



Simi Valley Schools

SIMI VALLEY UNIFIED SCHOOL DISTRICT

CHEMICAL HYGIENE PLAN

Simi Valley Unified School District Chemical Hygiene Plan

Foreword

The protection of the safety and health of its employees, students and environment is a high priority of the Simi Valley Unified School District (hereafter, "the District"). On March 25, 1991, the California Occupational Safety and Health Administration (Cal-OSHA) promulgated a rule for occupational exposure to hazardous chemicals in laboratories. This rule is designed to help protect laboratory workers from the hazards of the chemicals used. Section 1 provides a definition of which campus workplaces are considered laboratories under this standard.

Included in the standard is a requirement that all employers covered by the standard develop a Chemical Hygiene Plan (CHP). A CHP is a written program which sets forth work practices, equipment use and maintenance procedures, and personal protective equipment requirements that protect employees from the hazards presented by chemicals used in the lab. According to Cal-OSHA, the CHP must include standard operating procedures, criteria for the implementation of chemical control measures, measures to ensure proper operation of engineering controls, provisions for the training of workers, provisions for medical consultation in the case of exposure, designation of responsible people in the lab, and identification of procedures for the use of particularly hazardous substances or procedures. It is the intent of this document to satisfy these requirements.

It is up to Chemical Hygiene Plan Administrator (CHPA) to supplement this plan with more detailed information about the proper use of the particular chemicals used in their lab. These supplements may be in the form of written procedures, literature libraries, video presentations, and/or group or individual training. The CHPA and Chemical Hygiene Officer (CHO), if one is appointed, are responsible for the interpretation and enforcement of policies described in this CHP. The Chemical Hygiene Plan Administrator (CHPA) shall oversee the implementation and monitoring of this plan. The CHPA shall provide technical assistance with administration of this CHP when needed.

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Scope and Applicability

- A. The District is committed to the health and safety of its employees and students working in laboratories, science classrooms, and other facilities where chemicals are used regularly.
- B. Exposures will be controlled using the following methods:
 - 1. Engineering controls (vented hoods and cabinets)
 - 2. Safe work practices
 - 3. Personal protective equipment
 - a. When other methods of control are not feasible.
- C. This plan complies with the requirements set forth in California Code of Regulations, Title 8, section 5191 (CCR8, §5191) of the General Industry Safety Orders, Occupational Exposures to Hazardous Chemicals in Laboratories.
- D. Copies of this plan are located at the Risk Management Department in the Education Services Facility, as well as with the Science Chair of each location.

Responsibility

- A. Chemical Hygiene Officer will be the Director of Education Services, or their delegate. The Chemical Hygiene Officer is responsible for:
 - 1. Developing, implementing and maintaining the Chemical Hygiene Plan. The plan shall be reviewed every April.
 - 2. Monitoring the purchase, use, and disposal of chemicals in the science departments.
 - 3. Arranging training for laboratory and/or science classroom staff.
 - 4. Providing scheduled and periodic laboratory hygiene and housekeeping inspections including routine inspections of any emergency equipment required by this plan
 - a. At least semi-annually, the staff of the Science Department, DSF or District Safety Consultant, shall inspect the laboratories and chemical storage areas to ensure that they are being used in a safe manner. Additionally, an inventory of chemicals in each laboratory storage workroom should be compiled and updated on an annual basis.
 - b. See Appendix J for specific Inspection reports.
 - 5. Helping laboratory or science classroom staff evaluate hazards and devising adequate protective practices and facilities.
 - 6. Determining the required levels of protective apparel and equipment. Making sure protective equipment is available, in working order, used properly, and that required training is provided for its use
 - 7. Knowing the current legal requirements concerning regulated substances
 - 8. Assuring the following records are maintained (training, regular inspections, injury investigation and reports, and investigation of near misses etc.
 - 9. Seeking ways to improve the chemical hygiene program.
- B. Principals or Site Administrators are responsible for: ensuring that department heads and staff have proper support to conduct laboratory or science classroom lessons and activities in a safe manner.
- C. The Science Chair (located at each site) are responsible for:
 - A. Implementing, maintaining and understanding of the chemical hygiene plan within their Science Department.
 - B. Ordering through the District office all chemicals needed within their department.
- D. Teachers are responsible for:

1. Understanding and knowledge of policies described in this plan.
 2. Planning and conducting each experiment in accordance with the general practices developed by the California Department of Education and the procedures in this Chemical Hygiene Plan. If there is ever a conflict in recommended practices, the recommendations of **Section 5191** or other California safety orders will take precedence, and immediate notification should be brought to the attention of the Chemical Hygiene Officer
 3. Developing and practicing good personal chemical and biological hygiene habits
 4. Introducing students, as part of the lesson plan, to safe chemical handling procedures.
- E. Students
1. While students are not covered under the provisions of the CAL OSHA Standard, students should be made aware of chemical health and safety hazards in classroom situations and should be provided with information and equipment to protect themselves from those hazards. Student should be provided with training at the beginning of each course in which hazardous chemicals are used.
- F. All employees shall remain vigilant to unsafe work practices and conditions in the laboratories, storage areas, and other workspaces. All unsafe conditions and practices shall be reported immediately to the Science Department Head.

Criteria for Implementation of Control Measures - General Principles

- A. Chemical Exposures will be minimized using the following methods:
 - 1. Training of employees on hazard recognition, safe work practices and procedures for handling hazardous substances;
 - 2. Reviewing experimental procedures to assure the minimization of hazards and minimizing reagent usage to only what is necessary for the laboratory or science classroom lessons and activities;
 - 3. Formulating special procedures for highly hazardous substances, like formaldehyde;
 - 4. Maintaining housekeeping and work station orderliness.
 - 5. Adequate Ventilation: Refer to Section 4 of this plan for further information.
 - 6. Avoiding Underestimation of Risk
 - a. The District will train all laboratory and science classroom personnel to read and understand label hazard warnings and Material Safety Data Sheets (MSDS) and other sources of information. The District will review all laboratory procedures for safety hazards and exposure minimization. Science Department heads are to review and approve any new procedures to ensure they are in compliance with this Chemical Hygiene Plan.
 - b. Employees will not be allowed to ignore or underestimate hazards. Employees are allowed to perform their own hazard evaluation and report any concern to Science Department heads and the Chemical Hygiene Officer.
- B. Enforcement:
 - 1. Any personnel with an assigned responsibility under the Chemical Hygiene Plan, including but not limited to all of the above, shall upon failing to comply, be subject to appropriate disciplinary action.
- C. Exposure Limits
 - 1. The district recognizes its obligation to comply with the applicable personal exposure limits (PELs) and Threshold limit Values (TLVs) for substances in the laboratory.
 - 2. Ventilation, including fume hoods, along with mandatory work practices require procedures involving potential exposures to be conducted in a hood, facilitates compliance with exposure limits.
 - 3. The district will monitor exposure:
 - a. If it suspects that exposure approaches applicable limits,
 - b. To verify controls, or
 - c. When required by a specific Cal/OSHA regulation.

Criteria for Implementation of Specific Control Measures - Laboratory Facilities

- A. General Ventilation in classrooms and storage areas provides the following:
 - 1. Dilution ventilation for relatively less hazardous substances used in bench-top lessons and activities,
 - 2. Adequate supply of make-up air to the fume hoods,
 - 3. Maintains control over passive migration of volatile substances by utilizing negative pressure relative to adjacent classrooms.

- B. Laboratory Hoods (CCR8, §5154.1);
Purpose: prevent harmful exposure to hazardous substances

1. Design
 - a. Designed to draw air inward at an average linear face velocity of 100 feet per minute
 - b. Each hood has a continuous monitoring device to indicate that the air is flowing into the exhaust system during operation
 - c. Exhaust stacks are located to preclude re-circulation of hood emissions within the building
 2. Use:
 - a. Mechanical ventilation must be in operation at all times when hoods are in use, and for sufficient time after to clear the air of airborne contaminants.
 3. Maintenance
 - a. Fume hoods which do not meet minimum standards are posted with plainly visible placards prohibiting the use of hazardous substances in the hood, and repaired.
- C. Emergency Eyewash, Safety Shower & Fire Extinguisher (CCR8, §5162 & §6151)
1. An emergency eyewash and safety shower are kept accessible within 10 seconds at a normal gait from any point of expected exposure. Each Science Chair is responsible for checking the expiration date on the eye wash solution yearly. If used or expired, each site should contact the Purchasing Department to order replacements.
 2. Plumbing allows both eyewash and shower to be used simultaneously
 3. Employees and students are trained to know the location of the eye wash and safety shower and how to use these devices in an emergency,
 4. Eye wash and safety shower are tested monthly to ensure the flow rate is substantially copious and the eye wash fountains meet in the center.
 5. Portable fire extinguishers are located in the laboratory or science classroom at visible and accessible locations,
 6. Fire extinguishers are to be unobstructed and available for immediate use at all times,
 7. Employees authorized to use fire extinguishers include all laboratory employees trained in their use. This training will be provided initially and periodically and covers proper use and limitations of such extinguishers.
 8. Fires that cannot be controlled by portable fire extinguishers or become structural fires are responded to by immediate evacuation, sounding of the fire alarm and coordination with the fire department.

Administrative & Standard Operating Procedures

- A. Employees and students are to observe all applicable general safe practices as outlined in the District Injury and Illness Prevention Program (IIPP) or Code of Safe Practices.
- B. Standard Operating Procedures are **generally accepted and best practices** for use of chemicals in particular situations. These SOPs may be overridden under special circumstances when appropriate. The reasons for such modifications, if any, shall be documented by the **DSF**. When SOPs are not available for a specific lab situation, the **DSF** in conjunction with the District Safety Consultant will develop them, in consultation with the references cited below and the district science facilitator.
- C. Chemical Purchasing, Distribution, and Storage
 1. It is the responsibility of each individual Science Chair in coordination with District Purchasing personnel to establish guidelines for the procurement of chemicals. All employees involved in the receiving of chemicals should be informed about proper handling, storage, and disposal procedures. All chemicals should be dated upon receipt.
 2. Chemicals should not be accepted without accompanying labels, Safety Data Sheets, and proper packaging. Damaged or leaking containers should not be accepted. Employees should be informed about the proper handling of new chemicals that are known or suspected as hazardous; particularly those that are known, or suspected carcinogens, or those with special storage or handling requirements.
 3. Amounts of materials purchased and stored are to be the minimum practical;
 4. Padded bottle carriers, or boots, are to be used when transporting hazardous chemicals from storage to the classroom or from one classroom to another;
 5. Large bottles are to be lifted with two (2) hands, one hand under the bottle and the other hand around the neck of the bottle. Bottles are not to be lifted by the lid or molded ring at the top.
 6. Chemicals should be stored according to their compatibility group in a *single* safe and practical storage pattern. Adopt and standardize a plan that is agreeable to all staff members and use it *throughout* the school.
 - a. The storage compatibility categories shown in *Science Safety Handbook for California Public Schools*, chapter 7, table 7.4, are suggested for use in all California secondary schools. Use of more than one storage compatibility system at one site may be dangerous.
 7. Chemicals should be stored in chemically inert containers appropriate for the type and quantity of chemical. The containers are to be stored in a location or manner to prevent physical damage to or deterioration of the container. For example, chemical containers should not be stored directly on the floor. This precaution will prevent the contact of chemicals with water from flooding, mopping, or condensation and the puddling of liquid contents of defective or broken containers around adjacent stored chemicals. Large containers should be stored on the lowest shelves to minimize the danger of breakage or spillage when containers are being removed or replaced. (Refer to *CCR*, Title 8, Division 1, Chapter 4, Subchapter 7, Group 16, Article 109, sections 5163 and 5164.)
 8. Under no circumstances shall chemicals be brought in from home.
 9. Under no circumstances can chemicals listed in tables 7.2 and 7.3 in the California Science Safety Handbook be purchased.
- D. Procedures for procuring particularly hazardous chemicals (Appendix A)
 1. Teachers shall submit to the local Science Chair the following information:

- a. Who will handle the chemicals
- b. When and where will the chemicals be stored, used and disposed of.
- c. The specific experiments and procedures. The description should demonstrate that the chemicals will be appropriately handles before, during and after the experiments.
- d. The personal protective equipment that will be used by the instructor and the students.
- e. The methods of disposing of the hazardous waste generated by the experiments.

E. Housekeeping, Maintenance, and Inspections

1. All aisles and walkways are to be kept clear for passage, especially in an emergency;
2. All safety showers and eye-wash stations are to be unobstructed at all times;
3. All work is to be kept in a neat and orderly manner. Work areas are to be cleaned up upon completion of a task or at the end of each day;
4. No chemicals are to be stored near any sink;
5. No chemicals are to be placed on any office-style desk;
6. All chemical containers are to be properly labeled and closed after usage;
7. Balances are to be cleaned after each use by the user;
8. Floors are to be cleaned regularly;
9. All spills are to be cleaned up in accordance with paragraph g., Spill and Accident Procedure;
10. All chemicals are to be inspected for deterioration, container integrity, and replacement;
11. Safety showers and eye-wash stations are to be inspected and tested monthly (CCR8, §5162);
12. Fire extinguishers are to be checked monthly to ensure that there is no loss of charge (CCR8, §6151). Annual inspection and recharging as necessary will be performed by an outside contractor (CCR19, §575.1);
13. Adequate first-aid materials, approved by the consulting physician, are to be readily available for each laboratory. Such materials shall be kept in a sanitary and usable condition. A frequent (monthly) inspection shall be made of all first-aid materials, which shall be replenished as necessary (CCR8, §3400);
14. Formal housekeeping and chemical hygiene inspections shall be performed at least semiannually, informal inspections are to be continual;
15. Lab hoods are to be inspected and re-certified annually
 - a. VCSSFA
 - b. Date of inspection and tested velocity is posted on the front of the fume hood.

F. Environmental Monitoring

1. Refer to Section 3, paragraph e., Exposure Limits.

G. Personal Protective Equipment

1. Clothing should not be loose so as to not interfere with science class activities.
2. Shoes are to have non-skid sole, closed toe, and low heel (CCR8, §3385);
3. Eye protection meeting American National Standards Institute (ANSI) Z87 is to be worn at all times when working with chemicals in the laboratory (Ed Code, §32031), (CCR8, §3382);
4. Protective gloves are to be used whenever handling anything potentially hazardous to the skin (CCR8, §3384);
 - a. A supply of gloves of different types is to be available.
 - b. The proper type of protection will vary with the material being handled.

5. Additional protective clothing, such as aprons or lab coats may be provided according to hazard and need.

H. Signs and Labels

1. Emergency telephone numbers of emergency personnel, supervisors and other workers as deemed appropriate shall be posted near the telephones located in the Science classrooms, preparation rooms and storerooms, and in the Industrial Technology and Fine Art laboratories, shops and chemical/material storerooms. These signs shall be checked quarterly by the site's CHO for accuracy. Location signs for safety showers, eye-wash stations, fire extinguishers, first aid kits, emergency exits, and other safety equipment;
2. Flammable signs on storage cabinets for flammable and combustible liquids;
3. Areas where food consumption and storage are permitted and prohibited;
4. Warnings at areas or equipment where special or unusual hazards exist.

I. Spill and Accident Procedure

1. Spill and accident procedures have been established as part of the district's Standardized Emergency Management System (SEMS) Plan.
2. In the event of a chemical spill, release or other accident, lab workers will respond as outlined in the District's Emergency Response plan. The size of the spill and its hazards shall dictate the proper response. If there is any doubt about the lab worker's or custodian's ability to safely clean up the spill, and conditions do not warrant contacting emergency response services, then the Chemical Hygiene Plan Administrator shall be contacted.

Note: Proper emergency response relies upon knowledge of the lab hazards. For this reason, a campus wide chemical inventory in labs shall be conducted annually as specified by the CHPA. The chemical inventory is provided in Appendix C...

- a. The SEMS plan is compliant with the requirements of CCR 8, section 3220, Emergency Action Plan and the National Incident Management System (NIMS).

J. Waste Disposal (CCR22, §66262.10 et seq.);

1. Laboratory waste should be segregated by waste type to facilitate proper disposal. For example, different waste receptacles may be used for paper, glass, metal, plastic, organics, biological, and hazardous (such as waste chemicals).
2. Hazardous wastes should be placed in compatible containers and segregated to prevent interaction of incompatible wastes.
3. Any hazardous waste should be disposed of according to applicable hazardous waste disposal regulations.

General Rules for Handling Chemicals

- A. Understand the potential hazards of all the materials, processes, and equipment that will be used in the school laboratory.
- B. Know the risks involved in using chemicals and prepare the chemicals before class begins. Neutralizing solutions should be available for dangerous materials used by students.
- C. Report any student injury or accident immediately on the school district's accident report form, available in the main office or health office of each school.
- D. Reagent and storage bottles containing chemicals are to be properly labeled (including date of receipt or preparation) at all times. If the label is lost and the contents are unknown, the substance should be regarded as potentially hazardous and must be chemically categorized by an experienced waste specialist before possible treatment and transport to a proper disposal site.
- E. Poisons and dangerous reactants are to be made inaccessible to students except during actual usage. Students should be instructed never to taste or place any substance or object in the mouth except as specifically directed by the teacher under controlled conditions.
- F. Suction devices or pumps are to be used when pipetting. *The mouth should never be used for this purpose.*
- G. No explosive chemicals should be kept in the school laboratory. See chapter 7, table 7.2, for examples of common explosive chemicals, which *must be disposed of only by trained and qualified officials.* (Consult chapter 7, section E, Step 2, for more information.)
- H. Food for human consumption should not be stored in refrigerators or cabinets or on shelves used for storing chemicals or biological materials. Food should *not* be eaten in science laboratories or storage areas because of the danger of ingesting toxic or corrosive substances. (CCR8, §3368);
- I. In an experiment or demonstration involving any flammable liquid (such as alcohol), care must be taken that any flame in the room is at an absolutely safe distance from the volatile liquid. Vapors may flow along a table or countertop for long distances to an unseen ignition source, then blast back. Beware of gas water heaters in or near science classrooms or stockrooms.
- J. Teachers should be familiar with the location of all master controls for utilities, especially the master valve in each room for the gas outlets. Mark or color-code all services clearly.
- K. The instructional area should be kept free of spills, broken glass, and unnecessary equipment and materials. Good housekeeping is essential.
- L. Teachers should avoid unsafe practices by instructing and cautioning students about the correct techniques for the following activities:
 - 1. Using a Bunsen burner and other related flame-producing equipment;
 - 2. Heating liquids in test tubes, beakers, and crucibles;
 - 3. Handling reagent bottles;
 - 4. Using polyethylene squeeze bottles;
 - 5. Obtaining and handling dry chemicals;
 - 6. Cutting, bending, and fire-polishing glass tubing and rods;
 - 7. Using other laboratory materials, as appropriate (for example, pipettes)
 - 8. Proper dissection procedures and disposals of specimens as directed by manufacturer or state laws.
- M. Laboratories should always be locked when not in use.

- N. The custodial staff should be alerted to general hazards they may encounter in science areas and to special situations that arise.
- O. Teachers should set an example for the students by wearing goggles, aprons, gloves, and appropriate footwear when students are required to do so. Follow all safety regulations and be alert at all times, reminding students of hazards. Students who do not adhere to the rules should not be allowed to participate until the teacher is assured there will be no further infractions.

Training and Information

- A. Requirements
 1. Training and information will be provided to any employee when initially assigned to a laboratory or science classroom.
 2. Training will be provided prior to assignments involving new exposure to hazardous substances.
- B. Information. Employees shall be informed of:
 1. The contents of this regulation and its appendices which shall be available to employees;
 2. The location and availability of the employer's Chemical Hygiene Plan;
 3. The exposure limits for Cal/OSHA regulated substances or recommended exposure limits for other hazardous chemicals where there is no applicable Cal/OSHA regulation;
 4. Signs and symptoms associated with exposures to hazardous chemicals used in the laboratory; and
 5. The location and availability of known reference material on the hazards, safe handling, storage and disposal of hazardous chemicals found in the laboratory including, but not limited to, Material Safety Data Sheets (or Safety Data Sheets) received from the chemical supplier.
- C. Training Components
 1. On the applicable details of the employer's written Chemical Hygiene Plan;
 2. Methods and observations that may be used to detect the presence or release of a hazardous chemical (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
 3. The physical and health hazards of chemicals in the work area; and
 4. The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.
- D. Related Training (not required by Section 5191, but may be required by other regulations)
 1. Hazard Communication, including:
 - a. Chemical hazard information
 - b. Labels
 - c. Material Safety Data Sheets
 2. Specific hazard information and work practices;
 3. Personal protective equipment and usage;
 4. Safety equipment;
 5. First aid and procedures for medical emergencies;
 6. Fire prevention and fire extinguisher use;
 7. Standardized Emergency Management System (SEMS).
 - a. Chemical emergency response procedures;
- E. Training Documentation
 1. Training records will be maintained for at least three (3) years.

Medical Consultation and Surveillance

- A. Medical Consultation is available to any science staff when:
 - 1. There has been a significant spill or uncontrolled release of chemical vapors or fumes,
 - 2. A skin rash or irritation occurring after contact with a chemical,
 - 3. Other signs or symptoms associated with a hazardous chemical to which the employee may have been exposed in the laboratory or science classroom or chemical storage area,
 - 4. Corrosive splash to the eyes or face,
 - 5. If exposure monitoring reveals an exposure level above applicable levels,
 - 6. When required by a specific Cal/OSHA regulation,
 - 7. At the request of the employee if he or she believes it necessary and reasonably work-related.
- B. First Aid
 - 1. Employees trained in first aid are available during school hours.
 - 2. A means of summoning additional emergency medical assistance has been established as part of the district's SEMS Plan.

Material Safety Data Sheets (or Safety Data Sheets)

- A. Material Safety Data Sheets (MSDSs) or Safety Data Sheets (SDSs) received for all chemicals handled in laboratory and science classrooms shall be maintained by the school district in accordance with the district Hazard Communication Program.
- B. Employees are afforded access to MSDSs or SDSs as provided in the district Hazard Communication Program.

Recordkeeping

- A. Injury and illness records
 - 1. Employee injury and/or illnesses will be documented and reported pursuant to the district IIPP and California workers' compensation laws.
 - 2. Student injury and/or illness will be documented on the "Report of Personal Accident" form, and forwarded to the district third party administrator for liability claims.
- B. Chemical hygiene plan records are to be maintained to document the status of fume hoods and other safety equipment and that the program is implemented.
- C. Medical records are to be maintained in accordance with CCR 8, section 3204, Access to Employee Exposure and Medical Records.
 - 1. Medical records include:
 - a. Exposure monitoring records,
 - b. Medical Surveillance records,
 - c. MSDSs or SDSs.

Chemical Hygiene Plan Review

- A. The Chemical Hygiene Officer and the department heads from the various school sites will meet annually to review the Chemical Hygiene Plan. The Chemical Hygiene Officer will assign responsibility for taking corrective action of any deficiency noted.
- B. A record of the review meeting will be maintained for three (3) years.
- C. The record will include:
 - 1. The date of the meeting
 - 2. Meeting attendee names
 - 3. A list of corrective actions needed
 - 4. Dates of completion

List of Appendices

Appendix A – Definitions

Appendix B – Lab Specific Hygiene Procedures

Appendix C – Prohibited High Hazard Chemicals

Appendix D – Products Prohibited in Fine Arts

Appendix E – Chemicals Hazardous Materials Inventory

Appendix F – List of Chemicals restricted to instructor use prior to prep for Student lab use

Appendix G – District Hazardous Waste Pick Up Request

Appendix H – District Spill/Incident reporting form.

Appendix I - District Inspection Forms

All appendices are available by request from the District Risk Management Department.

References and Other Information Sources

A. Literature References

1. California Department of Education, Science Safety Handbook for California Public Schools, CDE Press, Sacramento, CA, 2012.
2. National Research Council, Prudent Practices for Handling and Disposing Hazardous Chemicals in Laboratories, National Academy Press, Washington, D.C., 1995.
3. California Code of Regulations, Title 8, §5191, Occupational Exposure to Hazardous Chemicals in Laboratories.
4. California Code of Regulations, Title 8, §5154.1, Ventilation Requirements for Laboratory- Type Hood Operations

B. Internet Resources

1. Material Safety Data Sheets <http://hazard.com/msds>
2. Material Safety Data Sheets – County wide
<https://msdsmanagement.msdsonline.com/a484e82f-ab4140a6-a2d6-e9bbd89bc48d>
3. Cal-OSHA Regulations <http://www.dir.ca.gov/samples/search/query.htm>
4. California Department of Education <http://www.cde.ca.gov>

Appendix A: Definitions – CCR Title 8, Section 5191

Action level – A concentration designated in Title 8, CCR for a specific substance, calculated as an 8-hour time weighted average, which initiates certain required activities such as exposure to monitoring and medical surveillance.

Designated area – An area that may be used for work with particularly hazardous substances. A designated area may be the entire laboratory, an area of a laboratory, or a device such as a laboratory fume hood.

Chemical Hygiene Officer (CHO) – The individual responsible for overseeing the implementation and monitoring of this plan as well as provide technical assistance with administration of the CHP when needed.

Hazardous Chemical – A chemical for which there is statistically significant evidence that acute or chronic health effects may occur in exposed personnel, based on at least one study conducted with established scientific principles.

Laboratory - A facility where the “laboratory use of hazardous chemicals” occurs. It is a workplace where relatively small quantities of hazardous chemicals are used on a non-production basis, and can include greenhouses.

Laboratory use of hazardous chemicals – Handling or use of such chemicals in which all of the following conditions are met:

- Chemical manipulations are carried out on a “laboratory scale”
- Multiple chemical procedures or chemicals are used
- The procedures involved are not part of a production process, nor in any way simulate a production process
- Protective laboratory practices and equipment are available and in common use to minimize the potential for employee (and student) exposure to hazardous chemicals

Laboratory scale – Work with substances in which the containers used for reactions, transfers, and other handling of substances are designed to be easily and safely manipulated by one person. “Laboratory scale” excludes those workplaces whose function is to produce commercial quantities of materials.

Science Teacher – An individual that has authority and responsibility for the students and procedures conducted in an individual laboratory environment.

SDS – Safety Data Sheet

Particularly hazardous substances – These include “select carcinogens, reproductive toxins, and substances with a high degree of acute toxicity”.

Permissible exposure level (PEL) – The maximum permitted 8-hour time-weighted average concentration of an airborne contaminant.

Physical hazard – A substance for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, an explosive, a flammable, an organic peroxide, an oxidizer, a pyrophoric, an unstable (reactive), or water-reactive material.

Protective laboratory practices and equipment – Those laboratory procedures, practices and equipment accepted by laboratory health and safety experts as effective, or that the employer can show to be effective, in minimizing the potential for employee exposure to hazardous chemicals.

Regulated carcinogen – Any of the following substances or any substance containing any or the following substances:

- 2-Acetylaminofluorene
- Acrylonitrile
- 4-Aminodiphenyl
- Asbestos
- Benzene
- Benzidine (and its salts)
- bis-Chloromethyl ether
- 4-Nitrobiphenyl
- Cadmium N-Nitrosodimethylam INE
- Dibromchloropropane (DBCP)
- 3,3'-Dichlorobenzidine (and its salts)
- 4-Dimethylaminoazobenzene
- Ethylene dibromide
- Ethyleneimine
- Ethylene Oxide
- Formaldehyde/Formalin
- Inorganic Arsenic
- Methyl Chloromethyl ether
- 4,4'-Methylene bis (2-chloraniline)
- Alpha-Maphthylamine
- Beta-Naphthylamine
- 4-Nitrobiphenyl
- N-Nitrosodimethylamine
- Beta-Propiolactone
- Coke Oven Emissions Vinyl Chloride

Reproductive Toxins – Chemicals that affect the reproductive capabilities including chromosomal damage (mutations) and effects on fetuses (teratogenesis).

Select carcinogen – Any substance that meets one of the following criteria:

- It is regulated by Cal/OSHA as a carcinogen
- It is listed under the category “known to be carcinogens” in the Annual Report on Carcinogens published by the National Toxicology Program (NTP) (1985 edition)
- It is listed under Group 1 (carcinogenic to humans) by the International Agency for Research on Cancer Monographs (IARC) (Volumes 1-48 and Supplements 1-8)
- It is listed in either Group 2A or 2B by IARC or under the category “reasonably anticipated to be carcinogens” by NTP and causes statistically significant tumor incidence in experimental animals in accordance with any of the following criteria:
 - After inhalation exposure of 6-7 hours per day, 5 days per week, for a significant portion of a lifetime to dosages of less than 10 mg/m³
 - After repeated skin application of less than 300 mg/kg of body weight per week
 - After oral doses of less than 50 mg/kg of body weight per day

Shall – Designates a regulatory mandate

Should – Designates a recommendation contained in the regulations or a recommendation from a recognized industry standard.

Appendix B: Laboratory Specific Chemical Hygiene Procedures

Use the following instructions to complete the **Laboratory Specific Procedures Form**

1. Identify the Chemical Hygiene Officer or person responsible for the overall conduct of the work involving the chemical.
2. Identify the people or group who will actually be using the materials. If a group of short-term workers and/or students will perform the work, indicate this and the person who will supervise the work.
3. Identify the Department(s) under whose control this work will be done.
4. Identify the room and building this material will be used in.
5. Identify the materials to be used.
 - List the chemical name and CAS number.
 - Circle the quantity to be used in the next year.
 - Circle the range of approximate concentration of the materials.
6. Circle the type of hazard the material presents.
7. Indicate whether or not there is safety information for the materials and whether or not training on safe use has been provided.
8. Indicate the control measures to use the materials safely.
9. Indicate how the user will be exposed to the chemicals.
10. Indicate if medical monitoring is required for users.
11. Indicate the room and type of storage area where these materials will be stored.
12. Indicate the method of disposal.

Laboratory Specific Procedures Form

Chemical Hygiene Officer (CHO):

Departments:

Laboratory Location Building:

Room:

Materials or Hazard Group:

Quantity used in the next year:

- <1 liter or 100 gm
- 1 liter/100 gm to 5 liter/1 kg
- 5 liter/1 kg to 20 liter/5 kg
- > 20 liter/5 kg

Concentration used:

- Dilute (<5%)
- Intermediate (5-25%)
- Concentrated (>25%)

What hazards do these materials present?

- Flammability
- Corrosivity
- Reactivity
- Acute Toxicity
- Chronic Toxicity
- Carcinogenicity/Teratogenicity/Mutagenicity

Chemical Safety Information and Training

Is safety information for these materials available? YES/NO

Has training in the safe use of these materials been provided to all users? YES/NO

What control measures are necessary to use the materials safely?

a) Engineering Controls

- Fume Hood
- Biosafety cabinet
- Gas monitors

b) Personal Protective Equipment

- Lab coats
- Proper Gloves
- Eye Protection
- Respiratory Protection

c) Emergency Response Equipment

- Safety Shower
- Eyewash
- Spill control Equipment
- Fire Extinguisher
- Fire Blanket

How will user exposure to these chemicals be assessed?

- Professional judgment of lab supervisor
- Air Sampling
- Other

Is medical monitoring required for users of these materials?

YES/NO

Where and with what equipment are the materials to be stored?

- Room
- General storage
- Spark-proof refrigerator/freezer
- Flammables cabinet
- Corrosives cabinet

Method of disposal

- Hazardous waste pick-up
- Neutralized or consumed during process

As part of your protocol planning effort, please indicate the ways that you can minimize the amount of hazardous waste generated and attach a short narrative description of those methods to this form.

I accept responsibility for the proper use of these materials in the labs named above and have assigned chemical hygiene responsibilities within the lab to people with the appropriate training and/or experience.

CHO Signature _____

Date: _____

Appendix C: Prohibited High Hazard Chemicals

Table 1: Carcinogens, Reproductive Toxins or Highly Toxic Chemicals

The chemicals listed below are extremely hazardous due to their toxic effects and are prohibited from use, handling or storage within District property or the scope of the District's educational environment. Any educational products that contain these chemicals are also prohibited. This is not an exclusive list, and may be expanded, based on the professional judgment of the CHPA, District Risk Manager and Chemical Hygiene Committee. Workers will be advised that these chemicals are prohibited.

Biologically active compounds

- Protease inhibitors (PMSF, Aprotin, Pepstatin A, Leupeptin)
- Protein synthesis inhibitors (cycloheximide, Puromycin)
- Transcriptional inhibitors (α-amanitin and actinomycin D)
- DNA synthesis inhibitors (hydroxyurea, nucleotide analogs/dideoxy nucleotides, actinomycin D, acidicolin)
- Phosphatase inhibitors (okadaic acid)
- Respiratory chain inhibitors (sodium azide)
- Kinase inhibitors (NaF)
- Mitogenic compounds (concanavalin A)
- Mitogenic inhibitors (colcemid)
- Castor bean (*Ricinus communis*) lectin: Ricin A, Ricin B, RCA Toxins
- Diisopropyl fluorophosphates: highly toxic cholinesterase inhibitor; the antidote, atropine sulfate and 2-PAM (2-pyridinealdehyde methiodide) must be readily available
- N-methyl-N'-nitro-N-nitrosoguanidine: carcinogen (this chemical forms explosive compounds upon degradation)
- Phalloidin for *Amanita Phalloides*: uses for staining actin filaments
- Retinoids: potential human carcinogen
- Urethane (ethylcarbamate): an anesthetic agent, potent carcinogen and strong teratogen, volatile at room temperature

Table 2: Shock Sensitive and Pyrophoric Chemicals

The classes of chemicals listed below may explode when subjected to shock or friction.

Peroxide Hazard on Concentration: Do not distill or evaporate without first testing for the presence of peroxides (discard or test for peroxides after 6 months).

- Acetaldehyde di-diethylene glycol dimethyl ether (diglyme)
- Dioxane
- Ethylene glycol ether acetates
- Ethylene glycol monoethers (cellosolves)
- Furan
- Methylacetylene
- Methylcyclopentane

Table 3: Explosive Chemicals

The list of chemicals is taken from Table 7.2 Explosive Chemicals (for Immediate Disposal *Only by Explosive Technicians*) of the *Science Safety Handbook for California Public Schools*, page 113.

- Benzoyl Peroxide
- Carbon Disulfide
- Diisopropyl Ether (if stored longer than 12 months)
- Ethyl Ether/Diethyl Ether (if stored longer than 12 months)
- Nitrogen Triiodide
- Perchloric Acid
- Phosphorous (white/yellow) Picric Acid
- Potassium Metal
- Sodium Azide

Table 4: Extremely Hazardous Chemicals

This list of chemicals is taken from Table 7.3 Extremely Hazardous Chemicals for Prompt Disposal of the *Science Safety Handbook for California Public Schools*, page 126.

- 2-Acetylaminofluorene
- Acrylamide (neurotoxin)
- 4-Aminodiphenyl
- Aniline
- Arsenic Powder, Arsenic Trioxide
- Asbestos
- Benzene, Benzidine
- Beryllium, Beryllium Compounds
- Cadmium Salts
- Carbon Tetrachloride
- Chloroform
- Chromium (VI) Oxide and all hexavalent chromium compounds
- Cobalt, Cobalt II Oxide
- p-Dichlorobenzene
- 3,3-Dichlorobenzidine and salts
- 4 Dimethylaminoazobenzene
- Ethylene Dichloride (1,2 Dichloroethane)
- Formaldehyde
- Hydrazine (anhydrous)
- Hydrofluoric Acid
- Lead Acetate, Lead Arsenate
- Methylchloromethyl Ether
- 4-4' Methylene Bis (2-Chloroaniline)
- Methylene Chloride (Dichloromethane)
- Alpha Naphylamine, Beta Naphylamine
- Nickel Powder, Nickel Compounds
- 4-Nitrobiphenyl

- Beta Propiolactone
- Sodium Arsenate, Sodium Arsenite
- Vinyl Chloride

- **Appendix D: Products Prohibited from Use in Fine Arts**

- The California Education Code Section 32064 prohibits schools from ordering or purchasing any product that contains toxic or carcinogenic substances for use in grades K-6. The law (Education Code Section 32065) also restricts the purchase of such products in grades 7-12, allowing the use only if the product bears a label informing the user of the presences of hazardous ingredients, the potential health effects, and instructions for the safe use. This restriction applies whether or not the product is included on the list of unacceptable art and craft supplies.
- The District will adopt in total the list “Art and Craft Materials Which Cannot Be Purchased for Use in Kindergarten and Grades One Through Six”.

Appendix E: Chemical/Hazardous Material Inventory

*Complete the attached form by **June 1st** (each year) and/or as changes are necessary. Keep a copy of this form in the Department file and send the original to the Chemical Hygiene Plan Administrator or designee. The District may utilize the services of a chemical specialist to conduct periodic inventories. When those services are used, the service provider's inventory report will replace the existing internal inventory.*

Department: _____

Building: _____

Person Completing Inventory: _____

Date of Inventory: _____

Inventory Reviewed By: _____

Appendix F: List of Chemicals Restricted to Instructor Use Prior to Instructor Preparation for Student Laboratory Use

The following is a list of chemicals that the District has determined will not be used by students prior a reduction of the hazardous natural of the chemical thorough approved laboratory procedures utilized to prepare the chemicals for use in student laboratory exercises.

- Antimony
- Bromine (ampule)
- Calcium Carbide
- Ethidium Bromide
- Hydrogen Peroxide (35%)
- Lead
- Lead Carbonate
- Lead Chloride
- Lead Nitrate
- Lead Oxide
- Lead Peroxide (dioxide)
- Lead Sulfate
- Lead Sulfide
- Mercurous/Mercuric Nitrate
- Mercury Compounds
- Mercury Metal
- Nickel Nitrate
- Nicotine
- Phenol (carbolic acid)
- Phosphorus (red)
- Potassium Chlorate
- Toluene

Appendix G: District Hazardous Waste Pickup Request

A copy of this form can be accessed on the SVU District Website under Risk Management.

Appendix H: District Spill Incident Reporting Form

Appendix I: Inspection Forms:

- A. **Science** classrooms, preparation and storage rooms will be inspected monthly. The inspection will be conducted and documented using the inspection form adopted in total from Appendix H of the *Science Safety Handbook for California Public Schools*.
- B. **Fine Arts** classrooms, preparation and storage rooms will be inspected monthly. The inspection will be conducted and documented using the inspection form *VCSSFA BIR-07 "Arts, Crafts, Ceramic Classrooms"* adopted in total from the *Ventura County Schools Self-Funding Authority*.
- C. **Print Shop and/or Photo Lab** classrooms, preparation rooms, shops and storage rooms will be inspected monthly. The inspection will be conducted using the inspection form *VCSSFA BIR-17 "Print Shop and/or Photo Lab"* adopted in total from the *Ventura County Schools Self-Funding Authority*.
- D. **Industrial Technology Wood Shop** classrooms, shops and storage rooms will be inspected monthly. The inspection will be conducted and documented using the inspection form *VCSSFA BIR-10 "Wood Shop Classrooms"* adopted in total from the *Ventura County Schools Self-Funding Authority*.
- E. **Industrial Technology Welding** classrooms, preparation rooms, shops and storage rooms will be inspected monthly. The inspection will be conducted and documented using the inspection form *VCSSFA BIR-25 "Welding Shop Area"* adopted in total from the *Ventura County Schools Self-Funding Authority*.
- F. **Industrial Technology Garage Area** classrooms, preparation rooms, shops and storage rooms will be inspected monthly. The inspection will be conducted and documented using the inspection form *VCSSFA BIR-26 "Garage Area"* adopted in total from the *Ventura County Schools Self-Funding Authority*.
- G. **Industrial Technology Other Miscellaneous**, such as metal, upholstery, cosmetology, etc. classrooms, preparation rooms, shops and storage rooms will be inspected monthly. The inspection will be conducted and document using the inspection form *VCSSFA BIR-12 "Generic for Maintenance Shops and Some Shop Classrooms"* adopted in total from the *Ventura County Schools Self-Funding Authority*.

VCSSFA BIR-07: Arts, Crafts and Ceramics (continued)

36. Inventory maintained, current, and available	Y	N
37. Hazardous material spill kit available	Y	N
38. Employee trained to use spill kit properly	Y	N
39. Employee Hazardous Material Training Program in effect and documented	Y	N
40. Hazardous material disposal plan written and used for all hazardous waste	Y	N
41. Inventory available for hazardous waste on school site property	Y	N
42. Eye and face shower available in room	Y	N
43. Fire extinguisher accessible with current inspection	Y	N
44. Employee trained to extinguish fires	Y	N
45. Fire alarm activator labeled and maintained	Y	N
46. Fire alarm working	Y	N
47. Fire drills occur and documented	Y	N
48. Room intercom working	Y	N
49. Disaster preparedness plan posted in room	Y	N
50. Employee trained in disaster assignment	Y	N
51. Students trained to react properly in the event of an earthquake	Y	N
52. Earthquake disaster drill occur are documented	Y	N
53. First aid kit available in classroom	Y	N
54. Employee has first aid training	Y	N
55. Employee has CPR training	Y	N
56. Emergency telephone number posted	Y	N
57. Room has security alarm system	Y	N
58. Alarm to police or security office	Y	N
59. Alarm dedicated to classroom	Y	N
60. Other non-structural hazards in room area	Y	N
61. Other		

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Report received by:

Abate within 10 days _____ Review date:

Abate within 60 days _____ Review date:

VCSSFA BIR-17: INSPECTION REPORT Print shop and/or Photo Lab

School Site Admin	Inspector Instructor	Date Room Name & Number	Time
			1. Fire extinguisher in an accessible location with current inspection Y N
			2. Employee trained to extinguish fires Y N
			3. Bulk solvent storage area appropriate Y N
			4. Bulk chemical storage are appropriate Y N
			5. Flammable liquids stored in approved cabinet Y N
			6. All containers labeled Y N
			7. Bulk ink storage area secure and maintained Y N
			8. Paper stock storage shelves and cabinets secured to wall studs or floor Y N
			9. File cabinets secured to wall studs or floor Y N
			10. Overhead storage safe with fall prevention for items on upper shelves Y N
			11. Floors maintained clean and dry Y N
			12. Ceiling and walls maintained Y N
			13. Light fixtures properly secured to ceiling Y N
			14. Walkways clear with no tripping hazards Y N
			15. Exits marked with door swing to the outside Y N
			16. Exit paths clear Y N
			17. Electrical panels clear for 36" for access Y N
			18. Breakers marked for type and area of service Y N
			19. Electrical outlets are properly wired Y N
			20. Electrical extension cords being used Y N
			21. Eletrical equipment has been checked for ground by an electrician Y N
			22. Wet sink area maintained clean and orderly Y N
			23. No electrical appliances being used within 6' of wet area of sink Y N
			24. Heavy equipment secured to wall studs, floor or work table Y N
			25. Rotating equipment parts properly guarded Y N
			26. Forced ventilation adequate for area Y N
			27. Exhaust system for petroleum solvents and chemical vapors adequate Y N
			28. Soiled rag closed container available and being used Y N
			29. Inventory control system in effect Y N
			30. Employee Hazardous Material Training Program in plain view Y N
			31. Safety Data Sheets available to employees at the work site Y N
			32. Inventory available to employees for review Y N
			33. Collection system for used solvents and/or chemicals in effect Y N

34. Written hazardous waste management program in effect	Y	N
VCSSFA BIR-17: Print Shop and Photo Lab (continued)		
35. Personal protective equipment being provided and used by employees	Y	N
36. First aid kit available in immediate area	Y	N
37. Employee trained in first aid	Y	N
38. Employee trained in CPR	Y	N
39. Emergency first aid instructions posted	Y	N
40. Telephone available with direct dial outside line capability	Y	N
41. Emergency telephone numbers posted	Y	N
42. Disaster preparedness plan information posted	Y	N
43. Employees trained in assignments in the event of a disaster	Y	N
44. Students trained to react properly in the event of a disaster	Y	N
45. Disaster drills held and documented	Y	N
46. Fire alarm audible with equipment running	Y	N
47. Fire alarm activator labeled and maintained	Y	N
48. Fire drills help and documented	Y	N
49. Other		

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Report received by:

Abate within 10 days _____ Review date:

Abate within 60 days _____ Review date:

VCSSFA BIR-10: INSPECTION REPORT – Wood Shop Classroom

School Site Admin	Inspector Instructor	Date Room Name & Number	Time
----------------------	-------------------------	----------------------------	------

- | | | | |
|--|--|--|-----|
| 1. Floor maintained clean and dry | | | Y N |
| 2. Walls and ceilings maintained | | | Y N |
| 3. Electrical panels clear for 36" access | | | Y N |
| 4. Breakers labeled for type and area of service | | | Y N |
| 5. Electrical outlets properly wired | | | Y N |
| 6. Electrical equipment inspected for ground | | | Y N |
| 7. Master electrical shut off switch accessible | | | Y N |
| 8. Electrical extension cords being used | | | Y N |
| 9. Hand tools properly stored | | | Y N |
| 10. Hand tools properly maintained | | | Y N |
| 11. Tool room orderly | | | Y N |
| 12. Storage cabinets secured to wall studs or floor | | | Y N |
| 13. Storage shelves properly secured | | | Y N |
| 14. Hand power tools are checked for grounding and properly maintained | | | Y N |

***THE FOLLOWING EQUIPMENT IS PROPERLY GUARDED,
HAS BEEN PROPERLY SECURED, AND HAS PROPER SAFETY DEVICE***

- | | | | |
|--|--|--|-----|
| 15. Bench style grinding wheel unit | | | Y N |
| 16. Pedestal style grinding wheel unit | | | Y N |
| 17. Radial arm saw equipped with electronic break | | | Y N |
| 18. Radial arm saw equipped with automatic saw return system | | | Y N |
| 19. Swing saw or "cut off" saw equipped with electronic break | | | Y N |
| 20. Swing saw or "cut off" saw equipped with saw return system | | | Y N |
| 21. Band saw (bench) | | | Y N |
| 22. Band saw (pedestal) | | | Y N |
| 23. Jig saw | | | Y N |
| 24. Table saw # 1 | | | Y N |
| 25. Table saw # 2 | | | Y N |
| 26. Planer | | | Y N |

27. Power jointer/planer	Y	N
28. Wood lathe	Y	N
29. Disk sander unit	Y	N
30. Belt sander unit	Y	N
31. Drum sander unit	Y	N

VCSSFA BIR-10: Wood Shop (continued)

32. Elbow sander	Y	N
33. Shaper unit	Y	N
34. Drill press	Y	N
35. Other equipment		

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36. Student safety program with orientation for using shop equipment provided	Y	N
37. Students tested on safety program documented and on file	Y	N
38. Student personal safety equipment available and used by students	Y	N
39. Student safety equipment properly maintained	Y	N
40. Good housekeeping evident in shop area	Y	N
41. Storage rooms labeled and normally locked	Y	N
42. Storage racks secured to wall studs or floor	Y	N
43. Storage cabinets secured to wall studs or floor	Y	N
44. Storage rooms clean and orderly	Y	N
45. Supplies properly labeled and stored	Y	N
46. Storage cabinets marked and secured in shop and office area	Y	N
47. Combustibles properly stored	Y	N
48. Flammable material containers properly labeled	Y	N
49. Flammables stored in approved cabinet	Y	N
50. Hazardous or toxic materials properly labeled	Y	N
51. Hazardous materials stored in approved cabinet	Y	N
52. Painting area and booth properly maintained	Y	N
53. Water absorption and paint fume exhaust system working	Y	N
54. Lights are explosion proof type	Y	N
55. Paint booth filters maintained	Y	N
56. Sawdust collection system maintained	Y	N
57. Dust filters cleaned and routinely serviced	Y	N
58. Dust collection bin emptied before maximum capacity is reached	Y	N
59. Ventilation adequate	Y	N

60. Work benches clean and properly maintained	Y	N
61. Trash containers emptied daily and as filled during the day	Y	N
62. Classroom shop safety rules posted	Y	N
63. Safety signs posted in a classroom area	Y	N
64. Signs maintained	Y	N
65. Exit paths clear	Y	N
66. Doors swing to the outside	Y	N

VCSSFA BIR-10: Wood Shop (continued)

67. Windows are made of safety glass or has protective coating installed	Y	N
68. Lighting adequate	Y	N
69. Overhead light fixtures are secure	Y	N
70. Overhead heaters secured and have a flexible gas feeder line	Y	N
71. Fire extinguisher accessible with current inspection	Y	N
72. Employee trained to extinguish fires	Y	N
73. Fire alarm working	Y	N
74. Fire alarm activator labeled and maintained	Y	N
75. First aid kit available in shop area	Y	N
76. Employee Hazardous Material Training Program in effect and documented	Y	N
77. Employee safety training programs in effect and documented	Y	N
78. Employee trained in first aid	Y	N
79. Employee trained in CPR	Y	N
80. Telephone with outside direct dial available	Y	N
81. Emergency telephone number posted	Y	N
82. Classroom has dedicated security system	Y	N
83. Alarms to police or security office	Y	N
84. Disaster preparedness plan posted	Y	N
85. Employees trained in duties for the event of an earthquake	Y	N
86. Students trained to react correctly in the event of an earthquake	Y	N
87. Other		

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Report received by:

Abate within 10 days _____ Review date:

Abate within 60 days _____ Review date:

VCSSFA BIR-25: INSPECTION REPORT – Welding Shop Area

School Site Admin	Inspector Instructor	Date Room Name & Number	Time
1. Floor maintained clean and dry			Y N
2. Work stations clean			Y N
3. Electrical shop equipment grounded			Y N
4. Equipment firmly secured to wall studs, floor or benches			Y N
5. Rotating parts of equipment properly guarded			Y N
6. Electrical panels clear 36" for access			Y N
7. Breakers marked for type of area of service			Y N
8. Electrical outlets wired properly			Y N
9. Emergency electrical shop equipment area shut off switch labeled			Y N
10. Electrical extension cords being used			Y N
11. Ventilation adequate for shop and work area			Y N
12. Exhaust fans adequate to remove vapors and fumes from welding area with air flow at least 100 linear foot per minute			Y N
13. Good housekeeping at work stations evident			Y N
14. Combustibles stored in proper location			Y N
15. Fire extinguisher available in area with current inspection			Y N
16. Employee trained to extinguish fires			Y N
17. Fire alarm activator marked and maintained			Y N
18. Fire alarm works			Y N
19. Storage racks secured to wall studs or floor			Y N
20. Storage cabinets secured to wall studs or floor			Y N
21. Tools properly stored as to not present a hazardous condition			Y N
22. Stationary shop equipment secured to wall studs, floor benches			Y N
23. Oxygen piping high has pressure relief system at outlet			Y N
24. Joint threaded or flanged			Y N
25. Pipe material is a.) black steel b.) wrought iron c.) brass d.) copper			Y N
26. Acetylene piping is steel or wrought iron only			Y N
27. Lines clearly marked			Y N
28. Oxygen lines painted green (preferred)			Y N
29. Other lines painted a distinctive color			Y N
30. Color identification chart posted at termination of each line/valve			Y N
31. All valves labeled			Y N
32. Emergency shut off provided and location clearly marked			Y N
33. Manifold system protected or area fenced			Y N
34. Each cylinder has backflow check valve			Y N

VCSSFA BIR-25: Welding Shop Area (continued)

35. Aggregate capacity does not exceed 3,000 ft ³ of gas entering building	Y	N
36. Bottles are in maintained verticle position	Y	N
37. Acetylene cylinders coupled have flash arrestors between each cylinder and coupler block	Y	N
38. Fuel gas and oxygen manifolds have signs on each bearing the name of substance contained with 1" high letters and signs permanently attached to them	Y	N
39. Arc welding area enclosed for low reflectivity	Y	N
40. Air flow maintained at floor level	Y	N
41. Proper safety gear and protection provided	Y	N
42. Safety signs posted	Y	N
43. Gas bottle cart has bottles secured	Y	N
44. Oxygen regulators are marked "USE NO OIL"	Y	N
45. Spare cylinder bottles stored separately by contents	Y	N
46. Empty bottles storage in separate area by contents	Y	N
47. Torches have back flow safety devices	Y	N
48. Hazardous materials labeled and stored properly	Y	N
49. Hazardous materials spill clean-up kit available	Y	N
50. Employee trained to use clean up kit	Y	N
51. Approved storage cabinets used for all chemical or flammable substances	Y	N
52. Employee Hazardous Material Training Program in effect and documented	Y	N
53. Hazardous material disposal plan in effect and records documented	Y	N
54. Safety Data Sheets available to employee on site	Y	N
55. Inventory of materials available to employees on site	Y	N
56. Hazardous waste containers marked for contents	Y	N
57. Parts cleaning tank has approved chemical and is properly vented	Y	N
58. Caustic tank being used for cleaning parts	Y	N
59. Caustic tank secured and equipped with mechanical exhaust system	Y	N
60. First aid kit available in immediate area	Y	N
61. Employee trained in first aid	Y	N
62. Employed trained in CPR	Y	N
63. Emergency telephone number posted	Y	N
64. Disaster preparedness plan posted	Y	N
65. Employee trained in duties for the event of a disaster	Y	N
66. Room has security alarm	Y	N
67. Alarm to police or security officer	Y	N
68. Other		

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Report received by:

Abate within 10 days _____ Review date:

Abate within 60 days _____ Review date:

VCSSFA BIR-26: INSPECTION REPORT - Garage area

School Site Admin	Inspector Instructor	Date Room Name & Number	Time
1. Floor maintained clean and dry			Y N
2. Ceiling and walls maintained			Y N
3. Oil spills cleaned up as soon as possible			Y N
4. Absorbent material for oil spills readily accessible			Y N
5. Work benches maintained, clean and orderly			Y N
6. Electrical equipment in shop area has been checked for ground by electrician			Y N
7. Equipment secured to wall studs or floor			Y N
8. Electrical panels clear 36" for access			Y N
9. Breakers marked for type and area of service			Y N
10. Electrical extension cords being used			Y N
11. Electrical outlets wired properly			Y N
12. Emergency electrical shut off marked			Y N
13. Ventilation adequate			Y N
14. Lighting adequate			Y N
15. Exit paths clear			Y N
16. Good housekeeping evident in shop area			Y N
17. Combustibles stored in appropriate location			Y N
18. Rotating machinery parts guarded			Y N
19. Brake drum turning equipment being used			Y N
20. Brake shoe grinding equipment being used			Y N
21. Approved dust collection being used during brake shoe grinding operation			Y N
22. Grit or sand blasting equipment being used			Y N
23. Blasting manual open safety nozzle being used exclusively			Y N
24. Storage room maintained in an orderly manner			Y N
25. Storage racks secured to wall studs or floor			Y N
26. Storage and file cabinets secured to wall studs or floor			Y N
27. Overhead storage safe with fall prevention for items on upper shelves			Y N
28. Tools maintained and properly stored			Y N
29. Large stationary shop equipment secured to wall studs, floor or work bench			Y N
30. Parts cleaning tank has approved cleaning chemical			Y N
31. Air compressor has state operating permit displayed in immediate area			Y N
32. Air compressor maintained in clean condition			Y N
33. Compressed air in excess of 10 lbs per square inch is not being used to blow dirt, chips or dust from clothing while it is being worn			Y N
34. Stationary welding area isolated from other shop activities			Y N

VCSSFA BIR-26: Garage Area (continued)

35. Area has an exhaust fan to remove fumes from welding operations	Y	N
36. Written hazardous material disposal plan in effect with employee education program for the plan	Y	N
37. Hazardous materials stored properly with containers labeled for contents	Y	N
38. Hazardous material spill kit is available	Y	N
39. Employee trained to use hazardous material clean up kit	Y	N
40. Inventory available of all hazardous waste stored at site	Y	N
41. Approved storage cabinets being used for hazardous materials	Y	N
42. All stored or otherwise used containers of hazardous materials are labeled for contents	Y	N
43. Inventory available with Safety Data Sheets for employees	Y	N
44. Approved receptacle with self-closing lid is being used for oily rags	Y	N
45. Employee Hazardous Material Training Program in effect and documented	Y	N
46. First aid kit available to employees	Y	N
47. Employee trained in first aid	Y	N
48. Employee trained in CPR	Y	N
49. Emergency telephone numbers posted	Y	N
50. Fire extinguisher accessible with current inspection	Y	N
51. Employee trained to extinguish fires	Y	N
52. Fire alarm location marked and maintained	Y	N
53. Fire alarm works	Y	N
54. Security alarm system installed for site	Y	N
55. Alarms to police or security officer	Y	N
56. Disaster preparedness plan posted	Y	N
57. Employee trained in duties in the event of disaster situation	Y	N
58. Other		

ITEMS PHOTOGRAPHED

Report received by:

Abate within 10 days _____ Review date:

Abate within 60 days _____ Review date:

USE THIS SPACE FOR DIAGRAMS IF NECESSARY

Simi Valley Unified School District

VCSSFA BIR-12: General Maintenance (continued)

34. Safety rules for shop posted in location obvious to everyone	Y	N
35. Chemical or paint mixing room or area properly maintained	Y	N
36. Floor drain provided and properly maintained	Y	N
37. Waste containers stored and labeled properly	Y	N
38. Paint booth adequate and properly maintained	Y	N
39. Air compressor properly maintained, current permit to operate posted	Y	N
40. Welding or soldering area isolated with flash protection	Y	N
41. Ventilation for area adequate	Y	N
42. High pressure gas bottles labeled and properly secured	Y	N
43. Windows made of safety glass or has protective coating installed	Y	N
44. Tripping hazards in walkways, working areas or storage area	Y	N
45. Written employee safety training program in effect	Y	N
46. Written documentation of training programs	Y	N
47. Employees aware of district's safety and loss control policy	Y	N
48. Written Hazardous Waste Management program	Y	N
49. Written employee Hazardous Material Training Program in effect	Y	N
50. Safety Data Sheets available on worksite	Y	N
51. Hazardous materials inventory available	Y	N
52. Employee personal safety equipment furnished and used when needed	Y	N
53. First aid kit available in shop area	Y	N
54. Employee trained in first aid	Y	N
55. Fire extinguisher accessible with current inspection	Y	N
56. Employee trained to extinguish fires	Y	N
57. Telephone with direct dial for outside line available	Y	N
58. Emergency telephone number posted	Y	N
59. Disaster preparedness plan posted	Y	N
60. Employees trained in duties for the event of an earthquake	Y	N
61. Students trained to react correctly in the event of an earthquake	Y	N
62. Dedicated shop security system installed	Y	N
63. Alarms or police security office	Y	N
64. Other		

ITEMS PHOTOGRAPHED

Report received by:

Abate within 10 days _____ Review date:

Abate within 60 days _____ Review date: