



Number: VI - 001

City of Riverside Safety and Health Policies and Procedures Manual

Effective Date: 04/2011
Review Date: 04/2014
Prepared by: City Manager/Finance

City Manager/Finance

City Manager

SUBJECT:

Hazard Communication ~~Program~~ Program

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PURPOSE:

This policy establishes the responsibilities and methods for assessing the hazards of substances in the workplace and ensures that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to all City employees by means of comprehensive hazard communication programs, including container labeling and other forms of warning, ~~material~~ safety data sheets, and employee training.

~~The Hazard Communication Policy is an element of the City's Injury and Illness Prevention Plan (Safety and Health Policies and Procedures Manual I—001) and enables the City to comply with the requirements of California Code of Regulations (CCR) Title 8 Section 5194 and of Fed/OSHA 29CFR (1910.1200).~~

~~The Hazard Communication Program is designed to increase employee awareness of the hazardous chemicals used in the workplace by providing information about hazardous chemicals, identifying the associated hazards and their harmful effects, and identifying protective measures against those hazards. This document uses Globally Harmonized System (GHS) for classification and labeling of chemicals which was incorporated into the 2013 Cal/OSHA Hazard Communication Standard (California Code of Regulation (CCR), Title 8, §5194).~~

POLICY:

Each department/division shall provide the resources and take whatever action is necessary to ensure the success of the City's hazard communication program. All levels of management shall support the program and ensure that it is implemented and that its requirements are communicated to affected employees. Full compliance with the requirements of the hazard communication program ~~includes (Material Safety Data Sheets, labeling of containers),~~ developing and maintaining a list of hazardous chemicals, availability and access to Safety Data Sheets (SDSs), establishing procedures for container labeling and other forms of warning, providing information and training. The information as presented in this policy statement and in its Appendices, is mandatory.

Discipline for non-compliance shall be in accordance with the Human Resources Policy and Procedures Manual, Section 111-1.

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PROCEDURE:

Responsibility	Action
City Manager	Department- Heads

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1. ~~Implement the City program for hazard communication.~~

2. Ensure that department heads are held responsible and accountable for the performance and actions of their departments/divisions relative to hazard communication.

3. Periodically review the requirements of the hazard communication program

with Division Heads and Supervisors and document that review.

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PROCEDURE:

Responsibility	Action
Division Heads/Supervisors	<p>4. Ensure that all containers of hazardous chemicals and materials are properly labeled.</p> <p>5. MaintainGenerate a comprehensive list, with locations noted, of the hazardous chemicals/materials used and/or stored within areas under their supervision.</p> <p>6. Obtain a Material Safety Data Sheet (MSDS) for each identified hazardous chemical/material to which employees under their supervision, or in areas under their supervision, may be exposed. (See Appendix B)</p> <p>7. Ensure that the Material Safety Data Sheets are readily accessible, during each work shift, to employees, their physicians, or their collective bargaining agents, when they are in their work area(s). Exercise of this employee right shall not result in discharge or retaliation.</p> <p>8. Ensure Training is conducted for employees under their supervision in the elements of the City's hazard communication program upon initial assignment to a work task or whenever a new hazardous chemical/material is introduced into the work area, and annually thereafter. (See Appendix C)</p> <p>9. Maintain hazardous substance training records, with dates and original signatures for employees and trainers, for each employee.</p> <p>10. Meet with on-site contractors to advise them of the hazardous chemicals/materials to which their employees may be exposed and to determine any hazardous chemicals/materials to which such contractors may expose City employees and to require appropriate measures to protect City employees from said hazardous chemicals/materials.</p> <p>11. Inform employees of their right to receive information regarding hazardous chemicals/materials to which they may be exposed, or their right to have their physicians and collective bargaining agents receive this information, and of their protection against discharge or other retaliation due to having exercised these rights.</p>
City Employees	<p>12. Attend training in the physical and health hazards of substances in the work area and the measures available to them to protect themselves against hazards, including appropriate work practices, emergency procedures, and personal protective equipment.</p> <p>13. Follow safe procedures for working with hazardous chemicals/materials as provided in training and as specified in Material Safety Data Sheets.</p> <p>14. Use the required personal protective equipment for each hazardous chemical/material as specified in Material Safety Data Sheets.</p> <p>15. Inform management and/or supervision of any hazardous chemical/material to which they may be exposed and for which they have received neither training nor a Material Safety Data Sheet.</p> <p>16. Follow the National Fire Protection Association (NFPA) 704 Hazard Communication Global Harmonized standard that Standard that prohibits any unmarked container containing chemicals being used in conjunction with any duties or assignments unless the container is portable and in control of a specific person for their immediate use. (See Appendix D)</p> <p>17. Follow clean up procedures in the event of a spill and dispose of hazardous chemicals/materials as specified in Material Safety Data Sheets.</p>

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PROCEDURE:

Responsibility	Action
Safety Officer	18. Report to management -and/or supervision any concerns encountered while working with hazardous chemicals/materials. 19. Use only hazardous chemicals/materials approved for use by management -and/or supervision. 20. Chemicals/materials designated for disposal shall be labeled as Hazardous -Waste, with the label including the name of the waste, the disposing department, and the waste accumulation date. Hazardous Waste labels are available from supervisors at the Corporation Yard, the Utilities Operations Center, and the Sewerage Division. Material Safety Data Sheets should be stored with the hazardous waste. Either the Fleet Management/Building Services Superintendent -or the Fleet Operations Manager may be contacted for access to the Hazardous Waste Storage Shed. 21. Provide hazard analysis assistance. 22. Coordinate training requirements. 23. Maintain a database of hazardous chemicals/materials used by City employees in the course of their work. 24. Review Material Safety Data Sheets for all proposed purchases of new chemicals/materials.
Purchasing Division	25. Ensure Safety Officer concurrence -prior to purchase of any new chemical/material. 26. Require vendors/manufacturers to provide a current Material Safety Data Sheet with every shipment of a chemical/material.

Attachments:

1. Appendix A- Definition of Terms
2. Appendix B - ~~Material~~ Safety Data Sheet Program
3. Appendix C -Training Program
4. Appendix D - Labeling of Containers Program

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Appendix A

Definition of Terms Associated With ~~Material~~ Safety Data Sheets

Acid – A substance that dissolves in water, or certain other solvents, and releases hydrogen ions.

American Conference of Governmental Industrial Hygienists (ACGIH) • ~~An organization~~An organization of professionals in governmental agencies or educational institutions engaged in occupational safety and health programs. ACGIH develops and publishes recommended ~~occupational exposure limits~~ for ~~chemical substances~~ and physical agents.

Alkaline – Having the ability to neutralize an acid and form a salt.

American National ~~Standards Institute~~ (ANSI) – A private ~~organization~~ that recommends work practices and engineering designs pertaining to safety and health.

Carcinogen – A chemical or physical agent capable of causing cancer. Such an agent is often described as carcinogenic.

Chemical – Any element, chemical compound, or mixture of elements and/or compounds.

Chemical Abstracts Service (CAS) – A private organization that indexes information published in "chemical abstracts". CAS numbers identify specific chemicals.

Chemical Name – The scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or Chemical Abstracts Service (CAS) rules of nomenclature, or a name which will clearly identify the chemical for the purpose of conducting a hazard evaluation.

Combustible Liquid – Any liquid having a flash point at or above 100 F (37.8 C), but below 200 F (93.3 C), except any mixture having components with flashpoints of 200 F (93.3 C) or higher, the total volume of which makes up 99 percent or more of the total volume of the mixture.

Compressed Gas – 1) A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70 F (21.1 C); or, 2) A gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130 F (54.4 C), regardless of the pressure at 70 F (21.1 C); or, 3) A liquid having a vapor pressure exceeding 40 psi at 100 F (37.8 C).

~~Corrosive~~Corrosive – A liquid or solid that causes visible destruction or irreversible alterations in human skin tissue at the site of contact.

Decomposition – Breakdown of a chemical (by heat, chemical reactions, etc.) into simpler parts, compounds, or elements.

Dose – The amount of a chemical absorbed in a unit volume of a tissue or in the whole body. Usually expressed in milligrams per kilogram (mg/kg).

Duration – The length of time exposed to a substance.

Electronic SDS - Alternatives to paper SDSs such as computers or other electronic

Evaporation – The process by which a liquid is changed into a vapor state and mixed into the surrounding air.

Explosive – A chemical that causes a sudden, almost instantaneous, release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

Flammable- A liquid that has a flash point below 100 F (37.8 C).

Flash Point – The lowest temperature at which a liquid gives off enough flammable vapor to ignite and produce a flame when an ignition source is present.

Globally Harmonized System (GHS) – Is a Classification and Labelling of Chemicals and is internationally agreed-upon, created by the United Nations beginning in 1992.

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Hazard Category - The division of criteria within each hazard class (e.g., oral acute toxicity and flammable liquids) include four hazard categories. These categories compare hazard severity within a hazard class and should not be taken as a comparison of hazard categories more generally.

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Hazard Communication - All employers with hazardous chemicals in their workplaces must prepare and implement a written hazard communication program, and must ensure that all containers are labeled, employees are provided access to SDSs, and an effective training program is conducted for all potentially exposed employees.

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Hazardous Chemical - Any chemical which is a physical or health hazard.

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Hazard Class - The nature of the physical or health hazards, e.g., flammable solid, carcinogen, oral acute toxicity.

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Hazard Statement - A statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.

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Health Hazard - A chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. Hazardous chemicals include carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system and agents which damage the lungs, skin, eyes or mucous membranes.

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~~**Hazardous Chemical** – Any chemical that is a physical hazard or health hazard.~~

Immediate Use – The hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

Incompatibles – Materials that could cause dangerous reactions from direct contact with one another.

Irritant – A substance that can cause an inflammatory response or reaction in the eyes, the skin, or the respiratory system.

Label - An appropriate group of written, printed or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.

Label Elements - The specified pictogram, hazard statement, signal word and precautionary statement for each hazard class and category.

~~Label - Any written, printed, or graphic material, displayed on or affixed to containers of hazardous materials.~~

~~Material Safety Data Sheet (MSDS) - A form listing the properties and hazards of a hazardous substance.~~

Mixture - Any combination of two or more chemicals other than components resulting from a chemical reaction.

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Mutagenic – A material that induces genetic changes (mutations) in the DNA of chromosomes.

National Fire Protection Association (NFPA)- An international voluntary membership organization to promote/improve fire protection and prevention and establish safeguards against loss of life and property by fire.

National Institute of Occupational Safety and Health (NIOSH) – The agency of the Public Health Service that tests and certifies respiratory and air sampling devices. It recommends exposure limits and conducts investigations and research in workplace safety.

Occupational Safety and Health Administration (OSHA) – The regulatory and enforcement agency for safety and health in most US industrial sectors.

Oxidizer- A chemical other than a blasting agent or explosive that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.

Physical Hazard - A chemical or mixture that is combustible, explosive, pyrophoric, reactive or is a compressed gas, oxidizer or organic peroxide.

Pictogram - Is a symbol that represents an object or concept. Hazard pictograms are one of the key elements for the labelling of containers under the GHS. Examples of pictograms can be found in Attachment B.

Precautionary Statement - A phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical or improper storage or handling.

Pyrophoric – A chemical that will ignite spontaneously in air at a temperature of 130 F (54.4 C) or below.

Reactivity – The ability of a substance to undergo a chemical reaction such as combining with another substance. Also referred to as *unstable* or *self-reactive*.

Responsible Party – Someone who can provide additional information on the hazardous chemical and appropriate emergency procedures.

Route of Entry – The means by which a hazardous substance enters the body. Common routes are inhalation, ingestion, eye contact, and skin contact.

Safety Data Sheets - A Safety Data Sheet (SDS) is a document that contains information on the potential hazards (health, fire, reactivity and environmental) and how to work safely with the chemical product. It is an essential starting point for the development of a complete health and safety program and an essential component of the GHS which is intended to provide comprehensive information about a substance or mixture for use in workplace chemical management.

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Signal word - A word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in this section are "danger" and "warning." "Danger" is used for the more severe hazards, while "warning" is used for the less severe.

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Solvent – A substance (most commonly water, but often an organic compound) that dissolves another substance.

Systemic Effect – An effect of a hazardous material on a part of the body other than that at which it entered.

Teratogenic – Causes malformation of an embryo or fetus.

Threshold Limit Value (TLV) – A term used by ACGIH to express the airborne concentration of material to which nearly all workers can be exposed day after day without adverse effects. "Workers" means healthy individuals. The young, old, ill, or naturally susceptible will have lower tolerances and need to take additional precautions.

Time Weighted Average (TWA) - The average concentration of a chemical in air over the total exposure time. In most cases, it is the calculation or measurement of an employee's exposure to an airborne contaminant during an eight-hour period.

Toxicity- The extent to which a substance will cause harmful effects.

Trade Secret - Any confidential formula or information that is used in an employer's business and gives that employer an opportunity to obtain an advantage over competitors who do not know or use it.

Use - To package, handle, react, emit, extract, generate as a byproduct, or transfer.

UN Number- A registry number assigned to dangerous commonly carried goods by the United Nations Committee of Experts on the Transport of Dangerous Goods. This UN number is required in shipping documentation on packaging as a part of the Department of Transportation's regulations for shipping hazardous materials.

Volatility – A measure of how quickly a substance forms a vapor at ordinary temperatures.

Water-Reactive – A chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

Appendix B

~~Material~~ Safety Data Sheet Program

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Safety Data Sheets are fact sheets for chemicals that pose a physical or health hazard in the workplace. These sheets provide our employees with specific information on the chemicals in their work areas. SDSs must be GHS-compliant and consistent with the 16-section format as follows:

- Section 1: Identification
- Section 2: Hazard(s) Identification
- Section 3: Composition/Information on Ingredients
- Section 4: First Aid Measures
- Section 5: Fire-Fighting Measures
- Section 6: Accidental Release Measures
- Section 7: Handling and Storage
- Section 8: Exposure Control/Personal Protection
- Section 9: Physical and Chemical properties
- Section 10: Stability and Reactivity
- Section 11: Toxicological Information
- Section 12: Ecological Information (non-mandatory)
- Section 13: Disposal Considerations (non-mandatory)
- Section 14: Transportation Information (non-mandatory)
- Section 15: Regulatory Information (non-mandatory)
- Section 16: Other Information

Each SDS is provided in English and includes the sections required by OSHA in the order listed in the Hazard Communication Standard California Code of Regulations (CCR) Title 8 Section 5194 and of Fed/OSHA 29CFR (1910.1200).

SDSs are kept readily accessible to all employees during each work shift at all city-wide locations. It should be noted that OSHA allows SDSs to be kept in any form, as long as the information is provided for each hazardous chemical and is readily accessible during each work shift to employees when they are in their work area(s). Therefore, we have taken advantage of this flexible OSHA provision for alternatives to SDSs in the workplace, which include, but are not limited to, an online database accessible through city desktop computers and any mobile devices.

Each department/division shall update their inventory lists via the SDS database of hazardous chemicals/materials, along with storage locations, on an annual basis. Any changes in the inventory shall be reported to the appropriate Safety Officer or designee so that the database can be maintained to comply with Cal/OSHA requirements.

Any City employee who becomes aware that there is a hazardous chemical/material in the workplace for which a SDS is not available shall contact their supervisor, the appropriate Safety Officer or designee so that one can be obtained.

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In the event that an employee is exposed to a hazardous chemical/material and requires medical treatment, an SDS must be readily available to send immediately to the attending physician.

Department Heads, Division Heads, and Supervisors, or their designee, shall review Safety Data Sheets when considering the purchase of new products and/or product replacements and shall route SDS's to the appropriate Safety Officer or designee for

further consideration. If it is determined that the subject product will be used, the SDS shall be "Approved" by the appropriate Safety Officer or designee. The following procedure shall be mandatory for procuring hazardous chemicals and materials:

1. ~~Central Stores – Prior to requesting an item to be carried in the Central Stores inventory, an approved SDS shall accompany the request for stocking the new material.~~
1. Direct Purchase – A copy of the approved SDS shall accompany the purchase requisition.
2. Supervisors must verify that an approved SDS is available before allowing new hazardous chemicals/materials to be purchased and used.

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~~Material Safety Data Sheets (MSDSs) provide important information about chemical products and their ingredients. Manufacturers use different layouts and different styles for their Material Safety Data Sheets, but all provide the required information. Following is a description of the required information:~~

~~**Product Identity**~~

- ~~• Manufacturer's name, address, phone number~~
- ~~• Chemical name of the product~~
- ~~• Any other names under which the product is sold~~
- ~~• Chemical family~~
- ~~• Chemical formula~~
- ~~• Chemical Abstracts Service (CAS) number~~

~~**Hazardous Ingredients**~~

- ~~• Specific ingredients~~
- ~~• Their approximate percentages~~
- ~~• The OSHA permissible exposure limit, ACGIH Threshold Limit Values, and any other exposure limit used or recommended by the manufacturer or importer.~~

~~**Physical/Chemical Characteristics**~~

- ~~• Appearance~~
- ~~• Odor~~
- ~~• Boiling point~~
- ~~• Specific gravity~~
- ~~• Solubility in water~~

~~**Fire and Explosion Data**~~

- ~~• Flammability~~
- ~~• Flash point~~
- ~~• Firefighting procedures~~
- ~~• Correct type of fire extinguisher~~

~~**Reactivity Data**~~

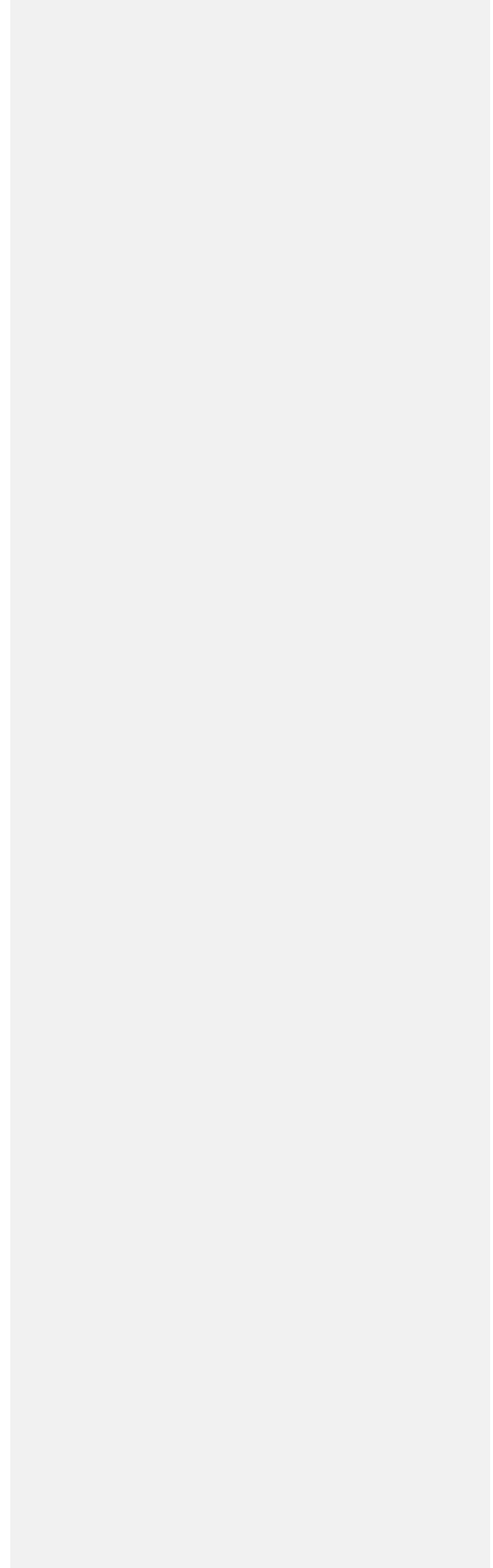
- ~~• Potential of the substance to react with other materials to produce fire, explosion, or new toxic substances~~
- ~~• Gives conditions to avoid: e.g. extreme temperatures, shaking or jarring, proximity to specific incompatible chemicals~~

~~**Health Hazards Data**~~

- ~~• Acute and chronic effects~~
- ~~• Whether the substance is carcinogenic, mutagenic, or~~

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- ~~■ Potential routes of entry of the hazardous substance into the body~~
- ~~■ Emergency and first aid procedures~~

~~Precautions for Safe Handling, Use, and Storage~~

- ~~■ How to handle spills and leaks~~
- ~~■ How to dispose of the substance safely~~
- ~~■ Protective measures relative to handling, use, and storage~~

~~Control Measures/Protection Information~~

- ~~■ Means of reducing exposure through engineering, work practices, and personal protective equipment~~

~~Additional Information~~

- ~~■ Date of Material Safety Data Sheet preparation or date of last change in contents~~
- ~~■ Name, address, and telephone number of the party responsible for preparing the Material Safety Data Sheet so that that person could, if necessary, provide additional information, including emergency procedures on the hazardous substance in question.~~

~~Department Heads, Division Heads, and Supervisors, or their designee, shall review Material Safety Data Sheets when considering the purchase of new products and/or product replacements and shall forward these sheets to the appropriate Safety Officer for further consideration. If it is determined that the subject product will be used, the MSDS shall be stamped "Approved", signed and dated by the appropriate Safety Officer, and marked with the name of any product being replaced. The following procedure shall be mandatory for procuring hazardous chemicals and materials:~~

- ~~1. Central Stores — Prior to requesting an item to be carried in the Central Stores inventory, an approved MSDS shall accompany the request for stocking the new material.~~
- ~~2. Direct Purchase — A copy of the approved MSDS shall accompany the purchase requisition.~~
- ~~3. Supervisors must verify that an approved MSDS is available before allowing new hazardous chemicals/materials to be purchased and used.~~

~~Any City employee who becomes aware that there is a hazardous chemical/material in the workplace for which a MSDS is not available shall contact their supervisor or the appropriate Safety Officer so that one can be obtained.~~

~~In the event that an employee is exposed to a hazardous chemical/material and requires medical treatment, a MSDS must be readily available to send immediately to the attending physician.~~

~~Each department/division shall update their inventory lists of hazardous chemicals/materials, along with storage locations and MSDS library, on a continuing~~

~~basis. Any changes in the inventory shall be reported to the appropriate Safety Officer so that the database can be maintained to comply with Cai/OSHA requirements.~~

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Appendix C

Training Program

All employees shall be provided with information and training on hazardous chemicals and materials in their work area at the time of initial assignment, and whenever a new hazardous chemical/material is introduced into their work area. Information and training may relate to general classes of hazardous chemicals/materials to the extent appropriate and related to reasonably foreseeable exposures on the job.

Information and training shall ensure that employees are informed of:

1. The ~~—~~requirements of the City's and the department/division's hazard communication policy. All employees shall be so informed as a part of their orientation at the time of hire and employees exposed to hazardous chemicals/materials in the work area shall receive annual refresher training.
2. Any operations in the work area where hazardous chemicals/materials are present.
3. The location and availability of the City's and the department/division's written hazard communication program, including list(s) of hazardous chemicals/materials and ~~Material~~ Safety Data Sheets required by this section.
4. The methods and observations that may be used to detect the presence or release of a hazardous chemical/material in the work area (such as the use of monitoring devices, the visual appearance or odor of hazardous chemicals/materials when being released, etc.).
5. The physical and health hazards of the work area, and the measures that they can take to protect themselves from these hazards, including specific procedures that the City has implemented to protect employees from exposure to hazardous chemicals/materials, such as appropriate work practices, emergency procedures (including spill response/clean-up/disposal and exposure first aid), and personal protective equipment to be used.
6. The details of the City's and the department/division's hazard communication program, including an explanation of the labeling system and of ~~Material~~-Safety Data Sheets, and how employees can obtain and use the appropriate information.

Employees must be provided training or refresher training prior to engaging in a non-routine task. Employees must be provided hazard notification and precautionary measures to avoid or minimize the potential risk of exposure.

Appendix D

Labeling of Containers Program

Every container of hazardous chemicals, except containers that will contain chemicals for immediate use, must be labeled, tagged, or marked in English to identify the chemical and to provide appropriate hazard warnings. Employees who speak other languages may add the information in their language to the material presented, as long as the information is also presented in English.

Manufacturers' labels on containers of hazardous substances shall not be removed or intentionally defaced (i.e., fade, get washed off) unless the container is immediately marked with the required information including the identity of hazardous substance(s) contained therein and the appropriate hazard warnings. The manufacturers' original label shall provide:

- Identity of the hazardous substance
- Signal word • Hazard statement(s)
- Pictograms (see Attachment B)
- Precautionary statement(s)
- Name, address and telephone number of the manufacturer, importer or responsible party

Employees are responsible for ensuring that appropriate labels are affixed to containers for all chemical products used in their work activities. This includes all bags, barrels, boxes, cans, cylinders, drums, vessels, storage tanks, and similar containers that are known to contain hazardous substances.

Alternative methods such as signs, placards, process sheets, and operating procedures are acceptable for individual stationary process containers, provided that the information is conveyed to all affected persons. Commonly used labeling systems include Department of Transportation, National Fire Protection Association and Hazardous Materials Identification System.

Employees and contractors shall have the opportunity to review these signs and placards at any time during their shift by contacting their immediate supervisor.

Secondary Containers

When the contents of large containers are broken down into smaller or secondary containers for in-house use, the supervisors in each work area must ensure that all secondary containers are properly labeled.

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Portable Containers

Portable containers are those in which an employee or independent contractor transfers chemicals from a labeled container to a portable one solely for immediate use.

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Pipe Labeling

Aboveground pipes transporting hazardous substances (e.g., gases, vapors, liquids, semi- liquids, or plastics) shall be labeled in accordance to 8 CCR §3321, "Identification of Piping".

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CONTRACTORS AND CONTRACT WORKERS

Hazard information, which includes access to SDS, must be made available to contractors and contract workers if the work is to be performed in the presence of hazardous chemicals. Contractors and contract workers must

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Appendix D

also disclose hazard information for hazardous chemicals that are brought into the work area that may affect campus employees.

1. The City's hazard communication policy requires that all containers of hazardous chemicals/materials be labeled using the National Fire Protection Association (NFPA) 704 Standard System for the Identification of the Fire Hazards of Materials. The labeling system is to label inadequately identified original containers to portable or stationary containers. This system provides a simple, readily recognized, easily understood system of marking that provides a general idea of the hazards and the severity of these hazards as they relate to handling, fire prevention, exposure, and control. The NFPA labels are divided into four sections of a diamond, each section marked with different colors and numbers. These sections represent the following:

FIRE HAZARD (Red)

- 0 - Will not burn
- 1 - Will ignite if preheated
- 2 - Will ignite if moderately heated
- 3 - Will ignite at most ambient conditions
- 4 - Burns readily at ambient conditions

HEALTH HAZARD (Blue) REACTIVITY (Yellow)

- 0 - Ordinary combustible 0 - Stable and not hazards in a fire reactive with water
- 1 - Slightly hazardous 1 - Unstable if heated
- 2 - Hazardous 2 - Violent chemical change
- 3 - Extreme danger 3 - Shock and heat may detonate
- 4 - Deadly 4 - May detonate

SPECIFIC HAZARD (White) OX-Oxidizer

ACID - Acid ALK - Alkali COR - Corrosive
-W - Use No Water

Radiation Hazard

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~~2. No container of hazardous chemical/material will be released for use until properly labeled, in English, to identify its contents and the appropriate hazard warnings.~~

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~~3. All secondary/auxiliary containers will be labeled in the same manner. Labels that meet the requirements of the City's hazard communication program for the hazardous material NFPA coding system and for hazardous waste are available in Central Stores.~~

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~~4. Labels for primary containers shall also include the name and address of the manufacturer.~~

Determine if we should have departments use the SDS database to create their own labels.

~~5. Material Safety Data Sheets shall be consulted to determine labeling requirements for each chemical/material. It is a requirement that the chemical/material name be placed on the label must be the same as that on the MSDS.~~

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~~6. Employees shall not remove or deface existing labels on containers of hazardous chemicals/materials.~~

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~~7. Employees shall ensure that labels remain legible and prominently displayed on containers.~~

~~8. Portable containers for immediate use during a single shift by a single employee who performs the transfer himself/herself are exempt from the labeling requirement.~~

~~9. Labeling requirements will also not apply to: 1) any pesticide as such term is defined in the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency; or 2) any consumer product or hazardous substance as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.), respectively, when subject to a consumer product safety standard or labeling requirement of those Acts or to regulations issued under those Acts by the Consumer Product Safety Commission and when maintained in its original container.~~

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Attachment 1: NFPA Hazard Identification System



NFPA Hazard Identification System

BLUE Diamond Health Hazard

- 4 Deadly
- 3 Extreme Danger
- 2 Hazardous
- 1 Slightly Hazardous
- 0 Normal Material

RED Diamond Fire Hazard (Flash Point)

- 4 Below 73 °F
- 3 Below 100 °F
- 2 Above 100 °F
Not Exceeding 200 °F
- 1 Above 200 °F
- 0 Will Not Burn

YELLOW Diamond Reactivity











- 4 May Detonate
- 3 Shock and Heat; May Detonate
- 2 Violent Chemical Change
- 1 Unstable if Heated
- 0 Stable

WHITE Diamond Special Hazard

- ACID – Acid
- ALK – Alkali
- COR – Corrosive
- OXY – Oxidizer
- ☢ – Radioactive
- W – Use No Water

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Attachment 2: GHS Hazard Pictograms and Related Hazard Classes

 GHS Hazard Pictograms and Related Hazard Classes		
		
Flame over Circle •Oxidizing gases •Oxidizing liquids •Oxidizing solids	Corrosion •Skin corrosion/burns •Eye damage •Corrosive to metals	Exploding Bomb Explosives Self-reactives Organic peroxides
		
Skull & Crossbones •Acute toxicity (fatal or toxic)	Environment •Aquatic toxicity	Gas Cylinder •Gases under pressure
		
Health Hazard •Carcinogen •Mutagenicity •Reproductive toxicity •Respiratory sensitizer •Target organ toxicity •Aspiration toxicity	Flame •Flammables •Pyrophorics •Self-heating •Emits flammable gas •Self-reactives •Organic peroxides	Exclamation Mark •Irritant (eye & skin) •Skin sensitizer •Acute toxicity •Narcotic effects •Respiratory tract irritant •Hazardous to ozone layer