C.13. Copper Controls

The control program for copper is detailed below. Permittees shall implement the control measures and accomplish the reporting on those control measures according to the provisions below. The purpose of these provisions is to implement the control measures identified in the Basin Plan amendment necessary to support the copper site-specific objectives in San Francisco Bay. Permittees may comply with any requirement of C.13 Provisions through a collaborative effort.

C.13.a. Manage Waste Generated from Cleaning and Treating of Copper Architectural Features, Including Copper Roofs, during Construction and Post-Construction.

i. Task Description – Permittees shall ensure that local ordinance authority is established to prohibit the discharge of wastewater to storm drains generated from the installation, cleaning, treating, and washing of the surface of copper architectural features, including copper roofs to storm drains.

ii. Implementation Level

(1) Permittees shall develop BMPs on how to manage the waste during and post-construction.

(2) Permittees shall require use of appropriate BMPs when issuing building permits.

(3) Permittees shall educate installers and operators on appropriate BMPs.

(4) Permittees shall enforce against noncompliance.

iii. Reporting

(1) Permittees shall certify adequate legal authority in the ~~2010~~ 2011 Annual Report or otherwise provide justification for schedule not to exceed one year to comply.

(2) Permittees shall report annually, starting with ~~2011~~ 2012 Annual Report, on training, permitting and enforcement activities.

(3) In the 2013 Annual Report, Permittees shall evaluate the effectiveness of these measures, including BMP implementation and propose any additional measures to address this source.

C.13.b. Manage Discharges from Pools, Spas, and Fountains that Contain Copper-Based Chemicals

i. Task Description – By adopting local ordinances, Permittees shall prohibit discharges to storm drains from pools, spas, and fountains that contain copper-based chemicals.

ii. Implementation Level – Permittees shall either: 1) require installation of a sanitary sewer discharge connection for pools, spas, and fountains, including connection for filter backwash, with a proper permit from the POTWs; or 2) require diversion of discharge for use in landscaping or irrigation.

iii. Reporting – Permittees shall certify adequate legal authority in the ~~2010~~ 2011 Annual Report or otherwise provide justification for schedule not to exceed one year to comply.

C.13.c. Vehicle Brake Pads

i. Task Description – Permittees shall engage in efforts to reduce the copper discharged from automobile brake pads to surface waters via urban runoff.

ii. Implementation Level – Permittees shall participate in the Brake Pad Partnership (BPP) process to develop California legislation phasing out copper from certain automobile brake pads sold in California.

iii. Reporting – Permittees shall report on legislation development and implementation status in Annual Reports during the permit term. In the 2013 Annual Report, Permittees shall assess status of copper water quality issues associated with automobile brake pads and recommend brake pad-related actions for inclusion in subsequent permits if needed.

C.13.d. Industrial Sources

i. Task Description – Permittees shall ensure industrial facilities do not discharge elevated levels of copper to storm drains by ensuring, through industrial facility inspections, that proper BMPs are in place.

ii. Implementation Level –

(1) As part of industrial site controls required by Provision C.4, Permittees shall identify facilities likely to use copper or have sources of copper (e.g., plating facilities, metal finishers, auto dismantlers) and include them in their inspection program plans.

(2) Permittees shall educate industrial inspectors on industrial facilities likely to use copper or have sources of copper and proper BMPs for them.

(3) As part of the industrial inspection, inspectors shall ensure that proper BMPs are in place at such facilities to minimize discharge of copper to storm drains, including consideration of roof runoff that might accumulate copper deposits from ventilation systems on-site.

iii. Reporting

Permittees shall highlight copper reduction results in the industrial inspection component in the C.13 portion of each Annual Report beginning September of 2010.

C.13.e. Studies to Reduce Copper Pollutant Impact Uncertainties

i. Task Description – Permittees shall conduct or cause to be conducted technical studies to investigate possible copper sediment toxicity and technical studies to investigate sub-lethal effects on salmonids.

ii. Implementation Level – Technical uncertainties regarding copper effects in the Bay are described in the Basin Plan's implementation program for copper site-specific objectives. These uncertainties include toxicity to Bay benthic organisms possibly caused by high copper concentrations as well as possible impacts to the olfactory system of salmonids. Permittees shall ensure that these studies are supported and conducted. Similar requirements are included in NPDES permits for wastewater discharges. Permittees shall submit in the 2010 Annual Report the specific manner in which these information needs will be accomplished and describe the studies to be performed with a schedule. Permittees shall report the findings and results of the studies completed, planned, or in progress in the 2012 Annual Report.