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RE: Comments on Discussion Draft for Section 5194 (Hazard Communication Standard)

On behalf of the San Francisco chapter of Physicians for Social Responsibility (SF PSR), I appreciate the opportunity to submit written comments on the Discussion Draft for Section 5194. The Discussion Draft contains suggested language to amend existing 8 CCR § 5194 to address specific changes OSHA made to 29 CFR 1910.1200 (Hazard Communication Standard) when the Globally Harmonized System (GHS) for classification and labeling of hazardous chemicals was incorporated into the Standard. SF PSR previously submitted comments prior to the advisory meeting on April 9, 2013. We submitted an amended version of the comments on April 15, 2013. Our comments were in support of Cal/OSHA retaining language in § 5194 that ensures greater protections for workers than the language in the 2012 OSHA Hazard Communication Standard. In addition to commenting on specific information in the Discussion Draft for Section 5194, our current comments also address other issues relevant to revising Section 5194 to incorporate the GHS classification and labeling of hazardous chemicals.

My name is Dr. Julia Quint. I am a member of the SF PSR Steering Committee. I also serve on a number of other advisory committees that have a toxic chemicals focus, including the Science Guidance Panel of the California Biomonitoring Program, the DTSC Green Ribbon Science Panel, and the World Trade Center Scientific and Technical Advisory Committee. I have served on several National Academy of Sciences committees, including a recent IOM committee that reviewed the chemical-disease links and other information in the Department of Labor's Site Exposure Matrix Database. I am retired from the California Department of Public Health (CDPH) and am a former Research Scientist and Chief of the Hazard Evaluation System and Information Service (HESIS), in the CDPH Occupational Health Branch. The following comments are submitted on behalf of SF PSR, only, and are not intended to represent the views of other organizations with which I am affiliated.

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Comments on Discussion Draft for Section 5194

Topic 1: Source Lists –5194 (d)(3)

SF PSR strongly supports Cal/OSHA's proposal to retain the source lists in subsection (d)(3)(A)-(C) of Section 5194, and to require classification of the chemicals on the lists as hazardous based on their identified health hazards.

Mandatory classification of chemicals as hazardous based on their identification by authoritative organizations such as the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), and the American Conference of Governmental Industrial Hygienists (ACGIH) ensures that California workers will continue to have the "right to know" about chemicals in their workplaces that can cause serious chronic diseases like cancer, organ system damage, reproductive damage, and asthma.

Retaining the current requirement in section 5194 that manufacturers classify chemicals on the source lists as hazardous is consistent with the GHS principle that *protection offered to workers should not be reduced as a result of harmonizing the classification and labeling systems* (GHS 1.1.1.6)

In addition, Cal/OSHA's proposal regarding source lists in subsection (d)(3):

- Is consistent with the requirements of Appendix A, Section A.O.3, Classification Based on Weight of Evidence, which states in part:
  For some hazard classes, classification results directly when the data satisfy the criteria. For others, classification of a chemical shall be determined on the basis of the total weight of evidence using expert judgment (emphasis added). This means that all available information bearing on the classification of hazard shall be considered together, including the results of valid in vitro tests, relevant animal data, and human experience such and epidemiological and clinical studies and well-documented case reports and observations.

  Unlike chemicals that are acute toxicants, chemicals that are chronic toxicants (carcinogens, reproductive toxicants, respiratory sensitizers, etc.) cannot be classified by applying criteria in Appendix A to data like LD 50 values. Classification of chronic toxicants requires expert judgment and must be based on the total weight of evidence.

  Consistent with the requirements of section A.O.3, scientists identified the chronic toxicants on the source lists in subsection (d)(3) using their expert judgment and employing weight of evidence determinations that are based on established criteria and guidance. The weight of evidence determinations are published, undergo peer review, and in some cases, public review.

- Helps to prevent potential misclassifications and disparate classifications of chemicals that pose serious health hazards due to the lack of required qualifications in Appendix A for what constitutes "expert judgment". The scientific information described in Appendix A that must be considered and analyzed to conduct weight of evidence determinations for carcinogens and other chronic toxicants is extensive, complex, can be controversial, and requires a high degree of specific scientific expertise and experience to understand and to use appropriately in classifying chemicals. The lack of information about minimum qualifications required to conduct weight of evidence determinations for high concern chemicals, coupled with the lack of scientific guidance information in Appendix A, can lead to unqualified and inexperienced personnel failing to classify

chemicals as "hazardous", omitting them from Safety Data Sheets, and preventing access to important health hazard information that workers, employers, and health care providers need to protect against work-related illness and disease.

The apparent assumption that classifying chemicals with chronic toxicity using the criteria in Appendix A will lead to common or "harmonized" classifications is not substantiated by fact and is inconsistent with the chemical hazard identification experience to date. More often than not, highly qualified and experienced toxicologists and other experts disagree with regard to their interpretations of the same toxicological studies and other toxicological issues such as mode of action and physiologically based pharmacokinetics data. Their interpretations largely depend on whether they are affiliated with industry groups or government agencies and other public health organizations, and on the goals and purpose of their affiliated organizations. A review of comments submitted by industry (and responses to the comments) regarding weight of evidence determinations conducted by government agencies, including Cal/OSHA, OSHA, EPA, and Cal/EPA OEHHA to identify chemical hazards, illustrates this point. It also emphasizes the importance of having established guidance and using transparent peer review and public processes for classifying chemical hazards. Examples are the comments submitted by industry representatives in response to the Cal/OSHA Health Experts Advisory Committee's weight of evidence documents on N-methyl pyrrolidone and ethylbenzene that are available on Cal/OSHA's website, and in response to OSHA's proposed methylene chloride standard (http://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=PREAMBLES&p_toc_level=1&p_keyvalue=Methylene~Chloride) and other carcinogen standards.

- Is consistent with the approach the European Union (EU) uses to implement their GHS-based classification and labeling of hazardous chemicals regulation. In the EU, it is mandatory for suppliers to use specific, EU-determined, harmonized classification and labeling for certain hazardous chemicals or mixtures instead of self-classifying the chemicals based on GHS criteria. The European Chemicals Agency (ECHA) develops harmonized classifications and labeling for the most hazardous substances, which are usually carcinogenic, mutagenic, toxic for reproduction or respiratory sensitizers.

  The ECHA states:
  The classification and labeling of certain hazardous chemicals must be harmonized to ensure adequate risk management throughout the European Union…

  Harmonized classifications and labeling are mandatory for the suppliers of respective substances so that users are better informed about their potential hazardous effects and how best to make use of them safely.

  The harmonization of the classifications aims at protecting human health and the environment while enhancing competitiveness and innovation. See http://echa.europa.eu/regulations/clp/classification

- Is consistent with other regulatory efforts in California that use source lists to identify chemicals that pose chronic health risks for workers. These regulatory efforts include the Safe Cosmetics Act of 2005, the Green Chemistry Hazard Traits for California's Toxics Information Clearinghouse regulation, and the soon to be promulgated Safer Alternatives to Consumer Products regulation. Retaining the lists in Section 5194 contributes to harmonizing protections against toxic chemical exposures for workers, communities, consumers, and the environment in California.

- Increases transparency of chemical classifications since the scientific evaluations which are the basis for adding chemicals to authoritative lists are accessible, are developed according to established guidelines, have undergone peer review, and in some cases, public review.

- Ensures consistent classification of chemicals that cause respiratory and dermal sensitization, and their inclusion on SDSs. The ACGIH uses a "SEN" notation to identify sensitizers. The ACGIH TLV documentations are one of the few sources of this information.

- Ensures that the health hazards of the much larger number of hazardous chemicals that have Cal/OSHA PELs and ACGIH TLVs compared to OSHA PELs will be classified and included on SDSs. Cal/OSHA PELs and ACGIH TLVs also are more protective than OSHA PELs for the same chemicals since they are updated on a more frequent basis. Most OSHA PELs have not been updated since 1971. Classifying chemicals that have Cal/OSHA PELs and ACGIH TLVs will inform workers and employers about potential health hazards and could result in increased protections for workers to prevent illnesses and diseases. It also ensures that chemicals uniquely regulated by Cal/OSHA will be classified and included on SDSs. 1-Bromopropane (n-propyl bromide), and the glycol ethers, ethylene glycol dimethyl ether (1,2-dimethoxyethane) and ethylene glycol diethyl ether (1,2-diethoxyethane) are examples.

- Ensures that emerging or unappreciated chemical hazards identified by HESIS will be classified and included on SDSs. This is consistent with the intent of the California Legislature to take early action to prevent work-related chronic disease. HESIS Hazard Alerts or Health Hazard Advisories on diacetyl (2006); N-methyl pyrrolidone (2006); 1-bromopropane (n-propyl bromide) (2003); and diesel engine exhaust (2002) warned of a fatal lung disease (diacetyl), developmental harm (N-methyl pyrrolidone and 1-bromopropane), reproductive harm and nerve damage (1-bromopropane), and cancer (diesel exhaust). The alerts also identified safer alternatives and other ways to protect against harmful exposures.

- "Levels the playing field" with regard to compliance with Section 5194 by manufacturers and importers, in addition to helping ensure consistent classification and labeling of chemicals that pose risks of serious health effects. Stating in Appendix A that the IARC and NTP carcinogen lists *may* be used to classify chemicals as carcinogens can result in some manufacturers and importers using the lists and others electing not to use the lists. This can be a disadvantage to those who list chemicals as carcinogens on SDSs based on identification by these authoritative sources, compared to their competitors who self-classify, arrive at a different conclusion regarding carcinogenicity, and do not list the chemicals on SDSs.

- Simplifies compliance with the standard. Decreases the time and resources manufacturers and importers have to spend identifying, retrieving, and evaluating studies, and conducting weight of evidence determinations to classify chemicals.

- Decreases potential liability for manufacturers and importers who are required to consider the full range of available scientific literature and other evidence concerning potential hazards when classifying health hazards. The lack of guidance regarding what comprises "the full range of available scientific literature and other evidence…" is open to interpretation and problematic.

- Assists physicians and other healthcare providers in identifying and providing consultations about work-related exposures, and in diagnosing occupational illnesses and diseases since a larger number of hazardous chemicals will be accurately classified and put on SDSs.

◆ Makes enforcement of the standard simpler and more transparent and consistent since the classifications are based on authoritative lists as opposed to weight of evidence determinations conducted by individual manufacturers and importers. Determining whether the individual weight of evidence analyses are accurate and complete may be time-consuming and challenging since there are no guidelines for what is compliant for the various categories of chronic health hazards.

- **Amend existing subsection (d)(3) to read:**

SF PSR supports the proposed amended language with incorporation of the additional revisions (noted in bold and double strikeout) as shown below:

(3) ~~The manufacturer, importer, or employer evaluating substances~~ Manufacturers, importers, and employers classifying chemicals, shall treat any of the following sources as establishing that the ~~substances~~ chemicals listed in them have met the total weight of evidence ~~criteria~~ **using expert judgment** as described in Appendix A for classification **of** ~~for~~ the hazard upon which their listing is based:

- **Amend existing subsection (d)(4) to read:**

SF PSR supports the proposed amended language with incorporation of the additional revisions (noted in bold and double strikeout) as shown below:

(4) Manufacturers, importers, and employers ~~evaluating substances~~ classifying chemicals shall treat any of the following sources as establishing that any ~~substance is a carcinogen or potential carcinogen for hazard communication purposes:~~ chemical listed has met the total weight of evidence ~~criteria~~ **using expert judgment** as described in Appendix A for classification as a known or presumed human carcinogen, or a suspected human carcinogen for purposes of this section:

(A) National Toxicology Program (NTP), Annual Report on Carcinogens (latest edition)
(B) International Agency for Research on Cancer (IARC) ~~Monographs~~ **List of Carcinogens** (latest edition)
(C) 29 CFR Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration.

~~Note to (d)(4): The Registry of Toxic Effects of Chemical Substances published by the National Institute for Occupational Safety and Health indicates whether a substance has been found by NTP or IARC to be a potential carcinogen~~.

Recommendations

Source Lists

1. Update the Director's List of Hazardous Substances to include the HESIS Hazard Alerts and other required information.

2. Add the Proposition 65 List to the Director's List of Hazardous Substances to provide an authoritative source for identifying reproductive and developmental toxicants.

3. Add "DSEN" and "RSEN" to chemicals on the Cal/OSHA PEL list and ACGIH TLV list (based on information in the ACGIH TLV Documentations) to identify and aid manufacturers and importers in classifying, dermal and respiratory sensitizers, respectively.

4. Add the health bases for the Cal/OSHA PELs and ACGIH TLVs to aid manufacturers and importers in classifying health hazards associated with the chemicals.

Appendix A

1. A.6 Carcinogenicity: Amend to require that manufacturers, importers, or employers use the guidance detailed in the OSHA regulation, 29 CFR 1990.143-145, Identification, Classification, and Regulation of Carcinogens to conduct weight of evidence evaluations for classifying chemicals [that are not identified as carcinogens on the source lists in subsection (d)(3)].

   As noted in our previous comments (April 15, 2013), 29 CFR 1990.143-145 specifies the minimum human and animal evidence required to determine if a chemical should be classified as a carcinogen, includes guidance on how to weigh evidence from non-positive studies, and specifies the criteria that must be met for non-positive studies to be considered.

2. A.6.4 Classification of carcinogenicity: Amend to read:
   Chemical manufacturers, importers, and employers ~~evaluating~~ classifying chemicals ~~may~~ shall treat the following sources as establishing that a substance is a carcinogen or potential carcinogen for hazard communication purposes in lieu of applying the criteria described herein:

   A.6.4.1 National Toxicology Program (NTP), "Report on Carcinogens" (latest edition);

   A.6.4.2 International Agency for Research on Cancer (!ARC) ~~"Monographs on the Evaluation of Carcinogenic Risks to Humans"~~ "List of Carcinogens" (latest edition)

3. A.7 Reproductive Toxicity: Amend to require manufacturers and importers to use the guidance in US EPA risk assessment guidelines for classifying reproductive toxicants and developmental toxicants. The EPA guidance describes what constitutes sufficient human evidence, specifies the minimum animal evidence required to identify that a hazard exists, and specifies the minimum evidence required to determine that a hazard does not exist. (See April 15, 2013 comments)

   A.7.2.2 Basis of classification: Amend to add new subsection A.7.2.2.4:

   A.7.2.2.4 Chemical manufacturers, importers, and employers classifying chemicals shall

treat the following source as establishing that a chemical is a reproductive or developmental toxicant for hazard communication purposes in lieu of applying the criteria described herein:

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) List (latest edition)

4. A.4 Respiratory or Skin Sensitization: Amend to add a new A.4.2.1 subsection to read:

A.4.2.1 Chemical manufacturers, importers, and employers classifying chemicals shall treat the following source as establishing that a chemical is a respiratory or skin sensitizer for hazard communication purposes in lieu of applying the criteria described herein:

Chemicals designated with "SEN" notations in the American Conference of Governmental Industrial Hygienists Documentation of Threshold Limit Values (latest edition)

5. A.9 Specific Target Organ Toxicity—Repeated or Prolonged Exposure: Amend to require manufacturers and importers to use the guidance in US EPA risk assessment guidelines for classifying neurotoxicants. The EPA guidance describes what constitutes sufficient human evidence, specifies the minimum animal evidence required to identify that a hazard exists, and specifies the minimum evidence required to determine that a hazard does not exist.

6. European Chemicals Agency (ECHA) Classification and Labeling Inventory Database: Amend Appendix A to inform manufacturers and importers that the EU Inventory Database can be used as a resource to classify chemicals. The online database includes chemicals that have been classified by the ECHA into various GHS-based hazard categories such as respiratory and dermal sensitizers, lactation hazards (effects on or via lactation), target organ toxicants, etc. Searching the ECHA inventory database using GHS-based hazard categories identifies the classified chemicals. For example, searching the inventory database for harmonized category 1 respiratory sensitizers identifies 193 chemicals. The database identifies 28 chemicals that the ECHA has classified as 1A reproductive toxicants.

Topic 2: One positive study conducted in accordance with established scientific principles

SF PSR does not support the proposed amendment to 5194(d)(2) in the Draft Discussion Document. The amendment specifies that one positive study conducted in accordance with established scientific principles for chemicals (in addition to carcinogens) should be noted on SDSs when the weight of evidence is insufficient to classify the chemical as a health hazard.

We do not support the proposed amendment because it reduces existing protections for workers. It contradicts Cal/OSHA's proposed definition of "health hazard" and the information in the existing (d)(2) subsection of 5194 that a single positive study conducted in accordance with established scientific principles should be used to classify a chemical as hazardous. In addition, for the notations regarding one positive study to be meaningful for SDS users, they should be accompanied by an explanation of the study's relevance to potential health effects of the chemical, and why the study did not provide sufficient evidence to classify the chemical. If "one positive study" needs to be noted for multiple chemicals in a mixture, it will be difficult for SDS preparers to explain the

significance of the aggregate study results and for users to understand it. Adding the information potentially could raise more questions than it answers.

SF PSR supports retaining the existing "one study" language in 5194(d)(2) with the revisions shown below (strikeout and bold), consistent with our previous comments (April 15, 2013). The language ensures existing protections for workers by specifying that one positive study conducted in accordance with established scientific principles should be used to classify chemicals as hazardous.

In addition, using one positive study conducted in accordance with established scientific principles to classify a chemical as hazardous:

- Is consistent with the OSHA regulation, 29 CFR 1990.143-145, identification, classification, and regulation of carcinogens http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=11381&p_table=STANDARDS

- Is consistent with EPA's hazard identification guidelines for neurotoxicants, carcinogens, reproductive toxicants, and developmental toxicants. See our comments submitted on 4/15/2013 for language regarding one positive study in the guidelines.

- Is consistent with IARC's classification guidelines for carcinogens.

- Has resulted in the identification of carcinogens and non-cancer health hazards by authoritative organizations including NIOSH, Cal/EPA OEHHA, and US EPA as shown below.

Examples of Health Hazard Classifications Based on Evidence From One Study

Chemical	Organization	Health Hazard	Reference Document
Epoxybutane	OEHHA	Respiratory	Chronic REL (cREL)
Toluene	OEHHA	Developmental	MADL
Propylene Oxide	NIOSH	Cancer	Current Intell. Bull (CIB)
Diesel Exhaust	NIOSH	Cancer	CIB
Methylene Chloride	NIOSH	Cancer	CIB
Toluene Diisocyanate	NIOSH	Cancer	CIB
Hexamethylene Diisocyanate	ACGIH	Respiratory	TLV Documentation
Hydrogen Cyanide	US EPA	Male Repro.	IRIS
Diethanolamine	OEHHA	Respiratory	cREL
Ethylene Oxide	NIOSH	Cancer	CIB
Napthalene	OEHHA	Respiratory	cREL

- Can help to prevent serious and potentially fatal diseases like bronchiolitis obliterans. A manufacturer of diacetyl would have been required to classify the chemical as a specific target organ toxicant and list it on the SDS based on a study which showed that diacetyl caused severe lung damage in animals. The manufacturer reported the study to EPA as required by the Toxic Substances Control Act (TSCA), but did not identify diacetyl as a lung hazard on the MSDS.

- Will not result in a large number of false-positive chemical classifications, based on the chemical hazard identification experience to date. Of the 955 carcinogens that IARC has classified, seven have been downgraded to a lower carcinogen classification and 55 have been upgraded to a higher classification based on relevant data. There are over 900 substances on the Proposition 65 List, and only seven of the substances have been delisted. Some of the delistings are not based on changes in hazard classification or identification.

- Is essential for protecting workers from occupational illnesses and diseases due to the limited amount of available toxicological information on most chemicals. Most chemicals are not tested before marketing and, except for the NTP cancer bioassays, are not routinely tested by government agencies. The toxicological database for most chemicals is very limited and consists for the most part of studies published by researchers associated with academic and other non-government organizations. A scientifically robust positive study, which provides evidence of an adverse health effect of a chemical is difficult to achieve and is not likely to be repeated to confirm the results since this would not be considered "new" research and probably would not be funded.

SF PSR supports the following amendment to 5194(d)(2) instead of Cal/OSHA's proposed amendment.

• **Amend 5194(d)(2) to read:**

(d)(2) Manufacturers, importers, or employers ~~evaluating substances~~ classifying chemicals shall identify and consider the full range of available scientific literature and other evidence concerning ~~such~~ the potential hazards. This section does not require manufacturers, importers, or employers to conduct toxicological **testing** or epidemiological ~~testing~~ **studies** of the chemical to determine how to classify its hazards. For health hazards, evidence which is statistically significant and which is based on at least one positive study conducted in accordance with established scientific principles is considered to be sufficient to establish a hazardous effect if the results of the study meet the definitions of health hazards in this section. Appendix A to section 5194 shall be consulted for the ~~scope of~~ classification of health hazards covered, and Appendix B shall be consulted for the ~~criteria to be followed with respect to the completeness of the evaluation, and the data to be reported~~ classification of physical hazards.

- **Amend OSHA Appendix A (to 29 CFR 1910.1200), as adopted in California (as Appendix A to Section 5194) to read:**

SF PSR does not support the proposed amendment to subsection A.O.3.5 for the same reasons we do not support the Cal/OSHA's proposed amendment to subsection (d)(2. The proposed amendment to subsection A.O.3.5 appears to reduce existing protections for workers. It adds language which specifies that one positive study must be noted on SDSs for chemicals when the weight of evidence is insufficient to classify the chemical.

SF PSR supports the following amendment to subsection A.0.3.5 of Appendix A:

A.0.3.5. Both positive and negative results are considered together in the weight of evidence determination. However, a single positive study performed according to good scientific principles and with statistically and biologically significant results ~~may justify~~ justifies classification.

- **Amend the definition of health hazard in subsection (c) to read**:

SF PSR strongly supports Cal/OSHA's proposed amendment with the additional revisions (in bold) shown below:

…The term "health hazard" includes chemicals which are classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye

damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria, **authoritative sources**, **and guidance** for determining whether a chemical is classified as a health hazard are detailed in Appendix A to this section—~~Health Hazard Criteria~~.

Additional Recommended Amendments to Appendix A (Section 5194)

1. A.6.1: Hazard categories for carcinogens, Other considerations:

   ~~Where the weight of evidence for the for the carcinogenicity of a substance does not meet the above criteria, any positive study conducted in accordance with established scientific principles, and which reports statistically significant findings regarding the carcinogenic potential of the substance, must be noted on the safety data sheet.~~

   Recommend deleting this information for same reasons we do not support the proposed amendments to A.0.3.5.

2. A.7.2.3.1 Weight of Evidence: Amend to read:

   …However, a single positive study performed according to good scientific principles and with statistically or biologically significant positive results ~~may justify~~ justifies classification (See also A7.2.2.3).

Topic 3: Statement regarding testing

SF PSR supports Cal/OSHA's proposal to retain the testing requirement in Section 5194 (d)(3) as indicated in our previous comments (April 15, 2013). Retaining the requirement ensures that ingredients in mixtures are identified prior to classification of the health hazards.

The statement in the federal standard that "no testing is required" is confusing since it implies that manufacturers and importers do not have to test mixtures to identify ingredients when they do not have existing test data. Identification of the ingredients in a mixture is essential for classifying the health hazards. It also is inconsistent with the requirement in Appendix B to use "test" methods to classify certain physical hazards. The GHS states that no testing is required to determine health hazards. This is different than stating that no testing is required.

For example, if a mixture contains xylene, which can contain up to 20% ethylbenzene (a carcinogen) as a contaminant, and there are no test data on the ethylbenzene content, the manufacturer should be required to test the xylene or the mixture before classification.

Unless the language in the federal standard is revised to "no *toxicity* testing" is required, or to the same language used in the GHS document, Cal/OSHA should retain the language currently in Section 5194 (with proposed amendments and revisions) to ensure that it is clear that the requirement to test does not mean testing for health hazards.

- **Amend Section 5194(d)(2) to read:**

SF PSR supports the proposed amended language with the additional editorial revisions (double strikeout and bold) as shown:

(d)(2) Manufacturers, importers, or employers ~~evaluating substances~~ classifying chemicals shall identify and consider the full range of available scientific literature and other evidence concerning ~~such~~ the potential hazards. This section does not require manufacturers, importers, or employers to conduct toxicological testing or epidemiological ~~testing~~ **studies** of the chemical to determine how to classify its hazards.

- **Amend Appendix A to read:**

SF PSR supports the amendment with the additional minor editorial revisions (bold and strikeout):

A.0.2.1 There is no requirement for toxicological **testing** or epidemiological ~~testing~~ **studies** of a chemical to determine how to classify its hazards.

Additional Recommendations From Comments Submitted on April 15, 2013

Require warnings on SDSs and labels for all chemicals classified as carcinogens, including Category 2 carcinogens, when they are present at concentrations of 0.1% or greater.

Labels are the primary, and many times the only, means of communicating information about the health hazards or chemicals to workers in small businesses. In spite of the requirements of the Hazard Communication Standard, many small businesses such as auto repair shops, dry cleaners, and nail salon shops do not get SDSs from vendors from whom they purchase solvents and other chemical-containing products, and do not provide training on health hazards.

In addition, Category 2 carcinogens are often upgraded to Category 1B carcinogens based on relevant data. The IARC Carcinogen List shows that the agency upgraded over 25 substances that were initially classified as "limited" evidence of carcinogenicity (2B) to "sufficient" evidence of carcinogenicity (2A) based on relevant data. This is equivalent to a GHS carcinogen classification change from Category 2 to Category 1B. Given the emerging nature of the science, it is important to ensure that workers are warned appropriately about cancer hazards and, to the extent possible, that labels for the same chemicals are consistent. As a result, it seems prudent to require manufacturers and importers to include cancer warnings on labels for all categories of carcinogens in addition to requiring warnings on SDSs.

Retain the three-month time frame for manufacturers to update labels.

Manufacturers have been complying with the three month time frame, and a compelling reason for extending the time frame to six months as not been presented. Since increasing the time frame to six months prolongs the time that known health hazards are communicated, it could increase potential risks of adverse health effects for workers. Given the serious consequences that could result, this important decision should be based on a sound rationale.

Respectfully,

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SF PSR

cc: Robert Gould, MD
President, SF PSR