SIERRA CLUB TOXIC CHEMICALS POLICY
Adopted February 2018

Part 1: Introduction and Purpose

The Sierra Club Toxic Chemicals Policy supplements its Environmentally Hazardous Substances Policy. Its purpose is to assist members and staff in identifying and controlling the unsafe and preventable impact of toxic chemical exposures on human health and the environment.

It is based on the Sierra Club policy on the Precautionary Principle:

> 'When an activity potentially threatens human health or the environment, the proponent of the activity, rather than the public, should bear the burden of proof as to the harmlessness of the activity. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing measures to prevent environmental degradation.'

Part 2: STATEMENT OF POLICY

Sierra Club supports:

Equity: Laws that protect the most vulnerable, people in low-income communities, minorities, children, and prospective parents from toxic exposures.

Safer Alternatives: If they can be proven to be safer, alternative chemicals should be substituted for the use of toxic chemicals for solving problems or producing energy or products. This avoids the hazards associated with their use.

Stringent Testing of Chemicals in Use: Chemicals suspected of having adverse impacts on the environment or human health must be evaluated for acute and chronic effects on organisms representative of those potentially impacted. The release into the environment of new or previously unrecognized toxic materials, such as nanoparticles, must be restricted and carefully monitored until safe methods of use and disposal can be documented, implemented, monitored, and restricted if necessary.

Testing of New Chemicals: No chemical substances should be introduced into use without undergoing thorough environmental and health hazard evaluations for acute, chronic, developmental, and other potential impacts. New toxicity testing methods should be supported, but they must be capable of addressing all potential impacts, including those that might be passed on to future generations for acute, chronic, developmental, and other risks.

Updating Standards: Regulatory standards for limiting exposures to toxic chemicals should be updated consistent with the latest science.

Bans and Phase Outs: Chemicals which cannot be proven safe should be banned or phased out in a timely way.

Monitoring and Reporting to the Public: - Without regard to the origin of toxic chemicals, entities responsible for managing potential exposures must carefully monitor their use, immediately and fully report unsafe exposures to the public, and pursue additional interim protective measures as warranted. This communication needs to be made in ways that will be understood not only by scientists, physicians, and the regulatory community, but by all potentially affected individuals.

Part 3. **Implementation:**

Sierra Club members and staff are encouraged to take action to prevent, reduce, or remedy the adverse effects that can result from exposures to toxic chemical substances that are naturally occurring, human-made, or produced from naturally-occurring biological processes. They should take a proactive role and assist regulatory agencies in developing protective regulations, and they should advocate for interim protective measures that will prevent toxic exposures or limit them to levels low enough that adverse impacts will not occur.

Sierra Club members and staff are encouraged to develop and circulate accurate scientific information and educational tools and make them widely accessible. Public understanding of environmental problems can help protect the environment and human health from the adverse impacts of hazardous substances. Increased public understanding can help activists recruit and empower others in protecting the air, water, land, communities, at-risk populations, and entire ecosystems.

Sierra Club members are encouraged to work with other organizations to investigate and evaluate risks posed by toxic chemicals, inform others about them, and call for interim protective measures if necessary. Citizen activists can call for studies, evaluate the results of studies and impacts of exposure levels, and work with regulatory agencies to establish and adopt these protective exposure levels. When federal or state agencies send out draft regulations for public review, it is important that the Sierra Club and individuals to submit comments. When new regulations are adopted, they should be monitored to assure timely enforcement of more protective limits when needed

Sierra Club members, staff and scientists are encouraged to monitor and officially comment on the work of EPA and other government agencies, to serve on state and federal advisory committees and to promote the adoption of legally enforceable exposure levels that will protect the environment and the vulnerable populations within it. If protective levels for a toxic chemical are not established, actions should be taken to stop the production, use and disposal of the substance until such time as protective measures are determined. These protective actions apply to actions taken pursuant to other Sierra Club policies related to hazardous substances.
http://www.sierraclub.org/policy/pollution-waste-management.

The Sierra Club Board tasks the Toxics Team with monitoring the latest science on exposures to environmentally hazardous substances and recommending for approval by the Vice President for Conservation updates to Sierra Club-supported limits to exposure where warranted.

Part 4: Background Information for Protecting People and the Environment from Toxic Chemical Exposures

Toxic chemicals may: (a) persist in the environment, become widespread and/or tend to become concentrated in living organisms,(b) by their effect on biological or environmental processes, present an acute, chronic, developmental or other hazard to living organisms including human beings, and/or (c) combine, act synergistically, or break down in the environment to create substances that meet the above criteria.

Each chemical may have different |adverse effects on different organisms. For many higher life forms, including humans, toxic effects may vary greatly depending upon the route of exposure (air, water, dust, foods, household products), route of entry (inhalation, ingestion, dermal contact), concentration, bioavailability, whether the exposure is chronic or acute, and whether the exposure occurs to a parent or grandparent, during gestation, or | during childhood, adolescence or adulthood. In addition, in many cases, some toxic effects are not yet known or fully studied.

Human-made toxic chemicals. No chemical substances should be introduced into use without undergoing thorough environmental and health hazard evaluations for all potential impacts. New EPA and NIEHS toxicity testing methods should be supported but it must be assured that they are capable of addressing all potential impacts including those that might be passed on to future generations.

Toxic chemicals created through biological processes affected by human activities: Some human activities have promoted the generation of unnatural and toxic levels of biologically-produced toxins (e.g. cyanotoxins, mycotoxins). Causes of these problems include inadequate treatment of wastewater, overuse or poorly targeted use of fertilizer, global climate change, and, in the case of toxic mold, flood damage to buildings. Activities leading to the generation of biologically created hazardous substances should be evaluated and modified with a goal of reducing or eliminating these threats.

Naturally-occurring toxic chemicals that may have adverse effects on living systems: Use, concentration and dispersal of compounds and elements must be strictly controlled to prevent adverse effects on human health and the environment. To prevent exposures to natural toxic chemicals human activities must be more closely regulated and in some cases stopped. For example, coal burning and the use of lead pipes for distributing drinking water, should be phased out as soon as possible.