



November 29, 2021

Liane M. Randolph, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Proposed SORE Regulations

Dear Chair Randolph,

On behalf of the 14,300-member Pacific Crest Trail Association (PCTA), we are writing in general support of the proposed SORE regulations. AB 1346 (Berman) requires CARB to adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new small off-road engines by July 1, 2022.

We laud the goal of CARB's efforts to reach zero emissions and agree that battery-operated equipment is most appropriate in urban areas for lawnmowers and leaf blowers, where recharging is easily accessible and battery weight is not an issue.

While we favor the new law's goals, we must point out that it will affect some aspects of the trail building and maintenance that the PCTA performs on the Pacific Crest National Scenic Trail (PCT) and associated side and connecting trails. Therefore, we want to point out the unintended consequence of this proposal regarding its effect on trail maintenance.

The PCTA is the primary private partner with the U.S. Forest Service, the Bureau of Land Management, the National Park Service, and California State Parks in the management and maintenance of the PCT. The PCT is one of eleven Congressionally designated National Scenic Trails and the only one in California. The PCTA has 30 full-time employees and coordinates with more than 2,000 volunteers contributing over 100,000 hours of work annually to maintain the PCT. The PCTA also acts as a technical advisor for the agencies and provides the necessary training and certification standards to the volunteers who build and maintain the trail. Our staff and volunteers who handle chain saws are trained and certified to meet the U.S. Forest Service standards.

This private-public partnership is rooted in the 1968 National Trails System Act, which authorizes land management agencies "... to encourage volunteers and volunteer organizations to plan, develop, maintain, and manage, where appropriate, trails throughout the Nation." The purpose of the National Trails System Act is to:

"...provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass."



The PCT travels through:

- 2,650 miles in California, Oregon, and Washington, of which 1,692 are in California
- 48 Congressionally-designated Wilderness Areas
- 25 National Forest Units
- **22 California Counties**
- 7 BLM Field Offices
- 6 National Parks
- **5 California State Park Units**
- 5 National Monuments
- **3 California State Wilderness Areas**
- 2 Native American Sovereignties
- Private Lands

The PCT connects a variety of ecosystems along the way, including desert, old-growth forests, alpine tundra, grasslands, and rainforest. In addition, the PCT is the sole natural connection between many of our state parks, national forests, national parks, and other protected lands in California and along the west coast. This connectivity is crucial for the survival of many wildlife species as they grapple with the rapid onset of climate change.

The PCTA has actively engaged in the Governor's efforts on the 30X30 Initiative and is extremely supportive of protecting and preserving the lands and waters of California. More than 25 million people live within an hour's drive from the PCT. In addition, the ongoing pandemic has laid bare the importance of trails and outdoor recreation. During the last year, the use of trails and public lands by Californians and visitors to the state has hit record numbers. The PCT must be accessible, useable, and safe for the public as a resource, and the maintenance of the trail remains a high priority.

To maintain the PCT as a footpath for hikers and horseback riders, the PCTA uses a variety of approaches. Trail maintenance may include cutting back overgrown brush, removing dead and downed trees from the trail, removing dangerous and low branches, creating water bars to assist with appropriate water drainage, widening the tread, and appropriately sloping the tread to prohibit trail creep or trail collapse.

In wilderness areas, where motorized and mechanized tools are prohibited, our volunteers use crosscut saws and other hand tools to cut brush and trees and maintain the tread, often with the help of the Back Country Horsemen of California. This work is painstakingly slow. In non-wilderness areas, many of which are several miles from a trailhead, chain saws and power brushers are vital for our maintenance duties.

While we have not thoroughly tested the battery-operated tools available on the market in backcountry conditions, based on the knowledge we have, today's battery-operated tools are unable to tackle most of the work we encounter. At this time, it's not practical nor feasible to use only battery-operated, zero-emission tools for trail maintenance.

Under the new rules, we would need to replace or phase out seven models of chain saws, pruning saws, and brush cutters. We are concerned about the higher cost of the new tools and the batteries, and the limitations of the batteries.

With a battery having an expected run time of 45 minutes under ideal conditions, we estimate that we'd need five to seven batteries per tool for one full day of work.

Another concern is that the battery tool owner's manuals have explicit warnings and limitations that make their use in the backcountry challenging. We would be unable to recharge batteries in the backcountry without access to power. Solar charging is not always an option as we work in cloudy conditions, rain, snow, and dense smoke. Additionally, owner's manuals state to "operate the charger only indoors, in dry rooms and within an ambient temperate range of 41F to 104F." The owner's manual also warns of exposing the tools or batteries to rain or wet conditions. If exposed to rain during work, remove the battery and allow it to dry indoors. This is not viable for our work in the backcountry over a weekend or a two-week-long project. These weather limitations make the use of battery tools difficult, if not impractical.

The manual describes the proper battery storage and use, namely, only use and store within 14F to 122F and never in direct sunlight or a vehicle in hot weather. Again, we use our tools in all types of weather and will often have a basecamp set up where we store our tools in trucks or trailers, hike out for the day to work, and then return to camp. We would not be able to safely or adequately recharge or store the batteries based on the owner's manual instructions and our real-world working conditions. We currently store all our equipment in tool caches and outdoor sheds throughout California that are not temperature-controlled and often get below 14F and above 122F, depending on the season.

Since we are working with volunteers to perform often dangerous work, safety is always our top priority. We must abide by the manufacturer's rules as a matter of principle.

These real-world impacts would limit our options when it comes to the use of battery-powered tools. For example, we could purchase larger equipment not subject to the SORE regulations, which undercuts the intent of reducing emissions and may impact the safety of our volunteers for using an inappropriately sized tool for the job at hand. Or we could purchase equipment out of state, which we feel sets the wrong example for our volunteers and the larger trails and conservation community.

We are eager to participate in a pilot program or demonstration project with battery equipment in the backcountry upon the approval of our MOU partners, ensuring the safety certifications are satisfied. Since our sawyers are certified through the U.S. Forest Service, we will be coordinating with our National and State partners to develop new training and safety protocols for best practices of this new equipment. If we find that the equipment is unsafe and unable to meet our needs in the backcountry, we respectfully request that the PCTA be considered for an exemption similar to what police and fire are granted with an emergency use authorization as we operate under the authority of a MOU with government partners, and the maintenance of the trail is a matter of public safety and access.

The pandemic, record heat, drought, and fire have limited our volunteers' time to safely work on the PCT for the last few years. Catastrophic wildfires have burned across the PCT to a degree rarely seen. Our volunteers and staff are already stretched thin trying to keep up with the job of reopening the trail where high severity fire has destroyed the surrounding environment.

Until the technology of battery-operated tools can be safely used and charged in the backcountry, while meeting the standards of speed, efficiency, and weight that gas-powered tools provide, we ask that trail crews be allowed to continue using gas-powered tools to maintain trails, for the safety and accessibility of the public. As stewards of the land, we look forward to the day when battery technology will meet the needs of trail maintainers.

Should you have any questions or need additional information on our operations, please contact me at jtripp@pcta.org.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Tripp', written in a cursive style.

Jennifer Tripp
Director of Trail Operations
Pacific Crest Trail Association