**MWD**
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

*Executive Office*

August 24, 2007

Ms. Barbara Fry
Chief Measure Assessment Branch
Stationary Source Division
Air Resources Board
1001 I Street
Sacramento, California 95814

Dear Ms. Fry:

**CARB Architectural Coatings – Suggested Control Measure (SCM)**

**Summary**

Metropolitan Water District of Southern California (Metropolitan) is submitting comments on the June 2007 proposed Architectural Coatings SCM language. We are supportive of the regulatory efforts to reduce the volatile organic compound (VOC) limits for architectural coatings. Metropolitan continues to be committed to aggressively identifying and testing 100 g/l or less VOC containing industrial maintenance coatings (IMCs) that provide long-term corrosion protection for essential water transmission and treatment infrastructure. The proposed continuance of the 250g/l VOC limit for the IMCs will facilitate these efforts and help us transition to the even lower VOC products as the manufacturers make them available.

**Background**

Metropolitan is a consortium of 26 cities and water districts that provides drinking water to nearly 18 million people in parts of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura counties. Metropolitan delivers an average of 1.7 billion gallons of water per day to a 5,200 square mile service area. Our facilities include the Colorado River Aqueduct, pumping plants, treatment plants, reservoirs, tunnels, pipelines, and hydroelectric plants. To meet our public service reliability mandates, historically the IMCs that we have internally approved for use on critical components of our water delivery system have a typical service life of around fifteen years. It is essential that we maintain this service reliability and protection of our infrastructure while making the transition to lower VOC coatings. We have been active participants in the architectural coating rulemaking activities, both at the State and the local level. The on-going dialogue that we have established with you and other CARB staff during the SCM rulemaking has been extremely positive.

As we have discussed, through our Materials and Metallurgy Test Lab (MMTL) Metropolitan has an on-going program to identify the less than or equal to 100 g/l VOC products as they are released into the market, and to test their performance to ensure that the coatings meet service and durability requirements according to water industry standards. Our testing program is currently focusing on 100% resin coating systems (such as poly-aspartic, poly-urea, and polyurethane coatings), as well as exempt solvent borne formulations (e.g. OXSOL and tertiary butyl acetate), in the following coating categories and specific performance areas:

- Immersion coating:
  - NSF certified, DTM – direct to steel, extended recoat window, and high build on vertical surfaces
- Structural steel in atmospheric exposure (the system consists of: zinc primer + epoxy intermediate + polyurethane top coat)
  - Color stability, UV resistance, moisture and corrosion resistance
- Zinc Primer – solvent borne (for structural steel)
- Coal tar and asphalt compatible coatings: Bitumen and polyurethane or epoxy composites
- Elastomeric water proof traffic deck and roofing systems: 100% resin polyurethane
- Chemical containment - protection for concrete containment structures.
  - Resistance to harsh chemicals (sulfuric acid, fluorosilicic acid)
- Concrete sealer-primers (100% solids epoxies):

**Issues**

1. Immersion Coatings

   While we have identified less than or equal to100 g/l VOC immersion coatings that have met our stringent performance criteria, Metropolitan has encountered application problems associated with these low viscosities, 100% resin epoxies. In conjunction with the manufacturers, we believe that given time, methods and primers can be developed that will improve the application characteristics of these essential compliant IMCs.

2. Other IMC categories

   Metropolitan is still looking for replacement products that meet our performance criteria in the following critical IMC categories:

   - Structural steel in atmospheric exposure
   - Zinc primer – solvent borne (for structural steel)
   - Coal tar and asphalt compatible coatings

We have actively been seeking the lower VOC formulations as they become available. However, we are finding that the release of the products in the usage categories listed above has been slower than we originally anticipated. To date, we have four IMC systems that were not released until late last year, in performance testing.

**Summary**

Based on Metropolitan's experience to date with the manufacturers' releases, and the test performance of the 100 g/l or less VOC containing IMC formulations, the proposed continuance of the 250 g/l regulatory limit for IMCs will provide Metropolitan with time to identify, test, and evaluate the performance of the lower VOC containing IMCs for incorporation into our internal approved coatings list.

Thank you for your consideration of these comments. We appreciate your responsiveness to our concerns regarding this significant issue, and we look forward to further sharing of technical information. If you have any questions regarding these comments, please contact Janet Bell at (213) 217-5516, or Carol Kaufman at (213) 217-6207.

Sincerely,

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