

Name: Jesse Holman

Subject: Consider Innovative Production Method Lowers CI >60%

Comment:

We kindly request consideration of adding to CCR Section 95489(c)(1)(A), Chemistry Replace Steam, as an innovative production method. This will incentive crude producers to stop using steam to extract heavy oil, reducing emissions in California's most disadvantaged communities while reducing overall fossil fuel demand.

Approving this incentive could reduce oil extraction emissions 61 million tons of CO₂e, eliminating 1.1 billion mcf of natural gas burned by 2030. Reducing the dirtiest oil's carbon intensity over 60%. California producers will deliver the cleanest crude to California refineries, reducing emissions, imports, costly refinery upgrades all while supporting a cleaner transition.

The chemistry proposed is plant based, pH neutral and biodegradable. This is safer, cleaner and more expensive than steam. Which is why approval of this innovation is necessary to accomplish the mission of CCR Section 95489. All approved innovations in 95489(c)(1)(A) are aimed at reducing, replacing or eliminating burning natural gas, either for steam or electricity. Approved innovations are reducing around 55,000 tons CO₂e per year.

Approving this innovation reduce millions of tons within the first two years.

This chemistry has so many other applications than just oil and gas. The biggest opportunities in O&G are the dirtiest production methods, which is steam in California and Canada. Next would be heavier oils from Alaska North Slope.

This chemistry outside O&G is an all-natural firefighting

suppression innovation, lower emissions in agriculture, water treatment, enhanced oil recovery, eliminating solvents and harmful cleaning products, soil remediation, and the opportunities keep growing.

Attached is how chemistry replaces steam, and an application for approval. The chemistry proposed is plant based, pH neutral and biodegradable, that is 13x lower carbon intensity than steaming.

Thank you for your consideration for creating California's clean transition.