

California Energy Commission STAFF REPORT

LOCALIZED HEALTH IMPACTS REPORT

Addendum 10 for a Project With a Location Change
Awarded Funding Through the Alternative and Renewable
Fuel and Vehicle Technology Program Under Solicitation
PON-11-602 – Alternative Fuels Infrastructure: Electric,
Natural Gas, Propane, E85, and Diesel Substitutes
Terminals



CALIFORNIA
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ADDENDUM 10

The *Localized Health Impacts (LHI) Report for Selected Projects Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation PON-11-602, Alternative Fuels Infrastructure: Electric, Natural Gas, Propane, E85, and Diesel Substitutes Terminals* was posted April 27, 2012¹. The addendum LHI for PON-11-602 was posted September 21, 2012² and includes Harvest Power Tulare, LLC. The proposer requests a location change with the project titled “Joint Harvest Power & EBMUD Food Waste to Energy.” Addendum 10 applies the same approach to assessing the potential localized health impacts for a project with a location change as the original LHI and subsequent addendum.

Table 1 lists the original and newly proposed address, environmental justice³ indicators, and new surroundings.

Table 1: Original and Proposed New Site Location for Harvest Power Tulare, LLC With Environmental Justice Indicators and New Surroundings

Original Site Location	New Site Location	EJ Indicators for New Location	Surroundings for New Location (within 1-mile radius)
Harvest-Tulare Composting Facility 24478 Road 140, Tulare, CA 93274	East Bay Municipal Utility District (EBMUD) 2020 Wake Road, Oakland, CA 94607	Poverty	Industrial use area close to densely populated communities with more than 10 schools, 6 day care centers, and 4 medical offices/hospitals

Source: Energy Commission staff analysis

1 Baronas, Jean, 2012. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2012-004

2 Baronas, Jean, 2012. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2012-004-AD.

3 The EJ indicators follow: (i.) minority subset represents more than 30 percent of a given city’s population (2010), (ii.) city’s poverty exceeds California’s poverty level of 15.9 percent (2009-2013), (iii.) city’s unemployment rate exceeds California’s unemployment rate of 5.8 percent as of December 2015, and (iv.) city’s percentage of persons younger than 5 years of age or older than 65 years of age is 20 percent higher than then California’s average. Note: For the entire state, the percentage of persons under the age of 5 years is 6.8 percent, and the percentage of persons over the age of 65 years is 11.4 percent.

New Proposed Site Description

The new proposed site at EBMUD in West Oakland is designed to produce transportation fuel, using contracted feedstock, and employ a technology that can be reproduced statewide. The primary method of converting the organic materials to transportation fuel is the same as the original Tulare location, namely anaerobic digestion. The process steps include preprocessing, hydrolysis, gas clean-up, compressed natural gas (CNG) production, and dewatering and composting of solid digestate. The CNG that is produced at the EBMUD location will be used as renewable transportation fuel displacing nonrenewable fossil fuels.

Truck Delivery

The proposed Oakland facility will expect 48/day average, 60/day peak, inbound truck traffic composed of feedstock for digestion. Outbound deliveries are expected to be 10/day average, 18/day peak, and will include digestive hauling, CNG deliveries, and reject fraction of the material.

Air Quality and EJ Indicators

Oakland is in a nonattainment zone for ozone, particulate matter (PM⁴) 2.5, and PM 10. Oakland has only one EJ indicator (poverty), compared to the original Tulare location, which has four EJ indicators (age, minority, poverty, and unemployment). If a project site is in a nonattainment zone and has more than one EJ indicator, as shown in Table 2, it is considered a high-risk community, according to the Environmental Justice Screening Method⁵. Therefore, Oakland, although a densely populated community, is not considered a high-risk community.

4 "Particulate matter" is unburned fuel particles that form smoke or soot and stick to lung tissue when inhaled. The numbers stand for microns in diameter.

5 California Air Resources Board (ARB), *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

Table 2: EJ Indicators Compared With California

Yellow highlighted areas indicate numbers that meet the definition for EJ indicators.

	Persons Below Poverty Level (2009-2013)	Black persons (2010)	American Indian and Alaska Native (2010)	Persons of Hispanic or Latino Origin (2010)	Asian (2010)	Persons Under 5 Years of Age (2010)	Persons Over 65 Years of age (2010)	Unemployment (December 2015)
California	15.9%	6.2%	1.0%	37.6%	13.0%	6.8%	11.4%	5.8%
EJ Indicators	>15.9%	>30.0%	>30.0%	>30.0%	>30.0%	>8.16%	>13.8%	>5.8%
Oakland	20.5%	28.0%	0.8%	25.4%	16.8%	6.7%	11.1%	5.4%

Sources: Unemployment information from the State of California, Employee Development Department (EDD) Labor Market Information Division: http://www.labormarketinfo.edd.ca.gov/CES/Labor_Force_Unemployment_Data_for_Cities_and_Census_Areas.html and Demographics information from the U.S. Department of Commerce, U.S. Census Bureau: <http://quickfacts.census.gov/qfd/states/06/0653000.html>

Location Analysis and Community Impacts

Based on staff’s assessment of the proposed new site location in Oakland, it is anticipated that the surrounding communities will not be disproportionately impacted by the implementation of the project. Specifications for both locations remain the same with the primary goal to demonstrate anaerobic digestion as a commercially viable and replicable process to boost the production of domestic renewable transportation fuel.