TO: HONORABLE CITY COUNCIL

FROM: CITY MANAGER

DEPARTMENT: PUBLIC WORKS

DATE: JULY 22, 2002

SUBJECT: ORDINANCE OF THE COUNCIL OF THE CITY OF PALO ALTO AMENDING CHAPTER 16.09 OF THE PALO ALTO MUNICIPAL CODE TO REDUCE DISCHARGES OF POLLUTANTS TO THE SANITARY SEWER AND STORM DRAINAGE SYSTEMS

RECOMMENDATIONS
Staff recommends that Council adopt the attached Ordinance (Attachment A) amending Chapter 16.09 of the Palo Alto Municipal Code (Sewer Use Ordinance).

BACKGROUND
The City of Palo Alto operates the Regional Water Quality Control Plant (RWQCP), a wastewater treatment plant for the East Palo Alto Sanitary District, Los Altos, Los Altos Hills, Mountain View, Palo Alto, and Stanford University. Wastewater from these jurisdictions is treated by the RWQCP prior to discharge to the Bay. Stormwater runoff in Palo Alto flows directly to the Bay without treatment. Wastewater and stormwater discharges are both regulated via National Pollutant Discharge Elimination System (NPDES) permits issued by the San Francisco Bay Regional Water Quality Control Board. Given the strict permit requirements, Palo Alto is continually exploring methods of reducing pollutant discharges to San Francisco Bay, including new industrial pretreatment and pollution prevention requirements.

DISCUSSION
The attached ordinance contains a number of amendments and additions to the current Sewer Use Ordinance. The following table lists some of the proposed changes.

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<td>Facility closure provisions addressing contaminated sediments; prohibition on once-through cooling water discharge; requirement for covered dumpster areas for new buildings; requirement for covered carwash area for new, larger residential buildings</td>
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One continuing issue of concern to the EHS Forum group, which represents many of the permitted dischargers in the RWQCP’s service area, is the identification of research laboratories as industrial dischargers under existing Sewer Use Ordinance provisions. No mechanism currently exists in the Ordinance to differentiate between traditional industrial dischargers and dischargers of wastewater from research laboratories. The EHS Forum has proposed that this distinction be recognized by including a definition of “laboratory” in the Ordinance in the future. The EHS Forum’s proposed definition would define a laboratory in terms of the relative quantity of hazardous materials used and the purpose of the procedures taking place. Staff plans to resume discussions on this topic with the EHS Forum. A definition of “laboratory” could be included in future Ordinance revisions if differing regulatory requirements can be identified to distinguish between laboratory and industrial facilities without compromising the intent of the Ordinance.

Some of the key proposed ordinance provisions are discussed below:

**Closure Requirements (16.09.061(d))**

The proposed ordinance provision is intended to address broken sewer lines and contaminated sediments in sewer lines at industrial facilities during the closure process. The provision would allow the RWQCP to require testing of sewer lines to ensure their integrity in cases where the facility had a history of pH violations or other discharges that could affect sewer lines. Ensuring the integrity of sewer lines is primarily a protection for the future property owner. Where broken sewer lines are identified, facilities would be required to repair or replace them. Testing to determine the quantity and pollutant content of sediments could be required based upon the type of operation at a facility and the historical pollutant discharges from the facility. In general, the focus would be on pollutants which are bioaccumulative, which are not removed by the RWQCP’s treatment process, and which may interfere with the RWQCP’s treatment processes. Where contaminated sediments are identified, facilities would be required to remove them in an approved manner. It is anticipated that sediment removal will take place using typical sewer cleaning practices for laterals. The RWQCP does not intend to require confirmation sampling after sediment removal has taken place. In circumstances where building configurations make testing and/or sediment removal impractical, the RWQCP
may invoke PAMC Section 16.09.165, which allows alternatives to the provisions of the Sewer Use Ordinance.

Food Waste Disposers (16.09.103(e) and (f))
The proposed prohibition on food waste disposers is intended primarily to decrease discharges of oil and grease to the sanitary sewer system, thereby preventing sanitary sewer blockages and overflows. A second benefit would be a decrease in solids loading to the RWQCP, and a corresponding decrease in sludge incineration volume. In addition, Palo Alto is currently working to complete a contract with a local company that composts solid waste from food service facilities. Composting of food waste is a more sustainable practice than sewer discharge. The ordinance provision would prohibit installation of food waste disposers in food service facilities effective January 1, 2003. Food service facilities with existing food waste disposers would be required to cease using the disposers by January 1, 2007. The 2007 implementation date for this provision for existing food service facilities recognizes the logistical difficulties that may be involved for some facilities. Although staff sent a notification of the proposed ordinance change and a request for comments to all Palo Alto restaurants, very few responses were received. Staff intends to work closely with food service facilities after passage of the ordinance to address any problems they may have. Modifications to this provision may be necessary in the future.

Zinc-Containing Floor Finishes (16.09.104)
The proposed ordinance provision addressing zinc-containing floor finishes would reduce zinc loading to the sanitary sewer system from floor maintenance activities. Zinc is a pollutant of concern due to its identification as a source of toxicity in the RWQCP’s treated effluent to the Bay. Many floor finishes contain high concentrations of zinc, but zinc-free floor finishes are available. The provision would prohibit the discharge of any zinc-containing floor finish or stripper solutions that have been used to remove zinc-containing floor finish to the sanitary sewer after January 1, 2003. Zinc-containing floor finishes would be defined as floor finishes containing greater than 0.01 percent zinc by weight (equivalent to 100 milligrams per liter). An exemption would be provided for facilities that choose to treat their zinc-containing solutions in a wastewater treatment unit approved by the RWQCP.

Covered Dumpster Areas (16.09.106(e))
The requirement for covered dumpster areas is intended to reduce discharges of pollutants to the storm drain system from dumpster areas during rainfall events. The ordinance provision would apply to all new buildings except single-family and duplex residences, and would be effective after January 1, 2003. Covered dumpster areas would be required to be designed to prevent water run-on to or runoff from the dumpster area.

Covered Vehicle Washpad Areas (16.09.106(f))
The proposed vehicle washpad requirement would reduce discharges of pollutants from vehicle washing to the storm drain system. The ordinance provision would apply to new
residential buildings with 25 or more units, and would be effective after January 1, 2003. Each building subject to the provision would be required to provide a covered vehicle washpad area for use by residents. The area would be designed to prevent water run-on and runoff. The drain for the area would be connected to an oil/water separator with a minimum 100-gallon capacity, and to the sanitary sewer. The oil/water separator would be required to be maintained at a minimum semiannual frequency.

Boiler and Heat Exchanger Maintenance Wastewater (16.09.115(d))
This provision is intended to prevent the discharge of wastewater to the sanitary sewer from maintenance of boilers, heat exchangers, and associated piping, when the wastewater has a high concentration of copper. The proposed provision is an amendment to PAMC 16.09.115(d), which currently addresses wastewater from cooling system maintenance. Wastewater from cleaning of boilers, heat exchangers, and associated piping where physical or chemical scouring is utilized would be required to be collected and tested for copper. The RWQCP could also require testing for other pollutants that could be present. The wastewater would have to meet the copper discharge limit specified in the PAMC in order to be discharged to the sanitary sewer.

Mercury Discharge Limit (16.09.116(d))
The proposed ordinance section would lower the mercury concentration limit for industrial waste discharges from 0.05 milligrams per liter (mg/L) to 0.01 mg/L. The RWQCP reevaluated its mercury limit in response to San Francisco Bay’s listing under the Clean Water Act as impaired by mercury. The change in the mercury limit is based upon the attached memorandum (Attachment D), which describes the process utilized to derive the new limit. The new limit would apply to all industrial waste discharges to the sanitary sewer except for dental facilities using mercury-containing amalgam, and would become effective on January 1, 2003. The Sunnyvale and San Jose treatment plants, which together with Palo Alto comprise the three lower South San Francisco Bay dischargers, already have mercury limits of 0.01 mg/L.

Storm Drain Discharge Cost Recovery (16.09.117(c))
The proposed provision would allow recovery of costs associated with authorizing and inspection of discharge of water from construction sites to the storm drain system. Fees would be as set forth in the City’s Municipal Fee Schedule.

Architectural Copper Prohibition (16.09.160(b))
The proposed architectural copper prohibition is intended to reduce discharges of copper to Palo Alto's storm drainage system. A summary of a study conducted by the RWQCP to quantify copper discharges to the storm drain system in the RWQCP service area is included in the attached Staff Report to the Planning Commission (Attachment E). The ordinance provision would prohibit the installation of copper metal roofing, copper gutters, and copper granule-containing asphalt shingles on new and existing buildings after January 1, 2003. Copper flashing for use under tiles and slates and small copper ornaments would be exempted. Replacement roofs and gutters on designated historic
buildings would also be exempted, but would be required to be pre-patinated to reduce copper loading in storm water runoff. Both the Planning Commission and the Architectural Review Board have indicated their support for adoption of these provisions.

Staff has conducted outreach and solicited comments regarding the proposed ordinance changes from permitted industrial facilities in the service area, City of Palo Alto departments, the Palo Alto Chamber of Commerce, and other interest groups. Written comments were received from several permitted facilities and from the Palo Alto Chamber of Commerce’s EHS Forum group. Staff’s summary of and responses to these comments are attached (Attachment C). A public meeting was held to review the proposed changes with the RWQCP’s permitted facilities in November 2001. In addition, staff attended two meetings of the EHS Forum group, and held a meeting with Stanford University representatives, to further address comments received by these entities. A number of changes have been incorporated into the proposed ordinance language as a result of public involvement in the ordinance adoption process.

POLICY IMPLICATIONS
The recommended ordinance adoption is consistent with the goals and policies stated in the Palo Alto Comprehensive Plan. The applicable policies are as follows:

Natural Environment Policy N-21:
Reduce non-point source pollution in urban runoff from residential, commercial, industrial, municipal, and transportation land uses and activities.

Natural Environment Program N-33:
Study the impacts on storm water pollution of architectural copper and consider limiting its use, if warranted.

Natural Environment Policy N-25:
Reduce pollutant levels in City wastewater discharges.

ENVIRONMENTAL ASSESSMENT
The adoption and implementation of this ordinance is exempt from the California Environmental Quality Act under Guideline 15308.

ATTACHMENTS
Attachment A: Ordinance
Attachment B: Ordinance Summary
Attachment C: Public Comment Responses
Attachment D: Mercury Limit Development Memorandum
Attachment E: Architectural Copper Staff Report