

5 Gyres
Azul
Beyond Plastics
Californians Against Waste
California Public Interest Research Group
California Communities Against Toxics
California Safe Schools
Climate Action California
Coalition for a Safe Environment
Coalition for Clean Air
Community Dreams
East Yard Communities for Environmental Justice
Ecology Center
Environmental Working Group
GAIA

Greenaction for Health and Environmental Justice
Greenpeace USA
Natural Resources Defense Council
Oceana
Partnership for Policy Integrity
Peninsula Interfaith Climate Action
Plastic Pollution Coalition
Sierra Club California
SoCal 350 Climate Action
Surfrider Foundation
The Last Beach Clean-up
The Last Plastic Straw
Valley Improvement Project
WILDCOAST

January 13th, 2023

Rachel Wagoner, Director
California Department of Resources Recycling and Recovery
1001 I Street
Sacramento, CA 95814

Transmittal Via E-mail: rachel.wagoner@calrecycle.ca.gov

Re: Consideration of a Technology Determination for H Cycle Pursuant to Article 2 of the SB 1383 Regulations

Dear Director Wagoner,

The undersigned organizations would like to express our concern over the technology determination for H Cycle pursuant to Article 2 of the SB 1383 Regulations, which is scheduled for presentation at the monthly public meeting on January 17th. We do not believe that H Cycle has met the burden of proof required to demonstrate that they meet the requirements of Article 2, and, additionally, the Department has not undergone sufficient environmental review to support making a determination on this application. We urge you to reject the request for approval before you.

Determination requires full environmental review

The SB 1383 regulations were adopted following a rigorous public process, including a comprehensive Environmental Impact Report. In the EIR, the Department states that the environmental review "evaluates and describes, on a statewide, program-level basis, the potential environmental impacts associated with the implementation of the regulations, including

the expected construction and operation of organic waste recovery facilities, identifies those impacts that could be significant, and presents mitigation measures, which, if adopted by CalRecycle or other responsible agencies, could avoid or minimize these impacts.”

This analysis subsequently goes on to analyze the potential impacts of new composting and anaerobic digestion facilities, along with a discussion of biomass facilities. The analysis does not, however, consider the potential impacts of facilities similar to those proposed by H Cycle.

Because the SB 1383 EIR did not cover the technology proposed by H Cycle, any determination regarding such technologies or feedstocks requires an additional environmental impact report to assess potential harms and impacts and take them into account, including environmental justice impacts, as described further below

At its core, CEQA is designed to promote informed decision-making. A public agency makes an informed decision under CEQA by weighing the potential negative impacts of the proposed action against its benefits, and that has not been done with regards to this proposed determination.

Lack of community input

In putting forward the technical determination without considering impacts other than GHG emissions, CalRecycle also undercuts environmental justice principles and protections. These considerations are implicit in Section 18983.2's explicit focus on specific locations for proposed technologies—the section requires applicants seeking such a determination to provide the Department “each end-use or landfill disposal location”. As far as we can tell, the specific communities that H Cycle would impact have not been informed of this proposed project and impacts, nor has this information been disclosed to the public.

Given that the determination is for a specific proposed location, the Department should seek the input of those communities that would be impacted by the facility and take environmental justice impacts into account. Section 65040.12 of the Government Code defines environmental justice to mean “the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.” It goes on to say that environmental justice includes “governmental entities engaging and providing technical assistance to populations and communities most impacted by pollution to promote their meaningful participation in all phases of the environmental and land use decisionmaking process.” Additionally, the statute says that environmental justice includes “the meaningful consideration of recommendations from populations and communities most impacted by pollution into environmental and land use decisions.”

In fact, in the most recent legislative session, the legislature created an Office of Environmental Justice and Tribal Relations within CalRecycle that is charged, in part, with “ensuring meaningful involvement of disproportionately burdened communities in department decisionmaking.” Similarly, CalEPA has adopted an Inter-agency Environmental Justice Strategy to, in part,

“ensure meaningful public participation and promote community capacity-building to allow communities to effectively participate in environmental decision-making processes.”

Moreover, the courts have long held that “[t]he significance of an activity depends upon the setting” (Kings County Farm Bureau v. City of Hanford) and that impacts that might not be significant in one location may be significant in a different area based on the cumulative impacts of multiple sources of pollution.

The action before the Department is regarding **a discrete proposed facility in a specific location**, and the Department has not solicited any input from the affected communities. In fact, the location of the proposed facility is not listed in the Request for Approval or accompanying documents. Furthermore, it appears that this company may use some form of gasification process. After decades of tracking similarly marketed so-called “conversion” and high treatment technologies, including several industry efforts to build such operations in environmental justice communities in California, we have yet to see company claims on emissions, costs, and other essential data points backed by facts.

This lack of transparency and public process alone are enough to warrant rejection.

Comparison to composting

The underlying premise of the Request for Approval is that the proposed technology provides a greater environmental benefit than composting. None of the data substantiating that claim has been posted publicly, so the public has had no ability to analyze this conclusion or the supporting assumptions.

Without knowing the specifics that were provided by the applicant, we are left with several questions based on the limited data provided in the RFA:

- 1) Does the analysis consider the creation of emissions that arise in thermal technologies that are not present in composting facilities (dioxin, furans, PAHs, etc)?
- 2) Does the analysis consider the loss of soil health and carbon sequestration from reduced compost production?
- 3) Much of the proposed benefit appears to come from an assumption that the fuel the facility produces will offset the emissions of a diesel fleet. Is there an actual diesel fleet that exists in the area where the project is being proposed that has committed to converting to hydrogen, fuel cell, or synthetic gas-derived natural gas?
- 4) Does the baseline account for the implementation of the Advanced Clean Fleets regulation when considering displaced diesel emissions?
- 5) The “engineered slag” produced by the facility is assumed to be a viable form of construction aggregate, but has any testing been done to indicate whether it can be used for that application? If, instead, the material needs to be disposed of, then the benefits of avoided aggregate use would no longer apply, and far greater transport of residual would be required. Further, the fact that the process produces slag indicates that it is a combustion process, since slag is the product of high heat combustion. Composting operations do not produce slag.

- 6) Would any slag designated for disposal be considered hazardous waste? If so, does the greenhouse gas analysis consider the increased impacts of transport to a Class I landfill?
- 7) The applicant proposes to use mixed waste paper as a feedstock. While food-soiled paper would likely be composted, mixed waste paper would otherwise be recycled under the regulations. Has the applicant evaluated the lifecycle impacts of no longer recycling this material?
- 8) The applicant is proposing to use plastics as a feedstock. Does the baseline account for the fact that the fossil fuel-derived carbon from this material would not be released into the atmosphere without the existence of the facility?
- 9) What is the type of technology used in the facility? Has it been proven to work under real-world operating conditions, or just in a laboratory? Has this process been employed at this scale elsewhere?
- 10) What is the energy balance of the process and how will it be measured and tracked? What is the carbon balance and how will it be monitored?

Based on similar thermal treatment processes, we find it exceedingly unlikely, if not impossible, that this facility will even have operational success, and if it does, that emissions and pollution could be less than compost operations and the application of finished compost. Furthermore, such a facility would compete with zero waste strategies of reduction and recycling for paper and other material streams, in addition to organics.

It appears that this facility would be some sort of waste gasification process, a high-temperature thermal process which requires heavy energy input during pretreatment, processing, and post-processing. These approaches have a track record of high-profile failures, fires, explosions, and financial losses. GAIA's 2017 publication [Waste Gasification & Pyrolysis: High Risk, Low Yield Processes for Waste Management](#) found that \$2 billion has been invested in projects which were either closed or canceled.

At a systematic level, a determination of this nature would be a slippery slope toward high temperature incineration and waste to energy approaches. The European Union is reversing course in its waste strategies after decades of misguided incinerator infrastructure commitments. A wide array of EU laws and regulations now tax incineration to make it more expensive, end public funding and renewable energy subsidies, and recommend that incinerators be closed, and Germany, Denmark, Sweden make incinerators pay for CO₂ emissions under the carbon trading system. Furthermore, the European Union's Waste Framework Directive stipulates that producing fuels from waste cannot be labeled or counted as "recycling." Clearly, the EU has reversed course on its pro-incineration policies due to the high pollution and greenhouse gas footprint of this technology. There is no rational justification for California to use the goal of keeping organics out of landfills to build an incinerator.

The available information makes it clear that this facility is a transformation facility and, given what it is planning on burning, it will have emissions comparable to any other transformation

facility, making it one of the leading sources of extremely toxic hazardous air pollutants in the state.

Based on these factors, we believe additional analysis is required before the Department can determine that the technology represents a reduction in landfill emissions comparable to composting. We also believe that additional environmental impact analysis is required before the technology can be used or approved for use in any form.

Sincerely,

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5 Gyres

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Jenn Engstrom, State Director
California Public Interest Research Group (CALPIRG)

Robina Suwol, Executive Director
California Safe Schools

Janet Cox, President
Climate Action California

Bill Magavern, Policy Director
Coalition for Clean Air

Jesse Marquez, Executive Director
Coalition for a Safe Environment

Ricardo Pulido, Director
Community Dreams

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Ashley Blacow, Pacific Policy Manager
Oceana

Laura Haight, U.S. Policy Director
Partnership for Policy Integrity

Debbie Mytels, Chair
Peninsula Interfaith Climate Action

Dianna Cohen, CEO & Co Founder
Plastic Pollution Coalition

Brandon Dawson, Director
Sierra Club California

Jack Eidt, Co-Founder
SoCal 350 Climate Action

Miho Ligare, Plastic Pollution Policy Manager
Surfrider Foundation

Jan Dell, Independent Engineer
The Last Beach Cleanup

Jackie Nuñez, Founder
The Last Plastic Straw

Scott Webb, Advocacy & Policy Director
Turtle Island Restoration Network

Macy Zander, Reuse Communities Policy and Engagement Officer
Upstream

Bianca Lopez, Co-Founder
Valley Improvement Projects

Fay Crevoshay, Communications and Policy Director
WILDCOAST

CC: Yana Garcia, Secretary of Environmental Protection
Liane Randolph, Chair, California Air Resources Board