 7. Allow mixture to penetrate bridge deck and dry. 8. Apply sand to deck surface to improve short-term skid resistance. 9. Repeat treatment steps to the remaining untreated lanes. 10. Remove excess sand when the deck is completely dry. 11. Remove traffic control devices. 		<u>Deck Surface Concrete</u>	<u>Application Rate</u>	B-2	0.03 gal./SY	Low Slump	0.02 gal./SY	Silica Fume	0.02 gal./SY																																								
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RECOMMENDED MATERIAL: <ul style="list-style-type: none"> • Mineral Spirits • Linseed Oil • Sand 																																																		
SAFETY: Avoid skin and eye contact with solutions. Wear all appropriate PPE. The mineral spirits and linseed oil mixture has a low flashpoint. Care must be exercised to prevent igniting the mixture by sparks, open flame, or other means. In no case should the mixture be heated in a distributor. Refer to the Safety Policies, Rules & Regulations – Employee Handbook.																																																		
OTHER CONSIDERATIONS: Crews may consider wearing disposable coveralls to avoid contact with material and to protect clothing. Spray must be controlled to keep mixture from getting on passing vehicles or adjacent property.																																																		
REFERENCES: EPG 770.10 Linseed Oil Treatment.																																																		