THE PEOPLE OF THE STATE OF CALIFORNIA hereby resolve this prosecution against defendant 1, the Regents of the University of California ("Regents") according to the terms of this Prosecution Enforcement Agreement ("Agreement"). Upon execution of the Agreement, including the terms and conditions set forth in Appendix A, the People will move to dismiss with prejudice all filed charges in the criminal action, Case Number BA392069, against defendant 1, the Regents, pursuant to Penal Code section 1385, in the furtherance of justice. Defendant 2, Dr. Patrick Harran, is not a party to this Agreement.
I. INTRODUCTION

1. This Agreement is entered into between the Los Angeles County District Attorney’s Office ("LADA"), and the Regents. This Agreement binds the LADA and the Regents upon the date of execution.

2. Appendix A, Cal/OSHA Administrative Enforcement Terms and Conditions, is incorporated by reference into this Agreement.

3. This Agreement is entered into to resolve the LADA’s criminal prosecution of the Regents pursuant to Labor Code section 6425(a), in Case Number BA392069, filed on December 27, 2011, arising out of the work-related death of Regents’ employee Ms. Sheharbano Sangji.

4. The LADA has determined that entering into this Agreement to resolve the prosecution of the Regents is appropriate and in furtherance of justice pursuant to Penal Code section 1385 in light of the following:

   (a) The Regents’ cooperation with Cal/OSHA and the LADA investigation and its agreement to continue to cooperate with Cal/OSHA and the LADA;

   (b) The Regents’ commitment to maintain a comprehensive laboratory safety program that is fully compliant with Title 8 and the California Code of Regulations governing employee health and safety issues in the workplace as set forth in Appendix A;

   (c) The Regents’ promise and obligation to establish a scholarship in the name of Ms. Sheharbano Sangji as set forth below;

   (d) The Regents’ good faith acceptance of responsibility for conditions under which the laboratory was operated on December 29, 2008 described in the Statement of Facts set forth in Section II below, and its remedial actions taken to address and correct laboratory safety issues; and

   (e) Collateral Consequences. The effect of a criminal conviction would negatively impact the University of California as a whole, including the campuses of UC Davis, UC Berkeley, UC Merced, UC Santa Barbara, UC Riverside, UC Irvine, UC Santa Cruz, UC San Diego, UC San Francisco\(^1\), and many thousands of students, employees, and indirectly, the public,

\(^1\) Excluding the clinical enterprises comprising the five health systems at UC Davis, UC Irvine, UC Los Angeles, UC
including potentially debarment, loss of funding, loss of licenses and exclusion from areas of
research vital to public health, public safety, and national security. Based upon a totality of the
circumstances as articulated in this Agreement, and reviewing the potential collateral
consequences, enforcement of this Agreement (including the terms set forth in Appendix A), best
serves the interests of justice.

5. This Agreement shall have full force and effect upon the execution of this
Agreement by the LADA and the Regents (the “Effective Date”).

6. This Agreement shall be effective and in place for four (4) years (the “Agreement
Term”) from the Effective Date.

II. STATEMENT OF FACTS

For purposes of this agreement only, the Regents do not dispute the following alleged facts:

1. The California Constitution, Article IX section 9 (a), created the University of
California as a public trust to be administered by the corporation known as “the Regents of the
University of California”. The Regents are responsible for administering the University's affairs
and constitute a separate but constituent part of the University.

2. In this work-related case, the Regents are the employer, and Ms. Sheharbano
Sangji is the employee. Dr. Harran, the employer’s Professor of Chemistry and Principal
Investigator in the laboratory, was Ms. Sheharbano Sangji’s direct supervisor in an organic
chemistry laboratory within the Department of Chemistry and Biochemistry at UCLA.

3. On December 29, 2008, Ms. Sangji was employed by the Regents in the
Department of Chemistry and Biochemistry at UCLA. Ms. Sangji was working as a research
associate in the organic chemistry laboratory managed by Dr. Patrick Harran. On that date, Ms.
Sangji was in the process of transferring a highly flammable chemical agent, tert-Butyllithium.
Tert-Butyllithium is a pyrophoric agent (a chemical that ignites when exposed to the atmosphere) which must be handled only by experienced and properly trained personnel. While conducting a transfer of tert-Butyllithium, the pyrophoric agent spilled from a syringe that Ms. Sangji was using to make the transfer. The tert-Butyllithium spilled onto her hands, arms and torso, and ignited. Ms. Sangji was not wearing a lab coat and was burned on her hands, arms and torso. On January 16, 2009, Ms. Sangji died from injuries caused by the tert-Butyllithium burns.

4. The Cal/OSHA administrative investigation of this matter began in 2009 following Ms. Sangji’s death. As a result of its investigation, Cal/OSHA issued one regulatory and three serious citations to the Regents on or about May 4, 2009. The total proposed penalty for these citations was $31,875. The Regents paid that total monetary penalty.

5. Following its administrative investigation, Cal/OSHA determined that pursuant to the California employee health and safety standards as set forth in the Labor Code and the California Code of Regulations, Title 8, the Regents had not adequately trained Ms. Sangji to work with tert-Butyllithium. Cal/OSHA further found that the Regents did not require appropriate personal protective equipment to be worn for the assigned laboratory project nor had they established standard operating procedures for transferring pyrophoric agents.

6. On December 27, 2011, after a review of the evidence collected by Cal/OSHA and a further independent evaluation of the controlling law, the LADA filed a complaint alleging three felony violations of California Labor Code section 6425(a), namely willful violation of an Occupational Safety & Health standard causing the death of an employee, against the Regents. The three charged counts allege the Regents’ willful: (1) failure to train, supervise, or instruct Ms. Sangji in the proper handling and operating procedures for working with chemicals in her work area; (2) failure to implement and maintain an effective Injury and Illness Prevention Program that include methods and/or work procedures; and (3) failure to require appropriate clothing be worn for the work being done. See California Code of Regulations, Title 8, Sections 5191(1)(4), 3203(a)(6), and 3383(b).

7. In response to the events that caused the death of Ms. Sheharbano Sangji, the Regents have implemented a comprehensive training and safety compliance program at UCLA.
Among these corrective and remedial measures taken, UCLA’s Office of Environmental Health and Safety (“EH&S”) has produced a safety video setting forth the safe and compliant workplace practices in the handling and transfer of pyrophorics, including tert-Butyllithium. Standard Operating Procedures have been established and implemented for researchers working with hazardous chemical agents; personal protective equipment including fire resistant lab coats is mandatory for researchers working with pyrophorics. The Regents have made a substantial, comprehensive, and good faith effort to bring their laboratory safety practices and procedures into compliance with Title 8 and the California Code of Regulations for employee safety.

III. PROMISES AND OBLIGATIONS OF THE REGENTS

In consideration of the LADA’s dismissal of the criminal action against defendant 1, the Regents knowingly, voluntarily, and with the advice of counsel agree to the following terms:

1. Acceptance of Responsibility for the Statement of Facts. For purposes of this agreement only, the Regents acknowledge and accept responsibility for the conditions under which the laboratory was operated on December 29, 2008 as set forth above.

2. Agreement that neither it nor any of its counsel, representatives, or executive employees who have authority to speak publicly on their behalf, will make any public statement denying responsibility for the conditions under which the laboratory was operated on December 29, 2008.

3. Agreement to Establish Sheharbano Sangji Scholarship. The Regents agree to establish a “Sheharbano Sangji Scholarship” at the University of California, Berkeley Law (Boalt Hall) for the study of Environmental Law. The scholarship shall be endowed in the amount of $500,000.00. Within ninety (90) days of the execution of this Agreement, LADA will meet with representatives from U.C. Berkeley School of Law as designated by the Regents to establish qualifications and eligibility. The scholarship is to be funded within one year of the execution of this Agreement and is to be administered by the Regents.

4. Agreement to Pay CAL/OSHA Costs. UCLA shall be responsible for the costs of any inspections above and beyond the usual number of inspections Cal/OSHA conducted prior to the execution of this Agreement, not to exceed an aggregate of $50,000.00, during the Agreement
Term. UCLA shall reimburse Cal/OSHA for all costs of inspection within 30 days from the receipt of an invoice.

5. Laboratory Safety – Cooperation and Compliance. The Regents agree to continue to cooperate fully and actively with the LADA and Cal/OSHA regarding any alleged violation of Title 8, workplace health and safety rules. The Regents shall:

(a) Comply with the terms of Appendix A in cooperation with Cal/OSHA;

(b) In response to any inquiry by Cal/OSHA, truthfully disclose and provide all information, documents, records and other evidence within the Regents’ possession, custody, or control relating to any Title 8 violations; and

(c) Exercise due diligence to prevent and detect violations of the Labor Code involving employee laboratory safety.

The Regents agree that it shall, within 120 days of the date of execution of this Agreement, provide the LADA and Cal/OSHA with a written certification from each Regents’ Campus’ EH&S Department, or its equivalent, confirming that it has commenced the implementation of safe laboratory practices and procedures compliant with Title 8, as set forth in Appendix A.

6. Certification of Compliance. The Regents agree that semi-annually during the Agreement Term, including between thirty and sixty days before the expiration of the Agreement Term, the Director of each Regents’ Campus’ EH&S Department, or its equivalent, shall execute under penalty of perjury, and provide to the LADA a certification that, to the best of his or her knowledge, after engaging in due diligence, the specific Regents’ Campus is in substantial compliance with the terms of this Agreement, including the provisions of Appendix A.

IV. PROMISES AND OBLIGATIONS OF LADA

Upon execution of this Agreement, including the terms set forth in Appendix A, the LADA agrees to move to dismiss with prejudice the criminal action, Case Number BA392069, against the Regents, and will not pursue any additional criminal charges against the Regents based on the facts set forth herein.
Nothing in this Agreement shall preclude or limit the LADA from bringing a criminal prosecution against the Regents for making false statements, obstruction of justice, perjury, subornation of perjury, witness tampering, or aiding and abetting or conspiring to commit such offenses, based on the Regents’ conduct in performing obligations under this Agreement.

V. BREACH OF THE AGREEMENT

It shall constitute a breach of this Agreement for the Regents knowingly to engage in conduct that constitutes a material failure to substantially comply with any of the promises and obligations set forth in the Agreement. For purposes of determining substantial compliance with or breach of this Agreement, conduct by an employee of the Regents that would constitute a breach of this Agreement if attributed to the Regents shall not be deemed to constitute conduct by the Regents unless the Vice Chancellor for Research of the Campus learns of that conduct and fails to initiate curative action within 30 days after learning of it.

The LADA shall confer with Cal/OSHA prior to any decisions or determinations with respect to an alleged breach of this Agreement by the Regents. In the event that the LADA preliminarily believes that the Regents have breached this Agreement, the LADA shall provide the Regents with written notice of this preliminary belief and the Regents will have 30 calendar days from the date appearing on that written notice in which to make a presentation to the LADA to demonstrate that no breach has occurred or, to the extent applicable, that the breach is not a knowing breach or has been cured. The LADA shall thereafter provide written notice to the Regents of their final determination regarding whether or not it will assert a breach has occurred and has not been adequately cured.

Should the LADA determine that it will assert that a breach has occurred and has not been adequately cured, the LADA may seek a determination, as set forth below, that the Regents are in breach of the Agreement and seek a penalty of up to $500,000.00.

Any question of whether the Regents have breached the Agreement and, if so, the appropriate amount of penalty, if any, shall be decided by the Honorable John W. Ouderkirk (retired) acting as Special Master in such proceedings as he deems necessary. The Special Master’s review of any breach asserted by the LADA shall be de novo, and the LADA shall bear
the burden of proof to establish any factual issues, as specified by the Special Master, by a
preponderance of the evidence. There shall be no appeal from the Special Master’s decision.

Monies from any penalty awarded by the Special Master for a breach of the Agreement
shall be distributed under the doctrine of *cy pres* and in the public interest, to a non-profit
organization designated by the LADA whose mission and organizational purpose is devoted to
workplace safety and the prevention of environmental crimes. The Regents agree to pay all costs
for retaining the Special Master.

The Regents agree to make any payment of the penalty decided upon by the Special
Master pursuant to this paragraph within 30 days of notice of the Special Master's decision on the
matter. The Regents’ failure to make timely payment will constitute a separate material breach of
this Agreement. Payment of a penalty by the Regents pursuant to this Agreement shall not relieve
the Regents of performing its obligations under this Agreement.

**VI. OTHER PROVISIONS**

This Agreement is binding on the LADA and on the Regents to the extent provided
herein.

The Regents warrant and represent that its undersigned officer is authorized to execute
and deliver this Agreement and has the authority to bind the Regents to its terms. The LADA
warrants and represents that their undersigned representatives are authorized to execute and
deliver this Agreement and bind the LADA to its terms.

All notices to the Regents required or permitted by this Agreement shall be in writing and
shall be delivered to the undersigned Counsel of Record for the Regents by first class, postage
prepaid mail, and by facsimile or electronic transmission effective in each case upon the later of
the date of mailing or the date of transmission.
For the PEOPLE:

Craig W. Hum
Deputy District Attorney
201 North Figueroa Street, 15th Floor
Los Angeles, CA 90012

Stanley P. Williams
Head Deputy District Attorney
Consumer Protection Division
201 North Figueroa Street, 12th Floor
Los Angeles, CA 90012

For the Regents:

Charles F. Robinson
General Counsel
1111 Franklin Street, 8th Floor
Oakland, CA 94607

Gene D. Block
Chancellor, UC Los Angeles
2147 Murphy Hall
Los Angeles, California 90095

DATED: July 25, 2012
APPENDIX A

CAL/OSHA ADMINISTRATIVE ENFORCEMENT TERMS AND CONDITIONS

DEFINITIONS

"Regents", for purposes of Appendix A, includes the campuses of UC Davis, UC Berkeley, UC Merced, UC Santa Barbara, UC Riverside, UC Irvine, UC Santa Cruz, UC San Diego, UC San Francisco. It excludes: UC Los Angeles; the clinical enterprises comprising the five health systems at UC Davis, UC Irvine, UC Los Angeles, UC San Diego and UC San Francisco, which are separately regulated enterprises; Lawrence Berkeley National Laboratory which is operated pursuant to a separate agreement with the U.S. Department of Energy; and at Livermore National Laboratory and Los Alamos National Laboratory, both of which are operated by Delaware limited liability companies in which the Regents is a member.

"UCLA" refers to the University of California, Los Angeles.

"Cal/OSHA" means the California Department of Industrial Relations, Division of Occupational Safety and Health, who promulgated this Appendix ("Appendix A").

The "Cal/OSHA Administrative Enforcement Terms and Conditions" is incorporated by reference into the Prosecution Enforcement Agreement (the "Agreement") signed by the Regents and LADA.

I. ADMINISTRATIVE ENFORCEMENT BY CAL/OSHA

1. The Administrative Enforcement Terms and Conditions shall be effective for a period of four (4) years from the date of execution of the Agreement.

2. The obligations of UCLA and the Regents set forth in Appendix A, Cal/OSHA Administrative Enforcement Terms and Conditions, shall apply only to all laboratory facilities within any Department of Chemistry and/or Biochemistry at UCLA and any Regents' campus.

3. Nothing in the Administrative Enforcement Terms and Conditions shall be construed to limit Cal/OSHA from assessing any fines or penalties as may otherwise be provided by law.
4. Regents and UCLA shall commit no violations of California Labor Code Sections 6425 and no knowing, non-negligent violations of Labor Code Section 6423.

II. OBLIGATIONS OF UCLA AND REGENTS

1. Regents and UCLA shall provide to the LADA and Cal/OSHA Bureau of Investigation, a list of all laboratory facilities currently in operation, or which become operational within the term of this agreement. The list shall also designate the department housing each laboratory, the location of each laboratory, the principal investigator assigned to each laboratory and the general type of research being undertaken in each laboratory (i.e., Biochemistry, Chemistry, Organic Chemistry, etc.). UCLA shall provide an interim list of its laboratory facilities within 90 days from the execution of this agreement and shall provide a final list of all facilities within 180 days. The Regents shall provide an interim list of its laboratory facilities at the other nine (9) UC campuses within 180 days from the execution of this agreement and shall provide a final list of all facilities within 365 days from the execution of this agreement.

2. UCLA and each of the other Regents’ campuses shall maintain a formal written Laboratory Safety Manual and Chemical Hygiene Plan, in full compliance with all applicable California Code of Regulations, Title 8 Sections, including but not limited to, Sections 5191 and 3203. UCLA and Regents shall ensure that copies of the specific institution’s Laboratory Safety Manual are provided to its laboratories. UCLA and Regents will also ensure that the Laboratory Safety Manuals are maintained in a visible location within each laboratory and are readily accessible to all laboratory personnel. Electronically available copies of the Laboratory Safety Manual are acceptable to meet this provision, provided such manuals are readily accessible to all laboratory personnel. UCLA and Regents shall make accessible copies of the Laboratory Safety Manuals, including any revisions made during the term of the Agreement, to the Los Angeles County District Attorney's Office and Cal/OSHA Bureau of Investigation.

3. UCLA shall require all existing Principal Investigators to complete: (1) a Laboratory Safety Training program, the subject matter of which provides comprehensive coverage of the University’s Laboratory Safety Manual; this training shall commence within 60 days of the execution of the Agreement, and; (2) formal training covering University policy...
concerning the Principal Investigator's responsibilities for laboratory safety, including but not limited to, UCLA policies 811, 905; 907, and the applicable Title 8 regulations governing laboratory operations including, but not limited to, California Code of Regulations, Title 8, Sections 5164, 5191, 5194, 3203, and 3380-3387. UCLA shall maintain records for five years of all Principal Investigators completing the training specified in this section. Laboratory Safety Training administered after January 1, 2010 may be applied to satisfy subdivision (1) of this requirement, if the training is certified to meet the subject matter scope of this section and written records of the training are maintained.

3.1. Regents shall require that Principal Investigators complete a laboratory safety training program, the subject matter of which includes coverage of the relevant campus' Laboratory Safety Manual. Regents shall ensure that the Laboratory Safety Manuals comply with all applicable Title 8 regulations governing laboratory operations including, but not limited to, California Code of Regulations, Title 8, Sections 5164, 5191, 5194, 3203, and 3380-3387. Individual Laboratory Safety Training administered after January 1, 2010 will satisfy this requirement, if the training is certified, in writing, that it was conducted in substantial compliance with this paragraph.

4. UCLA shall prohibit any new or visiting Principal Investigator from operating any laboratory facility, or directing or supervising any employees within any laboratory facility without first completing its Laboratory Safety Training Program, the subject matter of which provides comprehensive coverage of the University's Laboratory Safety Manual and additional training covering University policies concerning the Principal Investigator's responsibilities for laboratory safety including, but not limited to, UCLA policies 811, 905, 907, and the applicable Title 8 regulations governing laboratory operations including, but not limited to California Code of Regulations, Title 8, Sections 5164, 5191, 5194, 3203, and 3380-3387.

4.1. Regents shall prohibit any new or visiting Principal Investigator from operating any laboratory facility, or directing or supervising any employees within any laboratory facility without first completing the relevant campus' Laboratory Safety Training Program. Regents shall ensure such training complies with all applicable Title 8 regulations governing laboratory
operations including, but not limited to, California Code of Regulations, Title 8, Sections 5164, 5191, 5194, 3203, and 3380-3387.

5. UCLA shall require all existing laboratory personnel: (1) to complete a Laboratory Safety Training program, the subject matter of which provides comprehensive coverage of the University’s Laboratory Safety Manual; this training shall commence within 60 days of the execution of the Agreement, and; (2) to complete formal training covering University policy concerning an individual’s rights and responsibilities relative to lab safety and the applicable California Code of Regulations, Title 8, governing laboratory operations including, but not limited to, Sections 5164, 5191, 5194, 3203, and 3380-3387. UCLA shall maintain for five years records of all employees completing the training specified in this section. Laboratory Safety Training administered after January 1, 2010 may be applied to satisfy subdivision (1) of this requirement, if the training is certified to meet the subject matter scope of this section and written records of the training are maintained.

5.1. Regents shall require laboratory personnel to (1) complete a Laboratory Safety Training program, the subject matter of which provides comprehensive coverage of the relevant campus’ Laboratory Safety Manual and; (2) complete training covering policy concerning an individual’s rights and responsibilities relative to lab safety and the applicable California Code of Regulations, Title 8, governing laboratory operations including, but not limited to, Sections 5164, 5191, 5194, 3203, and 3380-3387. This training shall commence within 60 days of the execution of this Agreement. Individual Laboratory Safety Training administered after January 1, 2010 will satisfy this requirement if the training is certified, in writing, that it was conducted in substantial compliance with this paragraph.

6. UCLA and Regents shall ensure that all laboratory facilities comply with Title 8’s requirements for Standard Operating Procedures (“SOPs”). Additionally, for any chemical listed in the Chemical Classification List (attached hereto as “Exhibit 1”), the following shall apply: SOPs shall be written by laboratory personnel having the most experience and knowledge and who are routinely involved in the experimental process. The Principal Investigator and all personnel responsible for performing the procedures detailed by the SOP shall sign the SOP,
acknowledging the contents, requirements and responsibilities outlined in the SOP. The SOP shall be reviewed. The review shall be conducted by qualified personnel. The SOP shall be amended and subject to additional review and approval by the Principal Investigator where changes or variations in conditions, methodologies, equipment, or use of the chemical occurs, or when it is reasonably apparent that exposure to injury or illness may be increased or adversely effected by any anticipated or an unanticipated condition arises when an approved SOP is utilized, or where the scale of any reaction or application has increased beyond the capacity of the equipment or apparatus outlined or described in the original SOP, or the increased scale of any reaction or application had not been evaluated and approved within the scope of the original SOP. Authors of SOPs shall consider in developing, revising, and reviewing and approving SOPs, the usage and handling recommendations provided by the manufacturer.

7. A copy of all SOPs relevant to that particular laboratory’s operations shall be maintained in each UCLA and Regents’ laboratory in the Laboratory Safety Manual, or separately designated manual. SOPs shall be in a visible location within each laboratory and readily accessible to all laboratory personnel. Electronically available copies of the SOPs are acceptable to meet this provision, provided such SOPs are readily accessible to all laboratory personnel. The UCLA Laboratory Safety Manual and its appendices and UCLA policies 811, 905, and 907 (or Regents’ campus equivalents) shall control the specific procedures to be undertaken in the development, approval and use of SOPs to the extent the Laboratory Safety Manual and policies are not inconsistent with this section. To the extent that California Code of Regulations, Title 8 requires more stringent procedures, Title 8 shall control.

8. UCLA shall follow its “Procedures for Safe Use of Pyrophoric Liquid Reagents, 2/2009” when handling pyrophoric liquid reagents. Researchers (including Principal Investigators) or other laboratory personnel shall not work alone when handling pyrophoric liquid reagents. These procedures shall be in a visible location within each laboratory where pyrophoric liquid reagents are utilized and readily accessible to all laboratory personnel. Electronically available copies of the procedures are acceptable to meet this provision, provided they are readily accessible to all laboratory personnel.
8.1. Regents shall maintain written procedures for the safe use of pyrophoric liquid reagents. The written procedures shall be made readily available to laboratory personnel who handle pyrophoric reagents. The procedures shall, at a minimum, follow the UCLA “Procedures for Safe Use of Pyrophoric Liquid Reagents, 2/2009.” The procedures shall be in a visible location within each laboratory where pyrophoric liquid reagents are utilized and readily accessible to all laboratory personnel. Electronically available copies of the procedures are acceptable to meet this provision, provided they are readily accessible to all laboratory personnel.

9. UCLA shall require Principal Investigators to complete independent assessments as to the adequacy of Personal Protective Equipment afforded to laboratory personnel, relative to each new or existing procedure utilized within a respective laboratory, in accordance with applicable MSDS recommendations, manufacturer recommendations, UCLA policy 811, 905, 907, and California Code of Regulations, Title 8, including but not limited to, Sections 5191, 5194, 3380-3387 and 3203. Notwithstanding the regulatory requirements set forth above, or any other legal requirements not specifically cited herein, the following Personal Protective Equipment (PPE) policy shall be considered the minimum standard to apply at all times while working or occupying any laboratory area:

a. Full-length pants, or equivalent, and close-toed shoes must be worn at all times by all individuals that who are occupying the laboratory area. The area of skin between the shoe and ankle should not be exposed.

b. Protective gloves must be worn while utilizing any hazardous chemical, biological or unsealed radiological material. These gloves must be appropriate for the material being used and conditions under which such use takes place (i.e. open flame, extreme cold, etc.). The Material Safety Data Sheet (MSDS) for the material should be referenced when determining the effectiveness of the type of glove to be used.

c. Laboratory coats, or equivalent, are required to be worn while working on, or adjacent to, all hazardous chemicals, biological or unsealed radiological materials. These laboratory coats must be appropriately sized for the individual and be buttoned to their full length. Laboratory coat sleeves, or other forms of acceptable forearm protection, must be of a sufficient length to
prevent skin exposure while wearing gloves.

d. Flame resistant laboratory coats shall be worn when working with pyrophoric materials or flammable liquids. Cotton (or other non-synthetic material) clothing must also be worn during these procedures to minimize injury in the case of a fire emergency.

e. Laboratory coats may not be worn outside of a laboratory unless the individual is traveling directly to an adjacent laboratory work area. Protective gloves must not be worn in any public area outside of the laboratory (i.e., hallways, elevators, offices). Gloves must also be removed prior to handling any equipment that could likely result in cross-contamination (e.g., telephones, computer work stations, etc.).

f. Each department or research unit shall be responsible for providing professional laundry services as needed to maintain the hygiene of laboratory coats. They may not be cleaned by staff members at private residences or public laundry facilities. Any clothing that becomes contaminated with hazardous materials must be decontaminated before it leaves the laboratory.

g. Eye protection or equivalent engineering controls must be used while handling any hazardous chemical, biological or unsealed radiological materials. All eye protection equipment must be American National Standards Institute (ANSI) approved and appropriate for the work being done.

h. Some operations and procedures may warrant further PPE, as indicated by the MSDS, the standard operating procedures for the material being used, facility policies, regulatory requirements, or the UCLA EH&S Laboratory Hazard Assessment Tool. Any additional PPE shall be made available to each exposed or effected employee prior to implementation of any operation or procedures.

i. Employees shall not bear the cost of any required PPE. Written records shall be maintained by each laboratory verifying the date of issuance and type of PPE issued, or re-issued, to each laboratory personnel. Written records shall not be required for disposable PPE that is readily available in the laboratory (i.e., latex gloves, safety glasses).

j. No person shall be permitted to work in or occupy any laboratory area without first being provided the required Personal Protective Equipment. The Principal Investigator or EH&S
personnel, shall remove any person found by the Principal Investigator or EH&S personnel, working in or occupying any laboratory area without the required PPE, until the required PPE is obtained and utilized. The Principal Investigator or EH&S personnel shall complete a written record on a standardized form of any such removal, including the name of the subject removed, the time, date and location of the event, the person(s) making the removal, the specific circumstances surrounding the removal and the remedial action taken. The records shall be maintained by the EH&S Department.

10. UCLA through its Office of Environment, Health and Safety shall conduct comprehensive chemical safety inspections, in accordance with the UCLA Laboratory Safety Manual, Chemical Hygiene Plan, and California Code of Regulations Title 8. The EH&S department shall immediately notify the responsible Principal Investigator, or other responsible lab personnel, of any Critical Deficiency noted during an inspection. Critical deficiencies are those that can imminently lead to serious injuries or immediately dangerous to life and health. Such deficiencies shall be immediately corrected. The EH&S Department shall immediately order the cessation of any activity that constitutes a Critical Deficiency and will take all necessary action to abate the hazardous condition or activity.

III. ENHANCED REPORTING REQUIREMENTS

1. Principal Investigators shall be required to immediately report all recordable occupational injury or illnesses under Title 8 California Code of Regulations Section 342 to UCLA EH&S or to Regents’ campuses EH&S as applicable. During the term of the Agreement, UCLA and Regents shall immediately notify the Cal/OSHA Enforcement Unit, via telephone and e-mail to be provided, of any such recordable occupational injury or illness and shall immediately notify the Cal/OSHA Bureau of Investigation, via telephone and e-mail to be provided, of any occurrence. UCLA and Regents shall immediately secure any incident scene from all access and preserve all evidence until the Cal/OSHA Enforcement Unit AND Cal/OSHA Bureau of Investigation each responds or each determines that a response is not required. If no response is provided by either Cal/OSHA Enforcement Unit or Cal/OSHA Bureau of Investigation within 24 hours of when notice is received by Cal/OSHA, that shall be a determination that a response is
not required. UCLA and Regents may take all necessary steps to eliminate life/safety issues (i.e., fire or continued property damage), or environmental risks associated with the occurrence prior to securing the scene. Any such activities shall, to the extent possible, be documented by UCLA personnel or Regents' campuses personnel.

IV. CAL/OSHA ENHANCED INSPECTIONS

1. During the term of this Agreement, the Cal/OSHA Enforcement Unit and/or Cal/OSHA Bureau of Investigation, jointly or severally, at its discretion, shall have full access to any UCLA or Regents' laboratory facilities for the purposes of conducting inspections to determine compliance with its terms as set forth herein. The inspections shall be limited to three annually during the term of the Agreement, with the duration of any inspection to be determined at the discretion of the Cal/OSHA Enforcement Unit and/or Cal/OSHA Bureau of Investigation, jointly or severally. Advance notice of an inspection shall not be given to UCLA or Regents' facility. However, upon arrival at a designated laboratory, Cal/OSHA personnel shall contact the Regents' campus facility representative or UCLA EH&S representative, to be designated by the Regents or UCLA, and will permit the representative to be present during the inspection if such representative is reasonably available. "Reasonably available" shall mean availability within 1 hour of initial contact or attempted contact. Cal/OSHA personnel shall not be precluded from documenting any observable conditions while at the laboratory or beginning any inspection where the loss of critical information may, at the determination of Cal/OSHA personnel be likely, while waiting for the arrival of a representative. UCLA and Regents shall provide all documents, information and records necessary for the completion any inspection, upon request from Cal/OSHA personnel.

V. OTHER PROVISIONS

1. Nothing in this Appendix shall be construed to limit the investigative authority of the Cal/OSHA Enforcement Unit or Cal/OSHA Bureau of Investigation, as may be otherwise provided by statute.
1. Pyrophoric Chemicals

1.1. Aluminum alkyls: R₃Al, R₂AlCl, RAICl₂
   Examples: Et₃Al, Et₂AlCl, EtAlCl₂, Me₃Al, Diethylethoxyaluminium

1.2. Grignard Reagents: RMgX (R=alkyl, aryl, vinyl X=halogen)

1.3. Lithium Reagents: RLi (R = alkyls, aryls, vinyls)
   Examples: Butyllithium, Isobutyllithium, sec-Butyllithium, tert-Butyllithium,
   Ethyllithium, Isopropyllithium, Methylithium, (Trimethylsilyl)methylithium,
   Phenyllithium, 2-Thienyllithium, Vinyllithium, Lithium acetylide ethylenediamine
   complex, Lithium (trimethylsilyl)acetylide, Lithium phenylacetylide

1.4. Zinc Alkyl Reagents: RZnX, R₂Zn
   Examples: Et₂Zn

1.5. Metal carbonyls: Lithium carbonyl, Nickel tetracarbonyl, Dicobalt octacarbonyl

1.6. Metal powders (finely divided): Bismuth, Calcium, Cobalt, Hafnium, Iron,
   Magnesium, Titanium, Uranium, Zinc, Zirconium

1.7. Low Valent Metals: Titanium dichloride

1.8. Metal hydrides: Potassium Hydride, Sodium hydride, Lithium Aluminum Hydride,
   Diethylaluminium hydride, Diisobutylaluminium hydride

1.9. Nonmetal hydrides: Arsine, Boranes, Diethylarsine, diethylphosphine, Germane,
   Phosphine, phenylphosphine, Silane, Methanetellurol (CH₃TeH)

1.10. Non-metal alkyls: R₃B, R₃P, R₃As; Tributylphosphine, Dichloro(methyl)silane

1.11. Used hydrogenation catalysts: Raney nickel, Palladium, Platinum

1.12. Activated Copper fuel cell catalysts, e.g. Cu/ZnO/Al₂O₃

1.13. Finely Divided Sulfides: Iron Sulfides (FeS, FeS₂, Fe₃S₄), and Potassium Sulfide (K₂S)
1.14. **Elements**: Phosphorus, Cesium, Lithium, Potassium, Sodium, Sodium Potassium Alloy (NaK), Aluminum Phosphide (AIP)

2. **Water Reactive chemicals**
   - Aluminum alkyl halides
   - Aluminum alkyl hydrides
   - Aluminum alkyls
   - Aluminum borohydride or Aluminum borohydride in devices
   - Aluminum Carbide
   - Aluminum ferrosilicon powder
   - Aluminum hydride
   - Aluminum phosphide
   - Aluminum powder, uncoated
   - Aluminum silicon powder, uncoated
   - Barium
   - Boron trifluoride dimethyl etherate
   - Calcium
   - Calcium carbide
   - Calcium cyanamide with more than 0.1 percent of calcium carbide
   - Calcium hydride
   - Calcium manganese silicon
   - Calcium phosphide
   - Calcium silicide
   - Cells, containing sodium
   - Cerium, turnings or gritty powder
   - Cesium or Caesium
   - Diethylzinc
   - Dimethylzinc
Ethyldichlorosilane
Ferrosilicon, with 30 percent or more but less than 90 percent silicon
Hexyllithium
Lithium
Lithium alkyls
Lithium aluminum hydride
Lithium aluminum hydride, ethereal
Lithium borohydride
Lithium ferrosilicon
Lithium hydride
Lithium hydride, fused solid
Lithium nitride
Lithium silicon
Magnesium alkyls
Magnesium aluminum phosphide
Magnesium granules, coated, particle size not less than 149 microns
Magnesium hydride
Magnesium phosphide
Magnesium silicide
Magnesium, powder or Magnesium alloys, powder
Maneb or Maneb preparations with not less than 60 percent maneb
Methyl magnesium bromide, in ethyl ether
Methyldichlorosilane
Phosphorus pentasulfide, free from yellow or white phosphorus
Potassium
Potassium borohydride
Potassium phosphide
Potassium sodium alloys
Potassium, metal alloys
Rubidium
Sodium
Sodium aluminum hydride
Sodium borohydride
Sodium hydride
Sodium phosphide
Stannic phosphide
Strontium phosphide
Trichlorosilane
Zinc ashes
Zinc phosphide
Zinc powder or Zinc dust

3. Potentially explosive Compound Classes

Acetylene (-C≡C-)
Acyl hypohalites (RCO-OX)
Azide Organic (R-N3)
Azide Metal (M-N3)
Azo (-N=N-)
Diazo (=N=N)
Diazosulphide (-N=S-N=N)
Diazonium salts (R-N2+)
Fulminate (-CNO)
Halogen Amine (=N-X)
Nitrate (-ONO2)
Nitro (-NO2)
Aromatic or Aliphatic Nitramine (=N-NO2) (-NH-NO2)
Nitrite (-ONO)
Nitroso (-NO)
Ozonides
Peracids (-CO-O-O-H)
Peroxide (-O-O-)
Hydroperoxide (-O-O-H)
Metal peroxide (M-O-O-M)

**Explosive Salts:**
Bromate salts (BrO3-)
Chlorate salts (ClO3-)
Chlorite salts (ClO2-)
Perchlorate salts (ClO4-)
Picrate salts (2,4,6-trinitrophenoxyde)
Picramate salts (2-amino-4,6-dinitrophenoxyde)
Hypohalite salts (XO-)
Iodate salts (IO3-)

3.1. Potentially Explosive Chemicals
Acetyl peroxide
Acetylene
Ammonium nitrate
Ammonium perchlorate
Ammonium picrate
Ba/Pb/Hg azide (heavy metal azides)
Li/K/Na azide
Organic azides
<table>
<thead>
<tr>
<th></th>
<th>Chemicals</th>
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<tbody>
<tr>
<td>1</td>
<td>Benzoyl peroxide</td>
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<tr>
<td>2</td>
<td>Bromopropyne</td>
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<tr>
<td>3</td>
<td>Butanone peroxide</td>
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<tr>
<td>4</td>
<td>Cumene peroxide</td>
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<tr>
<td>5</td>
<td>Diazodinitrophenol</td>
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<tr>
<td>6</td>
<td>Dinitrophenol</td>
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<tr>
<td>7</td>
<td>Dinitrophenylhydrazine</td>
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<tr>
<td>8</td>
<td>Dinitroresorcinol</td>
</tr>
<tr>
<td>9</td>
<td>Dipicryl amine</td>
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<tr>
<td>10</td>
<td>Dipicryl sulphide</td>
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<td>11</td>
<td>Dodecanoyl peroxide</td>
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<td>12</td>
<td>Ethylene oxide</td>
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<td>13</td>
<td>Lauric peroxide</td>
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<tr>
<td>14</td>
<td>MEK peroxide</td>
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<tr>
<td>15</td>
<td>Mercury fulminate, Silver fulminate</td>
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<tr>
<td>16</td>
<td>Nitrocellulose</td>
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<tr>
<td>17</td>
<td>Nitrogen trifluoride</td>
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<td>19</td>
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<tr>
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<td>21</td>
<td>Nitromethane</td>
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<td>22</td>
<td>Nitrourea</td>
</tr>
<tr>
<td>23</td>
<td>Picramide</td>
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<tr>
<td>24</td>
<td>Picric acid (trinitrophenol)</td>
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<tr>
<td>25</td>
<td>Picryl chloride</td>
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<tr>
<td>26</td>
<td>Picryl sulphonic acid</td>
</tr>
<tr>
<td>27</td>
<td>Propargyl bromide (neat)</td>
</tr>
<tr>
<td>28</td>
<td>Sodium dinitrophenate</td>
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</tbody>
</table>
1. Succinic peroxide
2. Tetranitroaniline
3. Trinitroaniline
4. Trinitroanisole
5. Trinitrobenzene
6. Trinitrobenzenesulphonic acid
7. Trinitrobenzoic acid
8. Trinitroresol
9. Trinitronaphthalene
10. Trinitrophenol (picric acid)
11. Trinitroresorcinol
12. Trinitrotoluene
13. Urea nitrate

4. Acutely Toxic Chemicals

17. Abrin
18. N-Acetoxy-2-acetylaminofluorene
19. Acrolein
20. Acryloyl chloride
21. Actinomycin D
22. Aldicarb
23. o-Aminoazobenzene
24. 2-Aminofluorene
25. 4-aminopyridine
26. Ammonium vanadate
27. Anabasine
28. Apholate
Arsenious Acid, Monosodium Salt
Arsenic acid
Arsenic oxide
Arsenic pentoxide
Arsenic trioxide
Barium cyanide
Benzenethiol or Thiophenol
Beryllium powder
N,N-bis(2-chloromethyl)-2-Naphthylamine
Bromoethyl methanesulfonate
1,4-Butanediol dimethylsulfonate
Calcium cyanide
Cantharadin
2-Chloro-4-dimethyl-amino-6-methylpyrimidine
2-Chlorophenyl Thiourea
Copper cyanide
Cyanide salts
Cyanogen halide
Cyclophosphamide (2-bis(2-chloroethyl)-aminotetrahydro-2H-1,3,2- oxazaphosphorine-2-oxide)
Dichloromethyl ether
Dichlorophenylarsine
Diethyl-arsine
Digalen
Digifolin
Digoxin
7,12-Dimethylbenze[a]anthracene
3,3'-Dimethoxybenzidine
<table>
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<tr>
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<th>3,3'-Dimethylbenzidine</th>
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<tbody>
<tr>
<td>2</td>
<td>Dimethylethlenimine</td>
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<tr>
<td>3</td>
<td>1,2-Dimethylhydrazine</td>
</tr>
<tr>
<td>4</td>
<td>3,3'-Dimethoxybenzidine dihydrochloride</td>
</tr>
<tr>
<td>5</td>
<td>2,4-Dinitrophenol</td>
</tr>
<tr>
<td>6</td>
<td>1,4-Dinitrosopiperazine</td>
</tr>
<tr>
<td>7</td>
<td>Duboisine</td>
</tr>
<tr>
<td>8</td>
<td>Ethionine</td>
</tr>
<tr>
<td>9</td>
<td>Ethyl cyanide</td>
</tr>
<tr>
<td>10</td>
<td>Ethylenimine</td>
</tr>
<tr>
<td>11</td>
<td>Ethylene glycol dinitrate</td>
</tr>
<tr>
<td>12</td>
<td>Ethyl methanesulfonate</td>
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<tr>
<td>13</td>
<td>Fluoroacetamide</td>
</tr>
<tr>
<td>14</td>
<td>Fluroacetic acid</td>
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<td>15</td>
<td>Gitalin</td>
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<tr>
<td>16</td>
<td>Heroin</td>
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<tr>
<td>17</td>
<td>Hydrazoic acid</td>
</tr>
<tr>
<td>18</td>
<td>Hydrogen cyanide</td>
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<tr>
<td>19</td>
<td>N-Hydroxy-2-acetylaminofluorene</td>
</tr>
<tr>
<td>20</td>
<td>Hyoscyamine</td>
</tr>
<tr>
<td>21</td>
<td>Inorganic arsenic</td>
</tr>
<tr>
<td>22</td>
<td>Isobenzan</td>
</tr>
<tr>
<td>23</td>
<td>K-Strophanthin</td>
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<tr>
<td>24</td>
<td>Lanatoside</td>
</tr>
<tr>
<td>25</td>
<td>Lysergic acid diethylamide</td>
</tr>
<tr>
<td>26</td>
<td>3-Methylcholanthrene</td>
</tr>
<tr>
<td>27</td>
<td>Methyl chloromethyl ether</td>
</tr>
<tr>
<td>28</td>
<td>4,4'-Methylene bis-(2-chloraniline)</td>
</tr>
</tbody>
</table>
Methylhydrazine
Methyl methanesulfonate
Nickel cyanide
Nicotine salicylate
N-[4-(5-Nitro-2-furyl)-2-thiazoly]-formamide
Nitroglycerin
N-Nitroquinoline-1-oxide
N-Nitrosodimethylamine
N-Nitroso-N-methylurethane
Pantopon
Parathion
Paroxon
Phenyl-Arsonous dichloride
Phenyl Thiourea
Phosphorodithioic acid
Phosphorous (Yellow)
Potassium cyanide
Propylenimine
2-Propylpiperidine
Ricin
Scopolamine
Sarin
Silver cyanide
Sodium Azide
Sodium Selenate
Sodium cyanide
Sulfotep
Tabun
Tepp
2,3,7,8-Tetrachlorodibenzofuran
Tetraethyl lead
Tetramethyl Ammonium Hydroxide
Thallic oxide
Thallium(I) selenite
Thallium(I) sulfate
Thimet
Thiophenol
m-Toluenediamine
Uracil mustard
Vanadium pentoxide
Zinc cyanide
Zinc phosphide

Compounds with a high level of acute toxicity are defined by LD50 and LC50 levels.

<table>
<thead>
<tr>
<th>Oral LD50 (Rats, per kg)</th>
<th>Skin Contact LD50 (Rabbits, per kg)</th>
<th>Inhalation LC50 (Rats, ppm for 1 h)</th>
<th>Inhalation LC50 (Rats, mg/m³ 1 h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 50 mg</td>
<td>&lt; 200 mg</td>
<td>&lt; 200</td>
<td>&lt; 2000</td>
</tr>
</tbody>
</table>

5. Acutely Toxic Gases

Ammonia
Arsenic pentafluoride
Arsine
Boron trichloride
Boron trifluoride
Carbon Monoxide
Cyanogen
Cyanogen chloride
Chlorine
Diazomethane
Diborane
Fluorine
Germane
Hexaethyl tetraphosphate
Hydrogen bromide
Hydrogen chloride
Hydrogen fluoride
Hydrogen sulfide
Hydrogen selenide
Methyl mercaptan
Nitric oxide
Nitrogen dioxide
Nitrogen Tetroxide
Oxygen difluoride
Phosgene
Phosphine
Phosphorus pentafluoride
Selenium hexafluoride
Silicon tetrafluoride
Stibine
Sulfur tetrafluoride
Trimethylsilyldiazomethane
6. Peroxide Forming Chemicals

6.1. **Class 1:** These chemicals form peroxides after prolonged storage. These chemicals should be tested for the formation of peroxides on a periodic basis.

- Divinyl Acetylene
- Divinyl Ether
- Isopropyl Ether
- Sodium or Potassium Amide
- Vinylidene Chloride (1,1-dichloroethylene)
- Potassium metal

6.2. **Class 2:** Chemicals that form explosive levels of peroxides when concentrated through distillation, evaporation or exposure to air after opening.

- Cyclohexene
- Cyclopentene
- Decalin
- Diacetylene (gas)
- Dicyclopentadiene
- Diethyl ether (ether)
- Dioxane
- Ethylene glycol dimethyl ether (glyme)
- Ethylene glycol ether acetates
- Furan
- Methyl Isobutyl Ketone
- Methyl Acetylene (gas)
- Methyl Cyclopentane
6.3. **Class 3:** Chemicals which are a hazard due to peroxide initiation of polymerization. When stored in a liquid state, the peroxide forming potential increases significantly.

- Acrylic acid
- Acrylonitrile
- Butadiene
- Chlorobutadiene
- Chloroprene
- Chlorotrifluoroethylene (gas)
- Methyl Methacrylate
- Styrene
- Tetrafluoroethylene (gas)
- Vinyl Acetate
- Vinyl Acetylene (gas)
- Vinyl Chloride (gas)
- Vinyl Pyridine
- Vinlylidene chloride

7. **Strong Corrosives**

7.1. **Strong Acids**

- Hydrobromic acid
- Hydrochloric acid
Hydrofluoric acid
Nitric acid
Perchloric acid
Sulfuric acid

7.2. Strong Bases
Barium hydroxide
Calcium hydroxide
Lithium hydroxide
Potassium hydroxide
Rubidium hydroxide
Sodium hydroxide
Strontium hydroxide

8. Strong Oxidizing Agents (These can also be grouped: perchlorates, peroxides, permanganates, nitrates, etc.)

Ammonium perchlorate
Ammonium permanganate
Barium peroxide
Bromine
Calcium chlorate
Calcium hypochlorite
Chlorine trifluoride
Chromium anhydride
Chromic acid
Dibenzoyl peroxide
Fluorine
1. Hydrogen peroxide
2. Magnesium peroxide
3. Nitrogen trioxide
4. Oxygen
5. Perchloric acid
6. Potassium bromate
7. Potassium chlorate
8. Potassium peroxide
9. Propyl nitrate
10. Sodium chlorate
11. Sodium chlorite
12. Sodium perchlorate
13. Sodium peroxide

9. Strong Reducing Agents (Most of these if not all are water reactive chemicals)

15. Barium
16. Calcium
17. Lithium
18. Lithium aluminum hydride
19. Magnesium
20. Potassium
21. Sodium
22. Sodium borohydride

10. Regulated Carcinogens

26. 2-Acetylaminofluorene
<table>
<thead>
<tr>
<th></th>
<th>Chemical Name</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Acrylonitrile</td>
</tr>
<tr>
<td>2</td>
<td>Actinolite</td>
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<tr>
<td>3</td>
<td>4-Aminodiphenyl</td>
</tr>
<tr>
<td>4</td>
<td>Amosite</td>
</tr>
<tr>
<td>5</td>
<td>Anthophyllite</td>
</tr>
<tr>
<td>6</td>
<td>m-Arsenic Acid</td>
</tr>
<tr>
<td>7</td>
<td>o-Arsenic Acid</td>
</tr>
<tr>
<td>8</td>
<td>Arsenic Acid Hemihydrate</td>
</tr>
<tr>
<td>9</td>
<td>Arsenic Disulfide</td>
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<tr>
<td>10</td>
<td>Arsenic, Inorganic</td>
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<tr>
<td>11</td>
<td>Arsenic Pentoxide</td>
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<td>12</td>
<td>Arsenic Tribromide</td>
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<td>Arsenic Trichloride</td>
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<td>19</td>
<td>Arsenical Dip</td>
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<td>20</td>
<td>Arsenious Acid</td>
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<tr>
<td>21</td>
<td>Asbestos</td>
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<td>22</td>
<td>Benzene</td>
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<td>1,3-Butadiene</td>
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<td>25</td>
<td>Cadmium &amp; Cd compounds</td>
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<td>Cadmium Bromide</td>
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<td>28</td>
<td>Cadmium Carbonate</td>
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<td>Cadmium Nitrate</td>
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<td>Cadmium Oxide</td>
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<td>Cobalt (II) Arsenate</td>
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<td>27</td>
<td>Coke oven emissions</td>
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<td>28</td>
<td>Copper (II) Acetoarsenite</td>
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<td>29</td>
<td>Crocidolite</td>
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<tr>
<td>30</td>
<td>Cupric Acetoarsenite</td>
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<td>31</td>
<td>Cupric Arsenite</td>
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</table>
1,2-Dibromo-3-chloropropane
3,3'-Dichlorobenzidine
4-Dimethylaminoazobenzene
N,N-Dimethylnitrosoamine
Disodium Arsenate
Disodium Hydrogen Arsenate
Donovan's Solution
Ethylene Oxide
Ethyleneimine
Formaldehyde
Fowler's Solution
Gallium Arsenide
Inorganic Arsenic
Lead Arsenate
Lead Arsenite
Magnesium Arsenate
Methylchloromethylether
Methylene chloride
4,4'-Methylenedianiline
Monochlorodimethylether
2-Naphthylamine
alpha-Naphthylamine
beta-Naphthylamine
4-Nitrobiphenyl
N-Nitrosodimethylamine
Paraformaldehyde
Potassium Arsenate
Potassium Arsenite
beta-Propiolactone
Sodium Arsenate
Sodium Arsenite
Talc (containing asbestos fibers)
Tremolite [asbestiform]
Trisodium Arsenate Heptahydrate
Vinyl Chloride
Vinyl Cyanide