

## Hydrogen Fuel Plant Given Planners' OK

Dec 16, 2022



The Lancaster Planning Commission unanimously granted applicant SG H2 Holding Co. LLC/Dr. Robert T. Do, a Conditional Use Permit for the construction and operation of a renewable hydrogen fuel facility on about 15 acres at the northwest corner of Sixth Street East and Columbia Way (Avenue M), in the heavy industrial zone, and approved a mitigated negative declaration for the proposed project.

The city first announced the proposed project, in May 2020.

It consists of the construction and operation of a facility that would produce hydrogen from unrecyclable mixed waste paper feedstock.

“The feedstock would be gasified to produce a hydrogen-rich gas that would be further processed into pure renewable hydrogen fuel,” Senior Planner Jocelyn Swain said at Monday’s Planning Commission meeting.

The hydrogen gas would be transported off site in pressurized tube-trailer containers for use by Shell Hydrogen and Iwatani Corporation of America at hydrogen refueling stations throughout California.

“This is a clean fuel which would not release greenhouse gases or other air pollutants and does not contribute to climate change,” Swain said.

The proposed facility would convert 42,000 tons, per year, of unrecyclable mixed waste paper into 4,570 metric tons of hydrogen, per year, with a full production capacity of

13.1 metric tons, per day. The facility would also capture approximately 70,000 metric tons of carbon dioxide as a byproduct of the hydrogen production.

The system would recover the carbon dioxide and produce a carbon dioxide liquid that would be transferred to a site in Bakersfield for permanent sequestration.

The proposed facility would operate for approximately 25 years. It is designed to operate 24 hours a day, seven days a week for 350 days each year, or 8,400 hours, per year. The facility is expected to employ approximately 43 people.

There would be four buildings on the project site totaling 47,181 square feet. These buildings include the administrative building and warehouse, a water treatment building, operator/remote instrument enclosure building and biomass storage building.

In response to a concern raised by Landale Mutual Water Co. of Lancaster, Commission Chairman James Vose noted that under the conditions for approval, the City of Lancaster Economic Development Division plans on transferring sufficient water rights to the Landale Mutual Water Co. to meet the total water supply requirements for the project.