**Re:** Preliminary Screening of Chloroxylenol (PCMX, CAS 88-04-0), November 16, 2026 meeting

Dear Members of the Scientific Guidance Panel and OEHHA staff,

The Green Science Policy Institute supports the preliminary screening of chloroxylenol (PCMX). We thank OEHHA staff for a thorough and timely review.

Chloroxylenol is a likely replacement for quaternary ammonium compounds (QACs) if California were to restrict QACs in antibacterial soaps and body washes. It was already a common substitute when triclosan and triclocarban were removed from consumer soaps. The screening document shows that people are already exposed, with cited studies detecting chloroxylenol in urine and breast milk. Biomonitoring now would give California a baseline before a possible substitution-driven rise in use.

To help the Panel, we summarize below three peer-reviewed studies published in the past year that are not yet in the screening document.

- **Endocrine effects.** Chloroxylenol inhibited human 5α-reductase type 1, an enzyme needed to make dihydrotestosterone and neurosteroids. It did not inhibit the rat form of the enzyme, which suggests rodent studies may miss certain endocrine effects relevant to humans (Han et al. 2026). This finding strengthens the case for measuring human exposure.
- **Antimicrobial resistance.** In laboratory experiments, *Acinetobacter baumannii* adapted to chloroxylenol became resistant to tetracycline and to imipenem, a last-line antibiotic (Prasad et al. 2026). *Salmonella* growing in mixed-species biofilms on microplastics showed increased tolerance to chloroxylenol and ampicillin (Zhou et al. 2026).
- **Aquatic toxicity.** Chloroxylenol altered expression of genes involved in estrogen synthesis and estrogen signaling in catfish exposed at environmentally relevant concentrations (Ogunwole et al. 2025). Chronic exposure to chloroxylenol at environmentally relevant concentrations damaged the intestines of tadpoles, reduced digestive enzyme activity, and altered gut microbiota, disrupting normal development (Zhang et al. 2025).

We recommend that the Panel move forward with preparing a potential designated chemical document on chloroxylenol, and we would be glad to provide any of these studies on request.

Sincerely,

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