

Photograph by Osceola Refetoff

## PANAMINT VALLEY LIMESTONE QUARRY & KILN Bringing Environmental and Social Benefits to California

## **PROJECT OVERVIEW**

Panamint Valley Limestone (PVL) owns and operates a limestone quarry in Panamint Valley, California that contains the highest quality limestone in the Western U.S. PVL repurposed the quarry five years ago, after the coalfired power plant that used it shut down. The shuttered coal plant and its former ash landfill are located near the quarry in the town of Trona. PVL is also repurposing this brownfield site to build a limestone kiln, expected to open in November 2021.

The kiln will convert limestone from the quarry into quicklime and hydrated lime, both common materials in industry, agriculture, construction, and everyday life. PVL's key markets are in California's Los Angeles Basin and the Central Valley. The quarry's total limestone reserves are sufficient to supply these growing markets for hundreds of years. LOCATION Panamint Valley

**SIZE** 140,000 Tons/Year

**PRODUCTS** Limestone, Quicklime, Hydrated Lime

LIMESTONE IS USED IN Glass, Water Treatment, Agriculture, Roads, Cement, Medicines, and More

KILN OPERATIONAL DATE November 2021







The PVL kiln, which will be the only lime kiln in California, will lower greenhouse gas (GHG) emissions by significantly reducing diesel truck mileage required for shipping product to customers. For this reason, the California Air Resources Board has included the kiln in its cap-and-trade program and has awarded GHG allowances for operation.

The kiln's design is a state-of-the-art facility with advanced emission controls, utilizing best-available technology. The closed system will keep fugitive dust and particulate emission near zero.

The project will utilize an on-site solar array of approximately 1 megawatt, and the plant is in discussion with a local community solar project to contract for additional renewable energy supply.

Instead of tapping into the Indian Wells aquifer, which is designated by the California Department of Water Resources as critically overdrawn, the kiln will use water from an existing on-site well.



## SOCIAL BENEFITS

The PVL kiln will bring jobs and property tax revenues to the economically devastated town of Trona. A 100-year-old mining town near Death Valley, Trona suffered an economic downtown in 1982 and two crippling earthquakes in 2019. Its population is only 1,500 – down from 6,000 just a few decades ago.

PVL is expected to employ 36 full-time workers with an annual combined payroll of roughly \$4 million. About half of the construction jobs will be filled by local workers. The kiln is estimated to generate approx. \$600,000 a year in property taxes. PVL is a California-owned company, and one of the investors lives in Trona.

## SUMMARY

The Panamint Valley Kiln is a model of how a critical infrastructure project can repurpose a brownfield site, sustainably process waste, water, and energy through green technologies, and contribute to in-state growth and employment while helping California achieve sustainability goals. The new development will bring economic benefits to a devastated community, reduce greenhouse gas emissions in California, and operate sustainably by generating electricity from solar, drawing water from an on-site well, and controlling emissions through a high-tech emissions control system. It is an important example of triple bottom line economics – where people, profit, and planet all benefit.

