

May 8, 2025

The Honorable Monique Limon
CA State Senator, 21st District
1021 O Street
Suite 7610

The Honorable Jacqui Irwin
CA State Assembly Member, 42nd District
1021 O Street
Suite 6220

RE: Cap and Trade Expenditure Plan Request – Innovative Biosolids
Management Programs

Dear Senator Limon and Assembly Member Irwin:

On behalf of the Orange County Sanitation District (OC San), I am writing to respectfully request the inclusion of biosolids management as a priority strategy in the Cap-and-Trade Expenditure Plan. Specifically, we would like to request a \$100 million discretionary allocation to support the development and deployment of innovative biosolids treatment technologies across the state. This proposed program and funding source can build off the success of previous programs administered by the state and reduce emissions in a more efficient and cost-effective manner.

As California advances toward carbon neutrality and deep reductions in short-lived climate pollutants (SLCPs), biosolids management presents a significant opportunity to meet those goals while protecting public health and advancing environmental justice. OC San is actively piloting and implementing two groundbreaking technologies that align with the priorities of the Cap-and-Trade Program and the Greenhouse Gas Reduction Fund (GGRF):

- **Supercritical Water Oxidation (SCWO) Demonstration Project**

This emerging process uses water at elevated temperatures and pressure to destroy organic compounds in sludge and scum, converting them into benign elements such as carbon dioxide and water. The SCWO process also destroys emerging contaminants such as per- and polyfluoroalkyl substances (PFAS), pharmaceuticals, and microplastics. This process has the potential to eliminate several steps in the current wastewater solids treatment process, lowering chemical and energy consumption, and reducing long haul trucking of the solids removed as part of the wastewater process. OC San is currently advancing a demonstration-scale project and anticipates regional and statewide scalability.

Serving:

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Brea
Buena Park
Cypress
Fountain Valley
Fullerton
Garden Grove
Huntington Beach
Irvine
La Habra
La Palma
Los Alamitos
Newport Beach
Orange
Placentia
Santa Ana
Seal Beach
Stanton
Tustin
Villa Park
County of Orange
Costa Mesa
Sanitary District
Midway City
Sanitary District
Irvine Ranch
Water District
Yorba Linda
Water District

- **Deep Well Injection**

This method permanently sequesters biosolids more than 5,000 feet underground into porous geological formations beneath multiple layers of impermeable rock, at their source of generation, rather than moving them into other jurisdictions while at the same time eliminating odors and sources for groundwater and soil contamination, and road traffic. This proven technology provides a long-term, secure solution for carbon-rich materials and residuals that contain trace amounts of harmful substances. It is especially well-suited for handling materials with persistent contaminants like PFAS, microplastics, and pharmaceutical residues. Each wet ton of biosolids sequestered in this way eliminates the emissions of more than 5 tons of CO₂e, thus providing enormous support to the goals of the GGRF.

These two technologies provide a measurable and scalable path to reducing greenhouse gas emissions through:

- **Avoiding GHG emissions** by eliminating landfilling or land applying of organic materials
- **Reducing vehicle miles traveled (VMT)** by limiting long-haul biosolids transport— OC San currently transports over 500 wet tons of biosolids per day with a total of approximately 2,900,000 miles traveled annually to various composting facilities in California and/or farmlands in Arizona. Avoided trucking could reduce up to 5,500 metric tons of CO₂e per year just for OC San.
- **Finding a forever home for harmful pollutants** and avoiding the future emissions and health impacts associated with environmental contamination.

These technologies support multiple priorities of the Cap-and-Trade Expenditure Plan, including:

- Reducing GHG emissions and SLCPs
- Promoting innovation in climate solutions
- Advancing clean energy and sustainable waste management
- Reducing VMT and local air pollution
- Delivering co-benefits to public health, especially for disadvantaged communities
- Supporting the principles of a circular economy

OC San is committed to advancing sustainable, long-term solutions for biosolids management that are practical, cost-effective, and protective of public health and the environment.



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We respectfully urge the Cap-and-Trade Working Group to consider a \$100 million funding allocation to create a statewide competitive grant program that will help agencies like ours implement emerging biosolids management technologies.

We thank you for your continued leadership in advancing California's ambitious climate agenda and look forward to the opportunity to contribute innovative solutions that move the state closer to a more sustainable, equitable, and climate-resilient future. If you have any questions, please contact Jennifer Cabral, Director of Communications, at (714) 593-7581 or via email at JCabral@ocsan.gov.

Sincerely,

Ryan P. Gallagher
Board Chairman

CC: Orange County Legislative Delegation

Senate pro Tempore Mike McGuire

Assembly Speaker Robert Rivas

Cap and Trade Working Group Members:

Assembly Member Cottie Petrie-Norris

Assembly Member Chris Rogers

Assembly Member Esmerelda Soria

Assembly Member Corey Jackson

Assembly Member Diane Papan

Assembly Member Isaac Bryan

Assembly Member Lori Wilson

Assembly Member Rebecca Bauer-Kahan

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Assembly Member Dawn Addis

Assembly Member Rick Zbur

Assembly Member Gregg Hart

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Senator Ben Allen

Senator Henry Stern

Senator Catherine Blakespear

Assembly Budget Subcommittee No. 4

Senate Budget Subcommittee No. 2