

**OKLAHOMA DEPARTMENT OF TRANSPORTATION**

June 29, 1994

To: Divisions 1-8  
From: Bridge Engineer  
Subject: Maintenance  
Painting

As part of the bridge inspection program, the Bridge Division has been recommending blast cleaning and painting in the vicinity of the joints (especially near abutments and piers) during follow-up meetings with Divisions. Since our steel bridges until recently were painted with red lead paints, regulations require that the debris be contained, collected, treated and disposed of during blast cleaning operations. Divisions do not have the equipment or resources to properly perform these maintenance operations. For this reason, the Bridge Division has been looking for an alternate paint method which will not invoke the regulations found in **CFR 1926.62**, please refer to the attached Letter from the **Journal of Protective Coatings and Linings** entitled "OSHA's New Rule on Lead: Changing the Practice and Price of Lead Paint Removal".

For maintenance painting or when repairs are being done to an existing steel bridge which involves a relatively small area to be painted, the Bridge Division would recommend

the following proprietary products for cleaning and painting the bridges:

**P-S Super Cleaner**  
**Rust Grip**  
**Rust Grip HS (high solids)**

All the other products which the Bridge Division has investigated require hand and power tool cleaning in the rusty areas followed by a power wash which will invoke the regulations contained in [CFR 1926.62](#). This paint is unique in that it can be applied with only a solvent clean and has an impressive ability to penetrate rust.

The paint has an unlimited pot life. It is estimated that one gallon will cover 200 to 300 square feet of the bridge area depending on the thickness of the rust. The paint dry's to a very hard surface.

Application Procedure:

- (1) Apply solvent cleaner in accordance with the Manufacturer's recommendations. The Bridge Division recommends wire brushing loose rust scale if this can be done without invoking the regulations contained in [CFR 1926.62](#).
- (2) The solvent cleaner should be blown off when it dry's using compressed air with a pressure of 300-600 psi. Surfaces to receive paint must be completely dry. The presence of any moisture will greatly shorten the life of the paint.
- (3) The paint should be mixed and brushed on, primarily in

the rusty areas, in accordance with the manufacturer's recommendations. The paint may be applied to thick layers of rust. Extra caution should be used to avoid dripping the paint on cars or public property.

(4) For best results, it is recommended that a second coat be applied within four hours of the original application using the high solids version because it goes on thicker. Rust Grip will not stick to itself four hours after the original application.

(5) Do not attempt to clean your brushes, simply throw them away.

(6) If additional coats of paint are needed, it may be necessary to wait one to three years after the original application at which time rust grip will become porous enough to accept itself. If future coats are to be applied, the high solids version is recommended.

(7) If the rusty areas are found to be too excessive, it is recommended that you write the bridge division requesting a project be programmed to paint the bridge.

#### Safety:

(1) Workers should wear some kind of eye protection and a respirator while spraying on the compressed air.

(2) Workers should wear some kind of eye protection while applying the paint, especially in the overhead position.

(3) The paint is very difficult to get off your hands or face. For this reason it may be prudent to wear gloves and older clothes during painting operations.

(4) A copy of the manufacturer's safety information is included for your information for both the solvent cleaner and the paint.

### Paint storage:

Once a five gallon can is opened, it is recommended that the paint be stored in smaller containers. This paint is a moisture cure product. Moisture trapped in the air in a sealed paint can will allow a hard film to form on the top of the paint. To avoid this, the paint should be stored in containers which do not allow large air voids.

### Questions:

If you have any questions regarding these products or the paint program in general, please contact Walt Peters at (405) 521-2606.

The Bridge Division plans to write a Special Provision for this product in the near future. It is our opinion that MC money designated for painting could be used for the purchase of the paints and cleaner.



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