6.3 CHEMICAL USE

6.3.1 Purpose

The purpose of this policy is to establish a chemical use program to ensure consistent evaluation of hazardous materials used by City employees, to phase out products that pose human health or environmental risks, and to promote the use of non-hazardous alternatives by the City that are protective of human health and the environment.

In short, the purpose is to:

- * Know what chemicals are being used;
- * Make conscious decisions about the chemicals selected for use;
- * Use chemicals wisely; and
- * Make full use of chemicals bought.

6.3.2 Organizations Affected

All City departments that purchase and use hazardous materials are affected. $^{1} \ \ \,$

6.3.3 Definitions

<u>Hazardous Material</u>: A chemical or mixture that can pose a physical hazard, health hazard, or environmental hazard and that is regulated under the law to control its harmful effects. This definition is not intended to be rigid or legalistic because all materials regulated in this manner merit special attention and consideration by the City under this policy.

<u>Hazardous Waste</u>: Those solid wastes that are designated by 40 CFR Part 261 or WAC 173-303 as moderate risk, dangerous, hazardous, or extremely hazardous waste.

6.3.4 Policy

Hazardous materials shall be used, stored, transported, and disposed of in compliance with all applicable laws and regulations.

In designing, constructing, and maintaining City facilities, and in designing and conducting the City's operations, departments shall give priority to minimizing the need for hazardous materials. Consideration will be given to options such as process changes, product changes, improved operations and maintenance, modernized processes and/or equipment, closed-loop recycling, and material substitutions.

When a hazardous material is needed, the amount purchased and used shall be the smallest quantity practical. Recognizing that the purchase price of a product does not reflect its true cost to the City, use of large quantity

¹ This policy does not apply to abandoned hazardous materials found on City property, household hazardous waste collected by Seattle Public Utilities, criminal evidence gathered by Seattle Police Department, and other materials received by the City but not within our control.

discounts, bulk container purchases or minimum order requirements that exceed departmental needs should be discouraged when procuring hazardous materials.

City departments shall participate in annual interdepartmental efforts to inventory all hazardous materials used per year and to develop and maintain a Citywide chemical management information system on hazardous materials usage.

Upon completion of each annual citywide inventory of hazardous materials usage, the following general criteria shall be used to designate certain hazardous materials for phase-out from City inventories and limitation of new product purchases:

- * Do they pose as a human health risk?;
- * Do they pose as an environmental risk?;
- * Are they legally disposable?;
- * Does their use create Extremely Hazardous Waste, which is hazardous waste that is classified as "Extremely Hazardous Waste" under WAC 173-303-100 and has a quantity exclusion limit of 2.2 pound per month?; and
- * Is the use, emission of, or discharge to air or water highly regulated?

Any product containing hazardous materials that is not listed on a department's inventory shall not be purchased or used by that department without prior review to determine whether the product meets the City's health and environmental criteria.

When selecting replacements to hazardous materials targeted for phase-out, and in approving new products for use, departments shall place highest priority on protecting worker health and safety, protecting public health, and protecting the environment. The next level of priority to be considered includes product effectiveness and cost effectiveness.

Where hazardous materials are used in equipment serving functions vital to the City's operations, and the City has made significant investment in the equipment in which the chemicals are used or there are no satisfactory replacements, it is recognized that phase-out of those hazardous materials may not be immediately practical. Examples include fire suppression systems charged with halons, refrigeration or air conditioning systems using chloroflourocarbons, and electrical equipment filled with PCB-containing transformer oil or sulfur hexaflouride gas. In those cases, departments shall develop and implement best management practices to minimize the quantity of hazardous materials required, protect worker health and safety, and minimize release of hazardous materials to the environment. Such best management practices may include, for example, preventive maintenance procedures, use of leak detection methods or equipment, and use of recapture or closed-loop recycling systems.

When appropriate, excess hazardous materials should be returned to the supplier when that is an option, or offered for use by other City departments or elsewhere per the City Recommended Guidelines for Surplus of Hazardous Materials and ESD Administrative Rule 97-1 Regarding Disposition of Surplus Materials, Supplies and Equipment Other Than Real Property.

6.3.5 **Procedures and Responsibilities**

6.3.5.1 Developing and Conducting Annual Hazardous Materials Inventory

The Office of Environmental Management (OEM) shall coordinate development of a Citywide format for an annual comprehensive inventory of hazardous materials usage.

Department directors shall ensure that departments participate in Citywide planning for the inventory, conduct the inventory, and report the information in the specified format.

Upon completion of the initial inventory, each product identified on the inventory list shall be approved for use unless it has been identified for phase-out and a replacement option has been approved per Section 6.3.5.2.

6.3.5.2 Phasing-out Targeted Chemicals

Each year, the OEM shall compile data from the annual Citywide inventory and work with departments and, where applicable, user groups,² to refine chemical phase-out criteria, develop a Citywide prioritized list of chemicals targeted for phase-out, and establish a work plan including tasks and schedules for phase-out of chemicals.

Department directors shall ensure that departments participate in Citywide efforts to establish the annual phase-out list and annual work plan. Directors will also incorporate elements of the Citywide work plan into departmental work plans.

In addition to the chemical phase-out criteria, the OEM shall develop guidelines for evaluating replacement options for the products targeted for phase-out.

The OEM shall facilitate interdepartmental user groups in evaluating their hazardous materials usage. The OEM shall assist user groups and, where applicable, individual departments in researching alternatives to products targeted for phase-out.

Department directors shall ensure that departments participate in interdepartmental efforts as needed to phase-out targeted hazardous materials. Directors shall also evaluate proposed alternatives per guidelines developed by the Office of Environmental Management.

6.3.5.3 Reviewing Requests for New Products³

Any product containing hazardous materials that is not listed on a department's inventory shall not be purchased or used by that department without prior review to determine whether the product meets the City's health and environmental criteria.

Department directors shall ensure that departments have internal procedures to review requests for new products using guidelines established by the

² We anticipate that, in many cases, hazardous materials targeted for phase-out will be associated with user groups that are common to multiple City Departments. Potential user groups may include, for example, landscapers, painters, and custodians. ³ This refers to requests for new products that are initiated by employees, independent of the process to identify replacement products for chemicals scheduled for phase-out.

Office of Environmental Management and to prevent unauthorized use of new hazardous materials that have not been reviewed, or have been reviewed and rejected.

Department directors shall ensure that new products approved for use are added to the department's inventory list.

New products, approved for use within each department review, shall be subject to review for consistency with City criteria by the OEM upon completion of the next annual inventory. The Director of the OEM, in consultation with the City Safety Office and/or the applicable user group, shall make the final determination on product acceptability before such products are added to the permanent inventory of approved products.

6.3.5.4 Reviewing and Revising Procurement Procedures

The Executive Services Department (ESD) shall review procurement practices to ensure that they are consistent with this policy, including an assessment of:

- Standards for size and quantity of materials to be purchased under City contracts, including minimum order requirements, unit sizes, and quantity discounts;
- 2. Standards for type of materials available under City contracts to restrict availability of chemicals targeted for phase-out;
- 3. Standards requiring vendors to accept return of unused products;
- 4. Existing Blanket Contracts which are high priority for revision or replacement based on factors (1) or (2) above; and
- 5. Current utilization of direct vouchers for hazardous materials purchases.
- 6.3.5.5 Developing, Installing, and Maintaining the Chemical Management Information System

The OEM shall identify user requirements for a centralized chemical management information system that will be used to implement both the City's Hazard Communication Policy and Chemical Use Policy.

The OEM shall develop, install and maintain the chemical management information system and develop interdepartmental agreements on use and maintenance of the system.

Department directors shall ensure that departments comply with interdepartmental agreements on use of the chemical management information system.

6.3.5.6 Incorporating Hazardous Materials Minimization into Operations

The OEM shall assist departments, as needed, in identifying alternatives and developing and implementing best management practices to minimize hazardous materials use.

Department directors shall ensure that departments incorporate measures into their operations to reduce hazardous materials use, document those measures, and develop applicable written procedures on those measures.⁴

6.3.5.7 Involving and Training Employees

The OEM shall coordinate development of training materials to assist departments in implementing this policy.

Department directors shall ensure that departments train employees on departmental policies and procedures relevant to this policy. Department directors shall also support employee involvement in identifying and implementing strategies to minimize the use of hazardous materials and in evaluating replacements to chemicals targeted for phase-out.

6.3.5.8 Tracking Progress and Evaluating the Program

The OEM shall compile data on Citywide policy implementation, and make recommendations for future direction of the program.

Department directors shall report annually on progress in carrying out agreed-upon work plans for implementing this policy.

6.3.6 References

- City of Seattle Council Resolution 29268, December 18, 1995.
- Hazardous Materials Coordinating Committee (HMCC) Report on Council Resolution 29268, June 25, 1996.
- Hazardous Materials Coordinating Committee (HMCC) Recommended Guidelines for Surplussing Hazardous Materials, December 1997.
- State of Washington Hazardous Waste Reduction Act of 1990.
- State of Washington Pollution Prevention Plans Regulations, WAC 173-307.

⁴ This is based on requirements of the Washington State Pollution Prevention Plans Regulations, WAC 173-307. Departments with pollution prevention plans prepared in accordance with that regulation shall be deemed to have satisfied this requirement.