LEAD CONTAMINATION FROM THE GOLDEN GATE BRIDGE REPAINTING PROJECT

Specifications to Prevent Contamination Repeatedly Violated

One of the nation's highest-paid groups of bridge painters are failing to adequately perform their assigned tasks on what is arguably one of the most important lead abatement and painting projects in America today, namely, the Golden Gate Bridge Main Cable Renovation and Repaint Project (MCRRP). This project involves scraping off massive amounts of old lead-based paint and other coatings and materials containing even more lead. Bridge Manager Kary Witt has not enforced the Golden Gate Bridge District's own cleaning specifications, not to mention the industry standards set by the Society for Protective Coatings (SSPC). There are three main areas where the Bridge painters are failing to comply with these guidelines: (1) Bridge painters' so-called lead "containment structure" is completely inadequate and below that which is specified for the job; (2) Bridge painters have failed to daily police and remove lead residue which escapes from their inadequate lead containment structure as the guidelines require; and (3) Bridge painters have failed to consistently decontaminate themselves at the end of each workday in accordance with the specifications.

The Bridge painters' failure to adequately perform their assigned work in compliance with specifications may stem from a lack of training. Public records attained from the District's Office appear to indicate that Bridge Manager Witt has only provided the Bridge painters with brief lead awareness training when the industry standard calls for much more highly-developed training and certification process. Bridge Manager Witt has also allowed the 24-hour lead certifications to expire for those few Bridge painters who were actually certified at one time through the Painters Union Apprenticeship Training Program. So Bridge Manager Witt assigns lead abatement work to be performed where health and safety are at risk to a group of painters whom either have not received industry-standard training or to employees whose certifications have expired.

In the first paragraph of this Article it was noted there are three areas where the Bridge painters are failing to perform their work in compliance with specifications. Let's start with #1 and discuss the inadequacies of the lead containment structure. The Society for Protective Coatings (SSPC) defines "Containment System" as follows:

> "A containment system includes the cover panels, screens, tarps, scaffolds, supports, and shrouds used to enclose an entire work area or a paint removal tool. The purpose is to minimize or prevent the debris generated during surface preparation from entering into the environment, and to facilitate the controlled collection of the debris for disposal. Containment systems may also employ the use of ground covers or water booms."[1]

The Bridge's own specifications discuss at length that **lead** is present within the old coating system which is being removed as part of the MCRRP: "The wrapping wire was set in red **lead** paste which is known to have dried out and is no longer effective as a waterproofing system." "Both the longitudinal and circumferential grooves are packed with oakum and compacted **lead** wool." "The existing coatings on the cables, bands and appurtenances consist of the original 1937 vintage red **lead** primer with alkyd topcoats." "Existing coatings have been sampled, tested and found to contain heavy metals in varying amounts including **lead**."[2]

It is important to note that the Bridge painters are using power tools to remove the lead-bearing material described above from the Bridge. Under both the District's and SSPC's guidelines, when power tools are utilized for removal of lead-bearing material, stricter requirements are imposed because of the greater likelihood of flying lead particles. The District's own Technical Specifications for Main Cable Painting at Section 1.6.2 states in part that "Containment shall be in accordance with SSPC Guide 6, and equivalent to Table P, Class 1p for hand tool cleaning and vacuum shrouded power tool cleaning." SSPC Guide #6 at Section 4.2.2.1 states in part; "For hand or power tool cleaning, Class 1p normally requires air impenetrable walls with rigid or flexible framing, fully sealed joints, resealable entryways, and negative air achieved through forced or natural air flow (verified visually) and exhaust air filtration." However, the containment structure being utilized by the Bridge painters does not meet these guidelines and is inadequate at best. There is no roof containment whatsoever and the perimeter is often only contained by loosely drawn curtains (like in your shower at home) with gaping holes around the perimeter in many cases. See Figures 1, 2 and 3 below:

[1] Society for Protective Coatings (SSPC), Technology Guide No 6, Guide for Containing Surface Preparation Debris Generated During Paint Removal Operations, Dated October 1, 2004.
[2] Golden Gate Bridge District, Technical Specifications, Main Cable Painting, printed April 28, 2011.

Fig. 1: Picture taken of "containment structure" at east side of Bridge. At the arrow you can see the sky through the structure where a roof should be blocking this view. Curtains are not fastened together resulting in large gaps.

Fig. 2: Close-up of containment structure with arrow at gap.

Fig. 3: A close-up view of a large gap in a "containment structure" where power tools are being used to remove lead-bearing materials during the MCRRP.

In our own monitoring we have been on the Bridge and witnessed paint chips being blown out of the containment structure into the environment including onto the public walkway below. We have collected these paint chips which tested hot for lead right there on the spot. It is clear these contaminants are not just being blown onto the public walkway, but they are also being blown into the Bay and adjacent lands.

One would think any contaminants which escape from the lead containment structure would be immediately collected and properly disposed of. So let's now look at item #2 and discuss the inadequacies of the Golden Gate Bridge painters' collection of lead-bearing debris. SSPC Guide No 6, Section 4.1.2 states in part "In addition to collecting debris within containment, debris that escapes the contained area should be removed on a routine basis (e.g., end of work day, or as specified) to prevent winds or rain from carrying it onto surrounding property, into soil, ground, or storm sewers, or into bodies of water." According to the Bridge's own Technical Specifications for Main Cable Painting, Section 1.6.4, "It shall be the responsibility of the Paint Department to maintain containment provisions and see to the proper collection, handling and disposal of hazardous materials including all debris generated during surface preparation."

Figure 4 below is a photograph showing lead-bearing paint chips found on the public walkway below the lead containment structure. Paint chips such as these often remain on the public walkway long after the Bridge painters go home for the day.

Fig. 4: Photograph of lead-bearing paint chips on the public sidewalk on the east side of the Bridge under lead containment structure.

These issues are also addressed in a December 2011 report from Vantagepoint Consulting, the firm hired by the District to act as a consultant on the MCRRP project. In their report, Vantagepoint states that "some visible paint debris was observed on the sidewalk below the work areas which locations should be policed on a daily basis and any residues removed."[3] Despite Bridge management being given this reminder by its own paid consultant, Bridge painters subsequently still left work for the day without removing lead residue that escaped their "containment structure" and fell down on the public walkway or elsewhere.

Let's move on to #3 and discuss the inadequacies of the Bridge painters' failure to decontaminate themselves at the end of each workday in accordance with District and SSPC specifications. Here again Vantagepoint reports to the District and Bridge Manager Witt that, "some workers were observed not decontaminating…" This is most alarming because the Bridge painters failing to decontaminate themselves are exposing not only themselves, but their families as well as anyone or anything else they come into contact with when going through the rest of their day in a contaminated state. It is important to note here again that end-of-day cleanup is mandated by both the District specifications and SSPC guidelines.

[3] Vantagepoint Consulting Re: Results of Air Monitoring for Exposures to Lead During Lead Wool and Oakum Removal on the West Main Cable between Saddles 115 to 119 on November 28, 2011, Project #VP-11-08 dated December 6, 2011.

It is hard to imagine that Bridge Manager Witt and the District would choose to continue practices that are creating a massive liability for future lead contamination cleanup costs. Let's not forget who will ultimately pay for the clean-up. The District has already spent millions of the public's bridge toll, ferry and bus fare dollars cleaning up previous lead contamination. Will we see bridge tolls double again over the next ten years as they did over the previous ten years? And does anyone really think that any amount of money will get all the lead out of the Bay and adjacent lands?

In conclusion, one would think that any lead contamination would be unacceptable to the District, especially where the health of their public, their workers and their families are concerned. One would think that Bridge Manager Witt would hold the Bridge painters working under his direction accountable or that the District would hold Witt accountable. But alas, no one has been held accountable after this contamination has continued.

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