BINGHAM GREENEBAUM DOLL LLP BGD

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July 29, 2016

Ms. Emily Liu
Director of Louisville Metro Planning and Design Services
444 South 5th Street, Ste 300
Louisville, KY 40202

Re: Case Number 16AMEND1007

Dear Ms. Liu:

Please include this letter in the official record of the above-referenced case and provide a copy to the members of the Planning Commission.

I propose the following amendments to draft regulations before the Planning Commission at the August 1, 2016, meeting:

- Anaerobic digesters should be allowed only in the M-2, M-3 and EZ-1 zoning districts in the following circumstances.

- In the M-2 and M-3 zoning districts:

    - If no residential use or residentially zoned property is within 1/4 mile of the proposed anaerobic digester project, the project should be a permitted use with special standards under Section 4.3 of the Land Development Code ("LDC") and items B through J in the proposed draft regulations should be the special standards (the "Operating Standards");

    - A proposed anaerobic digester located between 300 feet and 1/4 mile of a residential use or residentially zoned property shall only be permitted upon the granting of Conditional Use Permit and shall be subject to the Operating Standards; and

    - An anaerobic digester shall not be located within 300 feet of any residential use or residentially zoned property.

- In the EZ-1 zoning district:

    - An anaerobic digester shall only be permitted as an accessory use upon the granting of a Conditional Use Permit and be subject to the Operating Standards;

- For purposes of this section, accessory use means the anaerobic digester would only process Feedstock (as defined in the proposed draft) generated by the primary use at the Building Site (as defined in the existing LDC) at which the anaerobic digester is located.

- There shall be a minimum setback of 300 feet from any residential use or residentially zoned property.

These modifications to the proposed draft regulations align the restrictions of anaerobic digesters with current restrictions in the LDC placed on other uses with similar risk profiles such as landfills, incinerators, fracking operations, composting facilities, recycling facilities, and solid waste transfer stations. If additional scientific research, data and reports show that the risk profile is greater than these similar uses, then and only then should significantly different setbacks be imposed on anaerobic digesters.

Anaerobic digesters are located in urban settings across this country, including the following locations (Google Earth photos of each are attached):

- New Albany, IN; 707 Pillsbury (General Mills plant); 250 feet from residential;
- Perris, CA; 1306 Goetz Rd; 800 feet from residential
- Jacksonville, FL; 1696 E. 14th St; 400 feet from residential
- Cleveland, OH; 13550 Aspinwall; 475 feet from residential;
- Compton, CA; 1140 W. Mahalo (Kroger distribution center); 525 feet from church; adjacent to commercial district; less than 1/2 mile from dense residential area
- Bradenton, FL; 1001 13th St. (Tropicana plant), adjacent to park with baseball field and pool; 275 feet from residential;
- Comstock, MI; 8938 Krum Ave (Bells Brewery); less urban but adjacent to soccer park;
- Brooklyn, NY; 329 Greenpoint Avenue; adjacent to commercial; less than 1/2 mile from dense residential; tours in glass-enclosed walkway built atop the digester - http://www.nyc.gov/html/dep/html/environmental_education/digester_egg_tours.shtml

In connection with approval of the facility in Perris, CA, the City of Perris published a 38-page Environmental Checklist Report analyzing the potential risks with the project. This project after all phases are complete would process approximately 150,000 tons per year of organic material. The report details: (1) the material processing facility that will have a biofilter that removes more the 99% of the odorous molecules, (2) the use of ferric chloride to control any hydrogen sulfide that naturally occurs in the digestion process so there should be no trace of hydrogen sulfide in the ambient environment; (3) the collection and processing of the biogas including the composition and pressure levels that mitigate against fire and explosion risks; (4) the potential air quality impact of the facility including the effect of trucking operations. All of these issues were explained in detail for the proposed digester project on 17th Street and would be required of any new project permitted going forward. Also, the California Energy Commission published a Localized Health Impacts Report. Copies of both documents are attached.

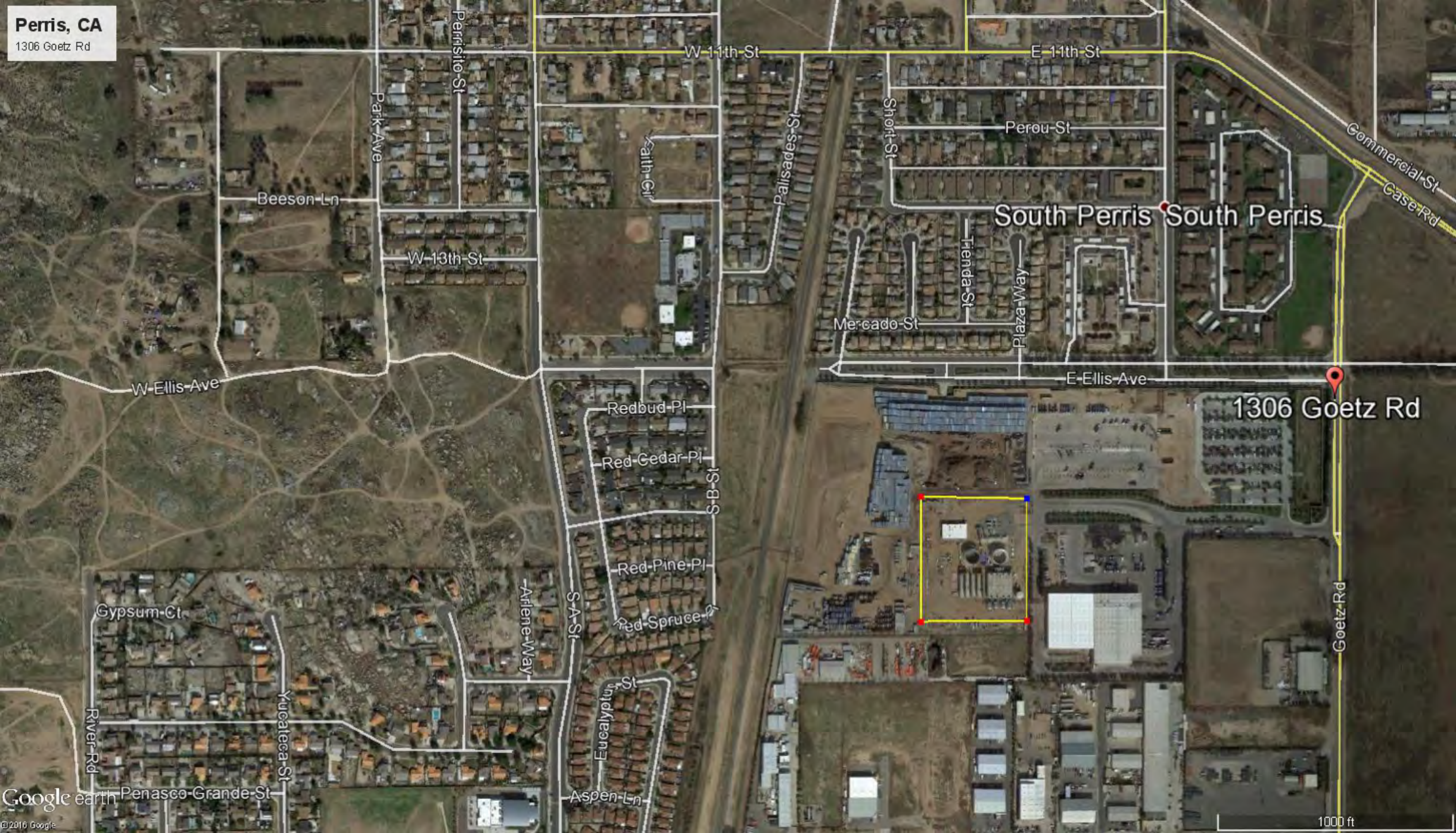
Finally, at the BOZA meeting for the proposed project on 17th Street, at meetings for the moratorium and at meetings for this amendment to the LDC, there has been significant importance placed on odor issues at the anaerobic digester in Haviland, Ohio, that was visited as part of the due diligence on the proposed project on 17th St. This Ohio digester has outside reception of materials, no air handling or biofilters, and a lagoon settling pond for the handling of the post-digestion liquid. That is not what was proposed on 17th Street and would not even be allowed under the proposed draft so that project in Ohio should not be the standard bearer for potential odor issues at digesters. The operations, design features and potential odor impacts on the surrounding community included in the attached environmental report provide much better insight for revising the LDC code than the Ohio project.

Thank you and I look forward to the continued discussions regarding anaerobic digesters.

Sincerely,

Brian D. Zoeller


New Albany, IN
707 Pillsbury Ln
62
Bell Ln
Tabor Ct
Mt Tabor Rd
W Oakwood Dr
Grant Line Center
Tiger Blvd
Grant Line Rd
Brentwood Ct
Ashwood Dr
University Woods Dr
Pillsbury Ln
707 Pillsbury Ln
Creekwood Ct
Slate Creek Ct
Rolling Creek Dr
Ballard Ln
111
Rosewood Dr
Woodbourne Dr
Plaza Dr
Laclede Ave
Hickory Grove
Beacon Dr
Google earth
© 2016 Google
900 ft


Perris, CA
1306 Goetz Rd
W-11th-St
E-11th-St
Perrisito-St
Park-Ave
Beeson-Ln
W-13th-St
Faith-Cir
Palisades-St
Short-St
Perou-St
Commercial-St
Case-Rd
South Perris
South Perris
Tienda-St
Plaza-Way
Mercado-St
E-Ellis-Ave
W-Ellis-Ave
1306 Goetz Rd
Redbud-Pl
Red-Cedar-Pl
S-B-St
Red-Pine-Pl
Red-Spruce-Pl
Goetz-Rd
Gypsum-Ct
Arlene-Way
S-A-St
Eucalyptus-St
River-Rd
Yucateca-St
Penasco-Grande-St
Aspen-Ln
Google earth
© 2016 Google
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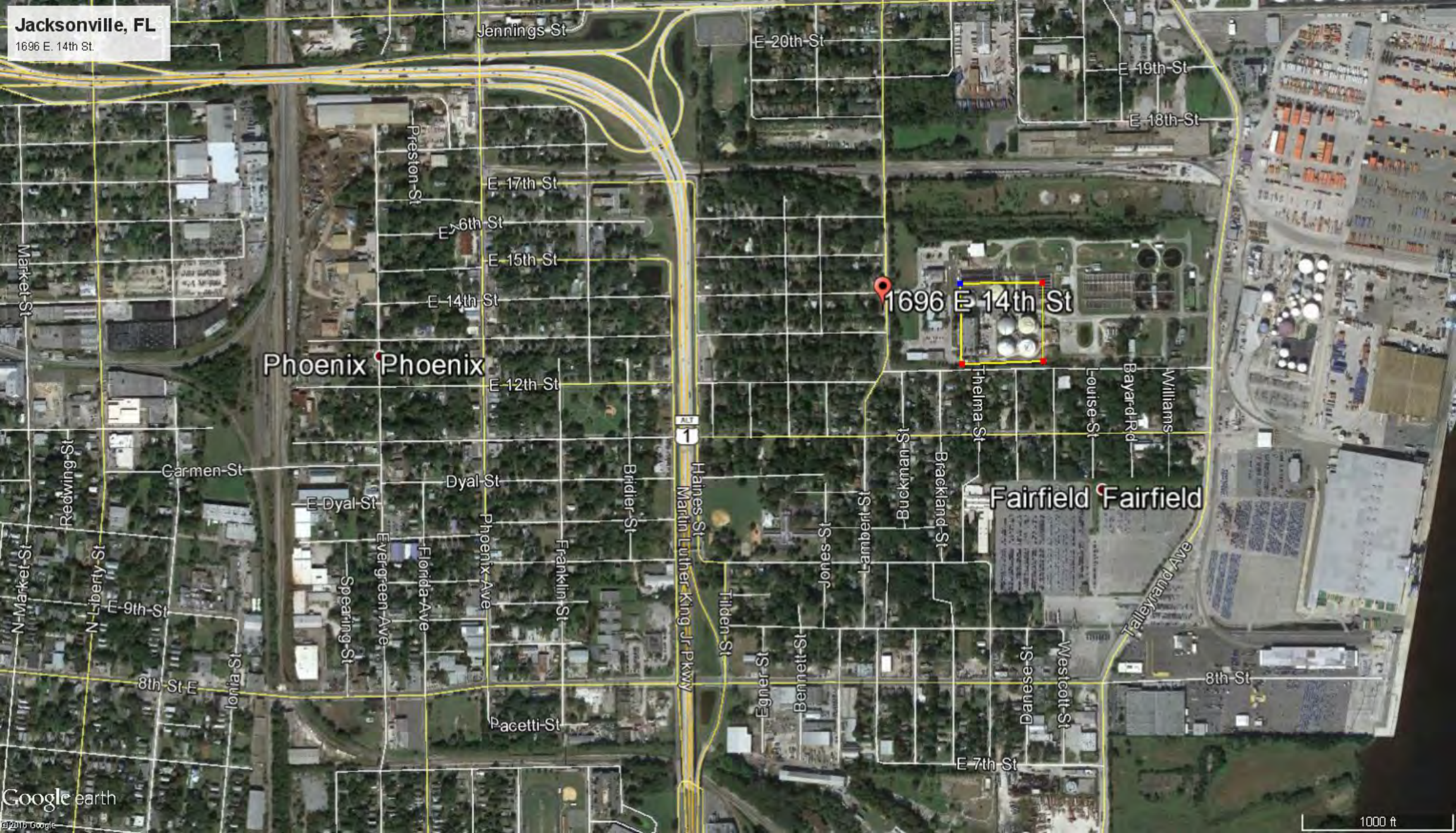
Jacksonville, FL
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Jennings St
E 20th St
E 19th St
E 18th St
Preston St
E 17th St
E 16th St
E 15th St
E 14th St
Market St
1696 E 14th St
Phoenix Phoenix
E 12th St
Carmen St
Dyal St
E Dyal St
Redwing St
N Liberty St
E 9th St
N Market St
8th St E
Spearing St
Evergreen Ave
Florida Ave
Phoenix Ave
Franklin St
Bridier St
Haines St
Martin Luther King Jr Pkwy
Pacetti St
Tilden St
Jones St
Lambert St
Buckman St
Brackland St
Thelma St
Louise St
Bayard Rd
Williams
Fairfield Fairfield
Talleyrand Ave
Westcott St
8th St
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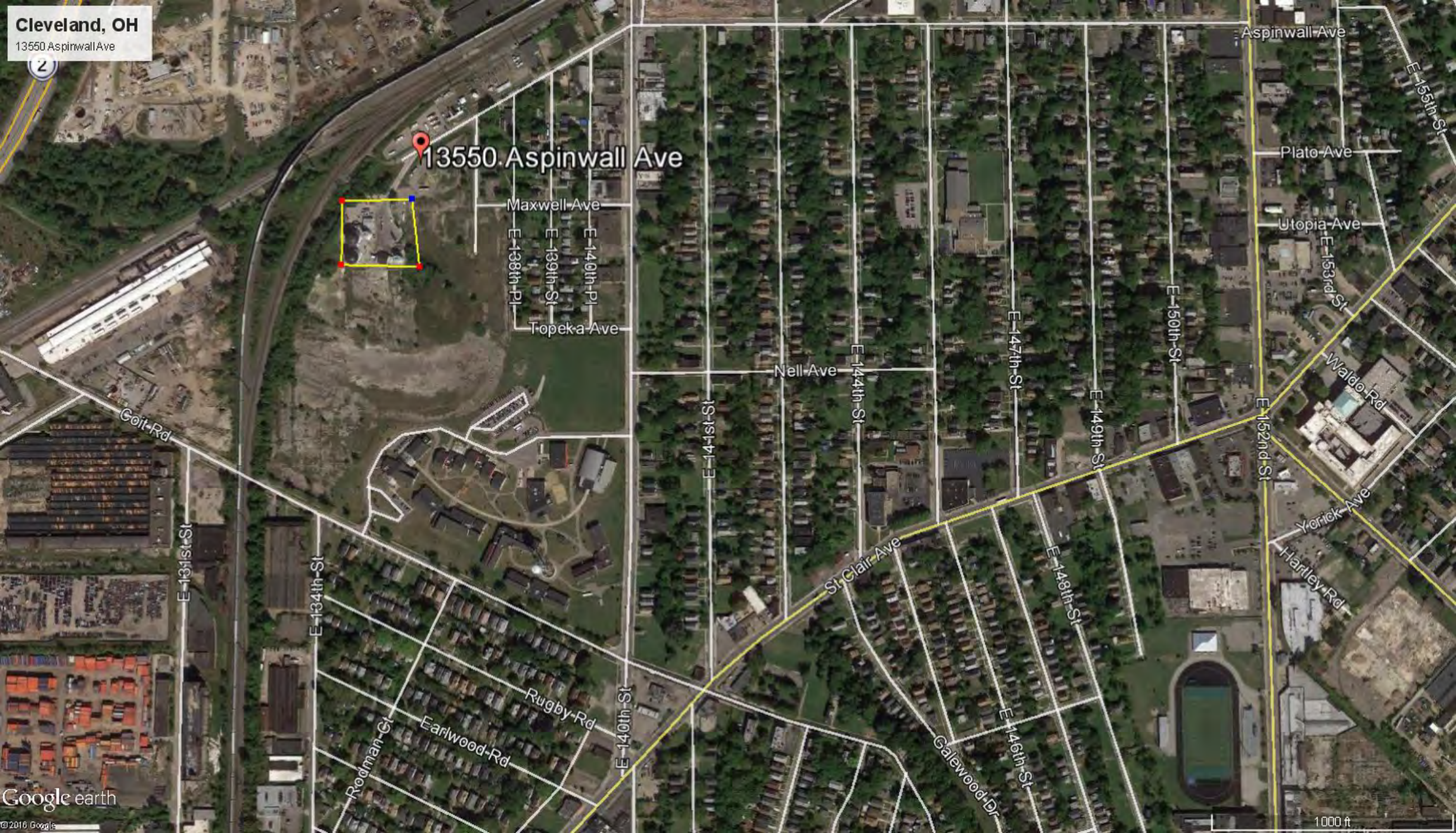
Cleveland, OH
13550 Aspinwall Ave
13550 Aspinwall Ave
Aspinwall Ave
E 155th St
Plato Ave
Utopia Ave
E 153rd St
Maxwell Ave
E 138th Pl
E 139th St
E 140th Pl
Topeka Ave
E 150th St
E 147th St
E 149th St
E 144th St
Nell Ave
E 141st St
Waldo Rd
E 152nd St
Goit Rd
E 131st St
E 134th St
Yorick Ave
Hartley Rd
St Clair Ave
E 148th St
Rugby Rd
Earlwood Rd
Rodman Ct
E 140th St
Galewood Dr
E 146th St
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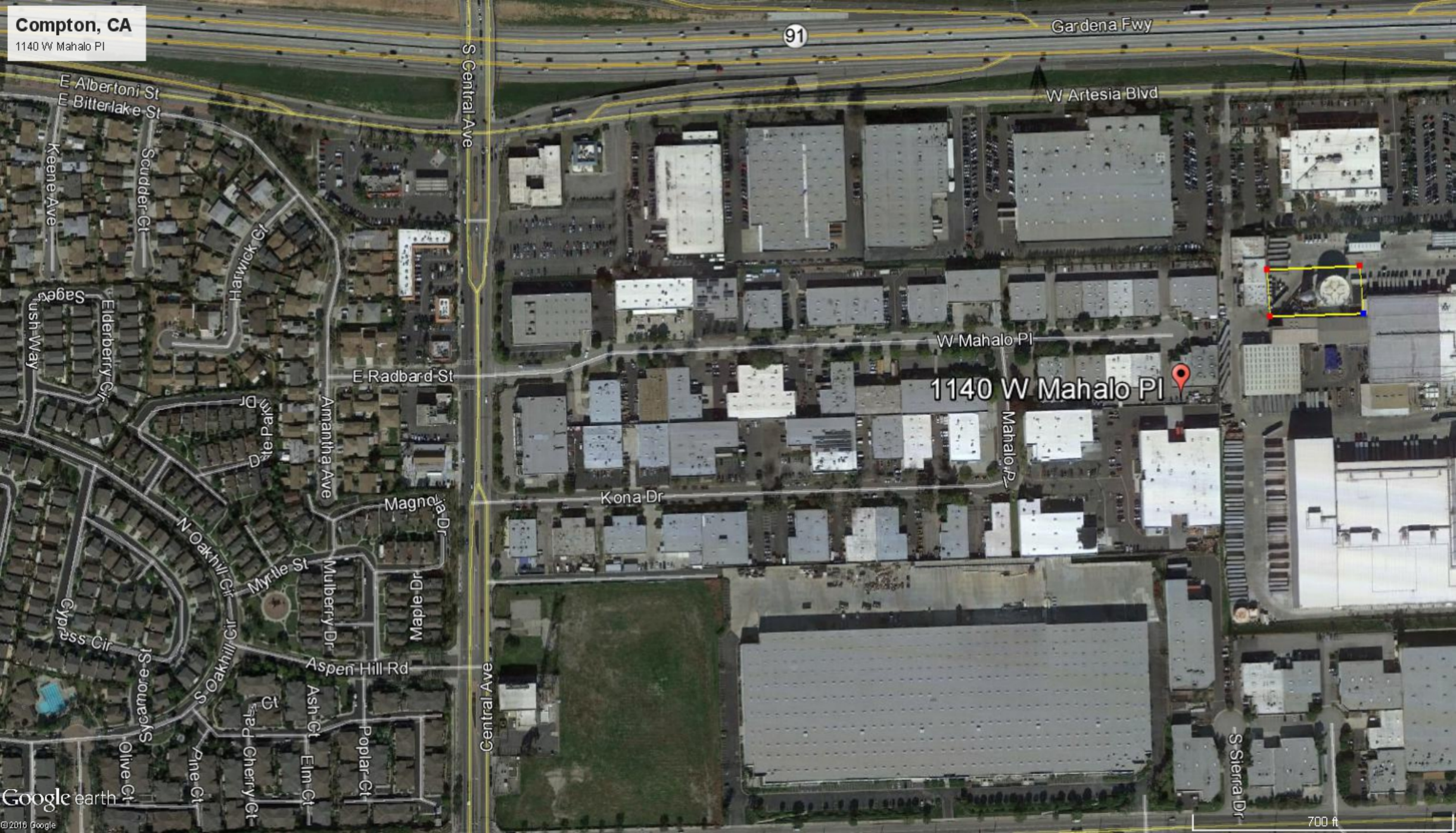
Compton, CA
1140 W Mahalo Pl
91
Gardena Fwy
W Artesia Blvd
S Central Ave
E Albertoni St
E Bitterlake St
Keene Ave
Scudder Ct
Harwick Ct
Sage Bush Way
Elderberry Cir
E Radbard St
W Mahalo Pl
1140 W Mahalo Pl
Mahalo Pl
Kona Dr
Amantha Ave
Date Palm Dr
Magnolia Dr
N Oakhill Cir
Myrtle St
Mulberry Dr
Maple Dr
Cypress Cir
S Oakhill Cir
Aspen Hill Rd
Sycamore St
Olive Ct
Pine Ct
Bad Cherry Ct
Ash Ct
Elm Ct
Poplar Ct
Central Ave
S Sierra Dr
Google earth
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700 ft


Bradenton, FL
1001 13th Ave
Martin Luther King Ave E
9th Ave E
14th St E
12th St E
12th St Ct E
13th St E
10th Ave E
11 Ave E
7th St E
8th St E
9th St E
13th Ave E
14th Ave E
15th Ave E
14th St E
15th St E
16th St E
17th St Ct E
17th St Cir
17th St E
18th St E
19th St Ct E
16th Ave E
Woodwinds Ln
Woodwinds Cir
Woodwinds Dr
Google earth
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Comstock, MI
8938 Krum Ave
Google earth
© 2016 Google
500 ft


Brooklyn, NY
329 Greenpoint Ave
329 Greenpoint Ave
Box St
Eagle St
Freeman St
Green St
Huron St
India St
Java St
Kent St
Milton St
Noble St
Oak St
Quay St
Meserole Ave
Norman Ave
Calyer St
Paidge Ave
Pulaski Bridge
McGuinness Blvd
West St
Franklin St
Manhattan Ave
Leonard St
Eckford St
Jewel St
Diamond St
Newell St
Humboldt St
Russell St
N Henry St
Monitor St
Kingsland Ave
Apollo St
Railroad Ave
Review Ave
Bradley Ave
Borden Ave
Gale Ave
33rd St
48th Ave
49th Ave
Long Island Expy
495
29th St
30th St
30th Pl
31st St
31st Pl
34th St
35th St
37th St
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City of Perris
Planning Division
135 N. D Street, Perris, CA 92570

Environmental Checklist

Project Title	Major Modification 11-04-0001, CR&R Green Energy Facility
Lead Agency Name and Address	City of Perris, Development Services Department, Planning Division, 135 North D Street, Perris, CA 92570
Contact Person and Phone Number	Diane Sbardellati, Associate Planner (951) 943-5003
Project Location	The existing 53-acre CR&R Perris Material Recovery Facility and Transfer Station is located at 1706 Goetz Road, Perris, at the southwest corner of Ellis Avenue and Goetz Road. The Green Energy project site is located in the western undeveloped portion of the CR&R site, near the southern border. The Renewable Natural Gas (RNG) would be piped to a dispensing station in a modified 4.4-acre truck parking lot adjacent to Ellis Avenue.
Project Sponsor's Name and Address	CR&R, Inc. David Fahrion, President 1706 Goetz Road, Perris, CA 92570
General Plan Designation	General Industrial
Zoning	General Industrial
Description of Project	The proposed project requires approval of a Major Modification 11-04-0001 to existing Conditional Use Permit 91-27. The Major Modification would allow expansion of the CR&R Perris Materials Recovery Facility (MRF) to include the 2.26 acre first phase of a Green Energy Facility with one anaerobic digester and supporting equipment on an undeveloped portion of the CR&R site. The operational area of the Green Energy Facility includes a biofilter area of .26 acres and a Renewable Natural Gas (RNG) fueling facility on 4.4-acres. The project anticipates conversion of up to 150 tons of processed organic municipal waste into biogas and compostable material per day. The biological decomposition and gas production takes place in a 97-foot vertical fully enclosed anaerobic digester (AD). A one-phase continuous digestion process degrades and stabilizes the organic municipal waste material, called feedstock. The feedstock will be trucked in from the CR&R MRF in Stanton, California until sufficient quantities are available locally. The lowest 15 feet of the anaerobic digester is a control room operating the plumbing, electrical components, and pumps for the digester. The RNG fuel is a natural byproduct of the anaerobic process. Methane is produced by the organisms as they break down the organic material, which after refining, is a high grade natural gas. The refined biogas would be piped underground approximately 855 feet to a RNG station with slow-fill fueling pumps for 48 CR&R collection trucks. An existing 4.4-acre concrete parking lot truck parking area near Ellis Avenue will be modified for the facility. The Green Energy facility project components include a previously entitled 39,000 square foot MRF building addition, the anaerobic digester (AD), a biogas holding tank, an emergency flare to vent biogas, and a biogas clean-up system that converts the raw biogas (methane) to pipeline quality RNG. A new 2,400 square foot metal building encloses electrical rooms, a storage area, control room, laboratory, restrooms, and an equipment room for the gas purification system. An attached 480 square foot metal canopy shields additional boilers and a generator on the south side of the building. All

<table>
<tr><td></td><td>waste handling conveyors from the transfer building are covered, sealed, and vented to an 11,354 square foot state-of-the art biofilter that removes trace odors from the process.

The fueling system includes a RNG storage tank, a pump station, 24 dual-hose slow-fill RNG posts, electrical equipment, piping and various instrumentation and/or control panels. Underground electric and gas utilities will be routed and buried in trenches approximately 18-inches below grade. Existing landscaping, street lights, fire hydrants and fire department connections will be relocated as required. To install the underground gas lines, the existing concrete pavement will be cut and repaired.

The Perris CR&R facility serves as the primary waste transfer and recycling station for Southwest Riverside County including the cities of Temecula, Lake Elsinore, Hemet, Perris, San Jacinto, and Canyon Lake and surrounding unincorporated communities. The facility assists these local municipalities in complying with the waste reduction and recycling mandates of the California Integrated Waste Management Act (AB 939) while serving as a local solid waste transfer facility for residents and businesses. Residual waste materials are currently hauled to either the Badlands Landfill northeast of the site, or the El Sobrante Landfill west of the site. The proposed project will reduce the amount of organic material being trucked to these landfills.

The project will be developed in phases beginning with a single 150 ton per day capacity digester. Based on the operational success of the first digester, the facility may ultimately consist of two digesters with a daily conversion capacity of up to 450 tons per day on 3.7 acres. The first phase is anticipated to be completed and operational by 2013.</td></tr>
<tr><td>Previous Environmental Analysis</td><td>In December 1991, an Initial Environmental Study was prepared for Conditional Use Permit 91-27. The Study analyzed the potential environmental impacts of a 1,800 ton per day waste transfer station and Materials Recovery Facility (MRF). It found that no potential significant environmental impact would be created by the facility that could not be mitigated to a level of insignificance. Mitigation measures included those for air quality, traffic and circulation, noise, water resources (drainage), hazardous materials, and health and safety. On August 15, 2007, Mitigated Negative Declaration 2254 was approved for the expansion of the waste transfer station/MRF under Major Modification 06-0158 to 3,000 tons per day. A copy of Negative Declaration 2254 and the associated Initial Study are attached.</td></tr>
<tr><td>Surrounding Land Uses and Setting</td><td><table>
<tr><th>Boundary</th><th>General Plan Designation</th><th>Existing Land Use</th></tr>
<tr><td>North</td><td>MFR-14/Specific Plan</td><td>Multi-Family Residential
Single Family Residential</td></tr>
<tr><td>East</td><td>Light Industrial
Public</td><td>Industrial</td></tr>
<tr><td>South</td><td>General Industrial</td><td>Industrial</td></tr>
<tr><td>West</td><td>General Industrial
Open Space
MFR-14</td><td>Single Family Residential
Railway Museum Private Rail Line
Yacht Manufacturer</td></tr>
</table></td></tr>
</table>

Other public agencies whose approval is required	CalRecycle (State of California) Southern California Air Quality Management District (SCAQMD) County of Riverside, Community Health Agency, Department of Environmental Health (LEA – Local Enforcement Agency) Riverside County Fire Department (CalFire)
Existing Facility	The original entitlement for CR&R was Conditional Use Permit (CUP) 91-27 approved on June 16, 1992 by the Perris City Council. Subsequent entitlements approved by the City include Major Modification 06-0158, Minor Modification 08-10-0017, and Administrative Development Plan Review (ADPR) 10-05-0009. CUP 91-27 permitted the construction of a facility designed to transfer or recover 1,800 tons of municipal solid waste, recyclable materials, organic wastes, and construction/demolition wastes per day. The CUP also permits subsidiary uses including the truck maintenance facility, administrative offices, passenger vehicle parking lots, truck parking lots, truck scales and scale house, and container storage areas. On April 19, 1996, revised Conditions of Approval for CUP 91-27 were approved based on the acquisition of a third parcel for the facility. **Conditional Use Permit (CUP) 91-27** The following existing uses approved with CUP 91-27 remain unchanged: **57,540 square foot waste transfer/MRF building** includes a tipping floor, two below-ground loadout ports, and a sort line for processing commingled recyclables. **Administrative Office:** A 1,920 square foot modular administrative office is located northwest of the transfer/MRF building. **Scalehouse/Truck Scales:** A 240 square foot scale house is located at the main entrance to the facility. Two 70-foot in-ground truck scales are located on each side of the scalehouse. **Fueling Facility:** A truck fueling facility is located south of the transfer/MRF building with one 20,000 gallon diesel fuel tank. **Cargo Container Storage:** Rentable empty containers are stored primarily on 25 acres of the undeveloped western portion of the site. **Major Modification 06-0158** was approved on August 15, 2007, expanding the existing facility to include the following: **Increased Daily Permitted Tonnage:** An increase in the total permitted tonnage of all wastes and recyclable materials entering the site from 1,800 to 3,000 tons per day. **Construction & Demolition Waste/Greenwaste Processing Facility**: A 62,700 square foot open-air facility designed to receive and process construction and demolition wastes such as concrete and asphalt, and organic materials such as greenwaste and wood. The system includes a series of screens, manual sorting stations, and grinders that separate various materials and reduce their size. All material storage and processing will occur on the 62,700 square foot concrete pad in the future. This processing area has not yet been constructed. **Employee Parking Lot:** At the southwest corner of Ellis Avenue and Goetz Road, a new employee parking lot of pervious pavement provides for on-site detention and percolation. 71 existing parking stalls remain near the office and along the west side of the site.

	Collection Truck Parking Lot: A new collection truck parking lot was constructed immediately north of the C/D waste processing facility site with paved parking lot for 140 collection vehicles and 13 transfer trucks. Existing parking for 17 collection trucks remains north of the offices. **Additional Truck Scale:** A third truck scale was installed north of the existing scale house. **Entrance Widening:** The main entrance driveway from Goetz Road was widened to be 130 feet wide near the scale house to allow for additional through lanes and onsite truck stacking. **Water Quality Detention Basin:** A new 40,000 sf WQMP detention basin was approved for the northwest corner of the project entrance. A 100,000 sf temporary retention basin at the west side of the property, adjacent to the rail line, collects offsite flows. **Landscaping and Screen Wall:** Approximately 147,277 square feet of landscaping was installed along the entire frontage of both Ellis Avenue and Goetz Road. A 12 foot high decorative masonry wall was constructed along Ellis Avenue and Goetz Road. **Minor Modification Review 08-10-0017** was approved on November 6, 2008 for interior site improvements north of the Goetz Road entry, including the reconfiguration of the 40,000 sf detention basin and the employee/visitor parking areas. A new 47-stall visitor parking area (with disabled stalls) was added. **Administrative Development Plan Review 10-05-0009** was approved on June 30, 2010 for the construction of a 39,900 square foot steel building addition to the existing transfer station building with roll-up doors for the processing of recyclable materials. This future building will receive the municipal organic waste that will be fed into the digester unit of the Green Energy Facility.

Environmental Factors Potentially Affected			
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.			
	Land Use/ Planning	X	Hazards & Hazardous Materials
	Population/ Housing		Noise
	Geology/ Soils		Public Services
	Hydrology/ Water Quality		Utilities/ Service Systems
X	Air Quality	X	Aesthetics
	Transportation/ Traffic		Cultural Resources
	Biological Resources		Recreation
	Mineral Resources		Mandatory Findings of Significance
	Agriculture Resources		None

Determination
(To be completed by the lead agency)

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant on the environment, and a NEGATIVE DECLARATION will be prepared
X	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

September 28, 2011
Date

Diane Sbardellati, Associate Planner
Printed Name

Development Services Dept., City of Perris
For

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
1. LAND USE AND PLANNING. Would the project:					
a.	Physically divide an established community?				X
b.	Conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigation an environmental effect?				X
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
Comments					
1.a.	Surrounding land uses include: North: Single family and multi-family residential housing South: Industrial manufacturing uses (yacht manufacturing) East: Industrial uses, vacant land; Perris Valley Airport across Goetz Road West: Rail line right of way and single family and multi-family residential development across Ellis Avenue The project site is zoned for General Industrial land uses that include waste transfer stations and materials recovery facilities (MRFs) such as the existing use, and the proposed Green Energy Facility. The intent of industrially-zoned property is to provide for more intense land uses that include the manufacture of products, the distribution of commodities, and the provision of services that are necessary for an urban environment. Industrial zones are generally located away from sensitive land uses so that they may operate without significant impacts to the community or the environment. Compatible industrial uses are located east and south of the site, and mitigation measures have been imposed to lessen impacts to residential uses to the west and north for the existing industrial use. The proposed project will not physically divide an established community. (Source: 1, 22)				
1.b.	The General Plan land use designation for the site is General Industrial, and the zoning is also GI (General Industrial). The site is located in an area established and designated for industrial purposes by the City's General Plan. The project is consistent with the Perris General Plan and Zoning Ordinance, in that the Green Energy Facility is a permitted use, and is complies with all zoning requirements. Moreover, the Facility has received approvals from the Federal Aviation Administration and the Riverside County Airport Land Use Commission. See Section 10.e. for detailed information. (Source: 1, 2)				
1.c.	The project is subject the provisions of the Multiple Species Habitat Conservation Plan (MSHCP) adopted by the City of Perris on September 17, 2003, and the Stephens Kangaroo Habitat Fee Area, as adopted by Riverside County. The project is located not located in the Narrow Endemic Plant Species Area (NEPSSA) of the MSHCP, however a burrowing owl habitat assessment was performed as required. No habitat or owls were present on the site. Regarding the Stephens Kangaroo Rat, while approval of the project and the development of the site would not directly impact the species, it is assumed to cumulatively impact the presumed traditional range of the Stephens Kangaroo Rat, and this impact is mitigated through the payment of SKR Habitat Conservation fees. (Source: 12, 13)				
2. POPULATION AND HOUSING. Would the project:					
a.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
Comments					
2.a.	The project is an expansion of an industrial facility that provides waste disposal services to residences and businesses in its service area by accepting materials from existing and projected land uses. The Green Energy Facility will convert organic waste to biofuel for CR&R trucks. The first phase will create up to 20 new permanent jobs for the local employment market, and up to 100 construction-related temporary jobs. The project does not require the extension of roads or infrastructure that could result in a significant increase in population, and will not displace any existing or planned housing. (Source: 22)				
2.b., &c.	The site consists of an existing transfer station/MRF and waste collection operations yard. Land designated for industrial development within the CR&R site is currently vacant or used for temporary cargo container storage. The Green Energy facility will occupy approximately 2.6 acres of this land, plus an existing parking lot to be used for slow-fill fueling. There is no existing or planned housing or inhabitants within the project site. (Source: 22)				
3. GEOLOGY AND SOILS. Would the project:					
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?			X	
ii)	Strong seismic ground shaking?			X	
iii)	Seismic-related ground failure, including liquefaction?				X
iv)	Landslides?				X
b.	Result in substantial soil erosion or the loss of topsoil?				X
c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d.	Be located on expansive soil, as defined in Table 1801-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e.	Have soil incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X

Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Comments				
3.a.i, ii	No known active faults cross the site, however, the site lies between the Elsinore and San Jacinto fault zones, with the Elsinore Fault located approximately 12 miles southwest of the site. Both of these zones are classified as active and all structures within the general region may be subject to moderate to severe ground shaking in the event of a seismic event. The site is not located within a designated Alquist-Priolo Zone. For the proposed Green Energy Facility, the anaerobic digestion process and gas production will occur within a seismically-engineered closed conduit pipe system. All tanks and processing vessels have automatic controls for operational safety. Final engineering and building plans will be required to comply with the Uniform Building Code specifications for Seismic Zone 4, and all site construction shall comply with the recommendations of the geotechnical report and the approved structural calculations prepared for construction of the Green Energy facility. Therefore, potentially significant impacts will be addressed through the minimum requirements of the Uniform Building Code. (Source: 1, 4)				
3.a.iii	Groundwater is not expected impact the project. As indicated in the City's General Plan Safety Element, Exhibit S-3, the general area of the site does not experience high groundwater and has a moderate potential for liquefaction. The 2005 Geological Investigation for Design and Construction of the CR&R expansion prepared by Harrington Geological Engineering Inc., stated groundwater was not encountered during their field exploration to a depth of 40 feet. (Source: 1, 4)				
3.a.iv	The site possesses a gentle slope from west to east with no hillside areas. There is no potential for landslide hazards. (Source: 22)				
3.b.	Project implementation will require additional site grading. The amount of earth to be excavated in Phase 1 of the project is 6,350-cubic yards. The excess material will be used to backfill the borrow area and oversized retention basin adjacent to the west property line. The existing retention basin was over-excavated to provide fill for prior improvements, and will be backfilled to its design size as new development (including the Green Energy Facility) occurs on site. The movement of vehicles and personnel on unpaved surfaces during construction may result in temporary soil erosion. At buildout the majority of the site will be improved with structures, pavement, gravel or other landscaping that will stabilize onsite soils and prevent erosion. (Source: 22)				
3.c.	The site lies within the Hanford-Tujunga-Greenfield soils association which is characterized as a deep, well drained to excessively drained soil with a surface layer of sand to sandy loam. These soils are suitable for dry land farming and pasture as well as irrigated truck farming and urban development. According to the 2005 Harrington Geotechnical Report, the earth materials encountered in their exploratory borings to a maximum of 40 feet were alluvium consisting of silty sands with some deeper layers of clayey silt and silty clay. The soils are moist and medium to very dense. As noted in the General Plan Safety Element, the site is not located in a geologic unit or soil classification that may be deemed as potentially hazardous. (Source: 1, 4)				
3.d.	The General Plan Safety Element states that the site is located in an area of soils that are not considered expansive. According to the 2005 Harrington Geotechnical Report, the preliminary tests indicate that the surface/near-surface soil possesses a very low expansion potential as defined the Uniform Building Code. Design recommendations for mitigating post-construction movement due to this characteristic were incorporated into the 2005 report, and were updated in the January 2006 Addendum. (Source: 1, 4)				
3.e.	The facility currently is connected to sanitary sewers maintained by Eastern Municipal Water District. No subsurface septic systems are planned. (Source: 22)				
4. HYDROLOGY AND WATER QUALITY. Would the project:					
a.	Violate any water quality standards or waste discharge requirements?			X	

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				X
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				X
e.	Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?				X
f.	Otherwise substantially degrade water quality?			X	
g.	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h.	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j.	Inundation by seiche, tsunami, or mudflow?				X
Comment					

Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
4.a.	No pollutants are generated from the processes of the proposed Green Energy Facility. All the anaerobic digestion processes and gas production will occur within a modern seismically-engineered closed conduit pipe system, tanks, and processing vessels with automated controls for operational safety. The processed waste end product (digestate or sludge cake) that will be sterilized for pathogens and seeds. Any spill of material will be basically benign and will be swept up and returned to an enclosed or protected area. The storage of chemicals used in the process such as ferric chloride will be subject to the permitting requirements for hazardous waste storage and containment as required by the Fire Marshal and the Riverside County Department of Environmental Health (LEA – Local Enforcement Agency). The Green Energy Facility is required to comply with all appropriate Regional Water Quality Control Board regulations and those of the local NPDES program. Implementation of these programs will significantly reduce or eliminate the potential for water quality degradation from this facility. The existing Water Quality Management Plan (WQMP 06-0158, approved March 4, 2009) prepared for the CR&R expansion in 2007 will be amended to address the Green Energy facility. Although the WQMP specifically addresses a 30-acre area of the CR&R Transfer Station north of the new development site, the drainage system and hydrology study address the entire site. The recycling area and the detention and retention basins were sized for the entire 53-acre site in anticipation of future development and designed to drain to the retention basin adjacent to Goetz Road. A Preliminary WQMP was approved August 10, 2011 to address Phase 1 and future phases (3.7 acres total) of the Green Energy facility and subsequent phases. Any trash and debris associated with the existing transfer and recycling building area, parking lot and tank area was previously addressed by the Litter Control Plan in place for the from the earlier (August 15, 2007) MMRP for Major Modification 06-0158. Other Pollutants of Concern are leaking oil, fluids or fuel from vehicles, which will be addressed by the Amended WQMP for the project. The following Conditions of Approval for the Green Energy Facility PWQMP are required: 1. The development shall be subject to all provisions of City of Perris Ordinance No. 1194, which establishes stormwater/urban runoff management and discharge controls to improve water quality and comply with federal regulations, and any amendments, revisions, or ordinances pertaining thereto. 2. The structural BMPs selected for this project have been approved in concept. The owner shall submit a final WQMP including plans and details providing the elevations, slopes, and other details for the proposed structural BMPs including the infiltration basin and porous pavement prior to the issuance of grading permits to the Public Works Department for approval. (Source: 11, 23)				
4.b.	The tank and equipment farm surface area will be covered in decomposed granite to allow for ground water infiltration. New impermeable paving will be limited to the fire lane and a 5-vehicle parking lot at the north end of the tank farm. The RNG fueling area will be modified from an existing parking lot that was previously evaluated in WQMP 06-0158. The proposed project will require approximately 7,200 gallons per day of potable water in the anaerobic digester for the processing of recyclable materials. However, the system is designed to recycle this water and minimize any wastewater to the sanitary sewer. A minor amount of potable water consumption will be by onsite employees for drinking water and sanitation purposes. The project will not deplete groundwater supplies or interfere with groundwater recharge. (Source: 10, 11, 22, 23)				

Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
4.c., d.	The proposed project requires the development of approximately 2.26 acres for a 'tank farm', biofilter, fire lane, and 5-vehicle paved parking area. This area was previously considered by WQMP 06-0158. The proposed project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river that would result in substantial erosion or siltation on- or off-site. A Stormwater Hydrology Report was prepared in 2008 for the overall CR&R project site prior to approval of Final WQMP 06-0158 in accordance with the guidelines and standards of the Riverside County Flood Control and Water Conservation District. The study indicates that the immediate project area drains in a general west to east direction. Approximately 208 acres west of the site are tributary. Of this total, approximately 70 acres of runoff are contributed from single family residential parcels (average ¼ acre) with the remaining 136 acres currently undeveloped. These flows have been diverted north from the existing 36-inch culvert under the rail line through a graded swale and directed to an oversized siltation/detention basin parallel to the railway frontage on CR&R property. The flows will be gradually released into a new stormdrain in the Ellis Avenue right-of-way and directed to their natural point of release at the intersection of Ellis Avenue and Goetz Road. The 40,000 square foot detention basin located along the Goetz Road frontage is designed to drain the entire site, including the area of the Green Energy facility. Stormwater collected from surface swales and subsurface pipes are directed to this basin, which is designed to intercept onsite runoff and gradually release the flows at current rates into the existing Goetz Road storm drain. For these reasons, the project does not have the potential to substantially increase the rate or amount of surface runoff to cause flooding on- or off-site. Any surface drainage that does not infiltrate will flow to the Goetz Road basin to be detained. (Source: 10, 11, 22)				
4.e., f.	The amount of runoff water from the project will not exceed the capacity of the existing and planned storm water drainage systems or provide substantial additional sources of polluted runoff because the existing WQMP for the CR&R facility has been amended to address the 40-acre western portion of the site where the Green Energy facility will be built. The original WQMP anticipated future development. The small amount of paving associated with the fire lane and small parking lot and the 2,850 sf roof area of the equipment building will slightly increase the impervious surface area and contribute to a minor increase in site runoff. The equipment area (tank farm) will be covered with decomposed granite or similar rock material for a pervious surface. The Amended WQMP addresses the new development, however the original WQMP factored in the highest runoff that could ever be generated on the site. With the use of decomposed granite as the surface material, the calculated flows are now conservative. The amended WQMP adds the Green Energy Facility to the exhibit maps with descriptive text. No additional calculations are needed, and there is no additional drainage to be considered. No upsizing of the existing retention or the west detention basin that captures off-site water is required. The project will also be required to comply with the NPDES program and prepare and implement a Stormwater Pollution Prevention Plan to manage potential surface pollutants during construction and long-term operation of the facility. This will include the implementation of Best Management Practices designed to reduce the potential for the release of pollutants, and those designed to contain any pollutants onsite. (Source: 10, 22, 23).				
4.g., h.	The project is not located within a designated 100-year flood hazard area. The project is industrial in nature, and no housing is proposed as part of the project. (Source: 1, 5)				
4.i.	According to the Perris General Plan Exhibit S-15, the eastern portion of the CR&R site and the proposed development site are partially located in a potential dam inundation area from Lake Perris. The dam is owned and operated by the California Department of Water Resources, who is responsible for preparing an analysis of potential inundation based upon dam failure in a major seismic event. Based upon a worst case scenario of a complete dam failure at maximum capacity, flood waters could reach the site in approximately 1.5 hours at a depth of up to five feet. No habitable structures are proposed, therefore no impacts are expected. (Source: 1)				

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
4.j.	The subject site is not anticipated to be subject to these hazards. A tsunami is a very large ocean wave caused by an underwater earthquake or volcanic eruption. The proposed site is located approximately 60 miles from the ocean with intervening mountain ranges, so a tsunami is unlikely to affect the project site. Mudflow can be defined as soft wet earth and debris, made fluid by rain or melted snow and often building up great speed. The subject topography is relatively flat and mudflow is not likely. A seiche occurs when wave that oscillates in lakes, bays, or gulfs from a few minutes to a few hours as a result of seismic disturbances. A seiche without dam failure is unlikely to affect the site which lies approximately 2 miles south of the Perris Dam. (Source: 1)				
5. AIR QUALITY. Where available, the significance criteria established by the applicable quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
a.	Conflict with or obstruct implementation of the applicable air quality plan?			X	
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors?			X	
d.	Expose sensitive receptors to substantial pollutant concentrations?			X	
e.	Create objectionable odors affecting a substantial number of people?			X	
Comments					

Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
5.a., b. & c.				

An Air Quality Impact Analysis was prepared for the CR&R expansion from 1,800 TPD to 3,000 TPD in September 2006 by Giroux and Associates, and updated June 7, 2011 to include the Green Energy Facility project. The following is a summary of the findings in the updated report.

The climate of the Perris area is an interior valley subclimate of Southern California's semi-arid climate, characterized by warm summers, mild winters, infrequent rainfall, moderate afternoon breezes, and generally fair weather. The clouds and the fog that form along the region's coastline rarely extend inland to the San Jacinto Valley, and burn off quickly after sunrise if they do. The most important weather pattern is the warm season airflow across populated areas of the Los Angeles Basin that brings polluted air into western Riverside County late in the afternoon. This transport pattern creates unhealthful air quality when the fringes of this "urban smog cloud" extend to the project site during the summer months.

Winds are an important factor in characterizing the local air quality environment because they both determine the regional pattern of air pollution transport and control the local rate of pollution dispersion. Daytime winds are from the NW at 6-8 mph as air moves regionally onshore from the cool Pacific Ocean to the warm Mojave Desert interior of Southern California. These winds allow for good local mixing, but may also bring air pollutants from urbanized coastal areas into interior valleys. Strong thermal convection in the summer ultimately dilutes the smog cloud from urbanized development, but the project area cannot completely escape the regional air quality degradation.

In addition to winds that control the rate and direction of pollution dispersal, Southern California also is known for strong temperature inversions that limit the vertical depth through which pollution can be mixed. Inversions trap pollutants such as automobile exhaust near their source and can lead to air pollution "hot spots" in heavily developed coastal areas of the basin, but within inland valleys there is not enough traffic to cause winter air pollution problems, although summers are subject to haze and occasional unhealthful air conditions.

In 2003 the Environmental Protection Agency (EPA) adopted a rule for states that extended and established a new attainment deadline for ozone for the year 2021. Because California had established Ambient Air Quality Standards (AAQS) several years before the federal action and due to unique air quality issues introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. A new state standard for an 8-hour ozone exposure was adopted in 2005 which more closely aligned California with the federal 8-hour standard, however it does not have a specific attainment deadline. Subsequently the EPA has strengthened the 8-hour standard and published draft standards anticipating a future 8-hour standard of 0.065 ppm. Standards for PM-2.5 were strengthened in 2006, and a new federal one-hour standard for nitrogen dioxide (NO_2) has recently been adopted, which is more stringent than the state standard. Based on air quality monitoring data in the South Coast Air Basin, the basin will likely be designated as a "non-attainment" area for the national one-hour standard.

For the Perris area, although there is no baseline air quality data available for the proposed project site, there is long-term air quality monitoring data for ozone and 10-micron diameter particulates, and data from Riverside for other particulate types and nitrogen oxide. According to Table 2 of the updated Giroux and Associates Air Quality Impact Analysis, 1) Perris photochemical smog (ozone) levels often exceed standards, 2) carbon monoxide (CO) levels declined to their lowest 1 and 8-hour levels in history in 2008, and have not exceeded federal and state standards in more than 10 years, and 3) PM-10 levels in Perris periodically exceed the state 24-hour standard, but no measurements in excess of the federal 24-hour standard have been measured in the last six years. Moreover, state PM-10 standards are exceeded an average of 29% of all days per year, and 4) a substantial fraction of PM-10 is comprised of ultra-small diameter particulates (PM-2.5). Both the frequency of violations of particulate standards and the high percentage of PM-2.5 are air quality concerns in the project area, however 2009 showed the fewest violations in recent years. Further, 5) more localized pollutants such as nitrogen oxides, lead, etc., are very low near the project site because background levels even near downtown Riverside never exceed allowable levels, and there are only limited sources of such emissions near the project site.

Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
5. a., b., & c., cont.				

There is substantial excess dispersal capacity to accommodate localized vehicular air pollutants such as NOx without any threat of violating state and federal standards.

Air quality impacts occur in two different ways. Primary air quality impacts occur near an individual source of emissions, such as CO_2. Many particulates, such as fugitive dust emissions, are also primary pollutants. Secondary air quality impacts require time to transform from a more benign form to a more unhealthful contaminant. This occurs regionally far from the source. Their incremental regional impact is very small on an individual basis and cannot be quantified except through complex photochemical computer modeling based on a specific amount of emissions. There is however no mechanism to translate those emissions directly into a corresponding ambient air quality impact. Other secondary significance criteria identified by the SCAQMD CEQA Handbook includes toxic, hazardous or odorous air contaminants.

SCAQMD has designated significant emissions levels for evaluating impact significance for primary pollutants. Any project in the SCAB with daily emissions for construction and operations in excess of the thresholds recommended by SCAQMD are considered significant. The only source of project-related hazardous air contaminants are those contained within small diameter particulates (PM-2.5) from diesel exhaust. Such exhaust will be generated from construction equipment and by diesel-powered haul trucks. Recently adopted policies regarding PM-2.5 emissions require the timely conversion of waste hauling fleets to diesel alternatives, or the use of "clean" diesel, if emissions are as low as alternative fuels. Since the project's intent is to produce a clean non-diesel fuel source for the CR&R fleet, the project would produce a less than significant impact on air quality from diesel emissions. Further, because health risks from toxic air contaminants are cumulative over an assumed 70-year lifespan, measurable off-site public health risk from diesel emissions would occur for only a brief portion of a project lifetime and only in limited quantity.

Short-Term Construction Impacts

The project construction includes installation of a tank farm, biofilter, 2,400 sq foot equipment building and office, a small parking area, paved fire lane/driveway, and a non-contiguous truck CNG truck fueling area located on an existing parking lot on a 2.16 acre site (first phase). Construction of a previously evaluated and approved 39,900 sf transfer building is part of the project. Dust as a fugitive emission during construction of the facility is a primary concern. Grading activities will be the most equipment intensive disturbance, and will be limited due to the already flat nature of the project site. However, there is no way to know the parameters of dust emission potential since it is based on several factors and can change day to day. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Average daily PM-10 emissions during site grading and other disturbance are stated in the SCAQMD Handbook to be 26.4 pounds/acre. This estimate is based upon required dust control measures in effect in 1993 when the AQMD CEQA Air Quality Handbook was prepared. Rule 403 was subsequently strengthened to require use of a greater array of fugitive dust control on construction projects.

A default universal factor is used by regulatory agencies to estimate fugitive dust generation based on area. Average daily PM-10 emissions during site grading and other disturbance are shown in the CalEEMod.2011.1.1 computer model to be about 10 pounds per acre, presuming the use of reasonable available control measures (RACMs). The SCAQMD requires the use of best available control measures (BACMs). Approximately 10-20% of PM-10 particulates are expected to be PM-2.5 particulates, and are considered to be more unhealthful than the larger diameter particulates. Larger particles of fugitive dust have more potential for nuisance soiling than a health hazard because large particles are readily filtered by human breathing passages and are chemically inert.

Exhaust emissions will result from on and off-site heavy equipment. Prototype grading, paving and other construction equipment such as cranes, forklifts, tractors, loaders and backhoes were evaluated in the CalEEMod.2011.1.1* computer model for a worst case scenario and peak daily construction activity emissions were found to be well below SCAQMD thresholds, as shown in the chart below:

Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

5.a., b. & c., cont.

Construction Activity Emissions (lbs/day)							
Activity	**ROG**	**NOx**	**CO**	**SO2**	**PM-10**	**PM-2.5**	**CO2(e)**
Maximum Daily Emissions	11.7	19.1	11.4	0.0	2.1	1.7	1,961.6
SCAQMD Threshold	75	100	550	150	150	55	-

Peak daily construction activity emissions will be below SCAQMD CEQA thresholds.

Localized Significant Thresholds to evaluate ambient air quality on a local level in addition to regional emissions-based thresholds of significance were also found to be well below the LST for construction on-site:

LST Emissions (lbs/day)				
Perris Valley	**CO**	**NOx**	**PM-10**	**PM-2.5**
LST	887	148	12	4
Max On-Site Emissions*	10	16	2	2

Long-Term Operational Impacts

The proposed Green Energy facility will initially process 150 tons of organic feedstock (household municipal waste, greenwaste and foodwaste) into an organic base for mulch and energy in the form of refined methane gas. 15% of the waste will become CNG. Although there will be an increase in criteria air pollutants to deliver the material to the facility, there will be a corresponding decrease in exhaust emissions by replacing diesel combustion engines with clean-burning vehicles. Delivery of 150 tons of feedstock from Stanton, CA will consume 75 gallons of diesel fuel a day, and another 15 gallons will be used by the Perris CR&R hauling fleet. The digested material will produce approximately 35 million cubic feet of methane. By BTU equivalence, 4.9 billion BTU from diesel fuel are required to deliver the feedstock, which in turn produces 36 billion BTU of clean energy. The almost 10:1 efficiency is augmented by the fact that CNG produces fewer air pollutants than the diesel fuel it replaces.

For analysis purposes, air pollution emissions from feedstock delivery have been treated as "new" emissions, and all three phases and 60 employees were factored into the results. Thus, if all delivery emissions are considered new, and if all three phases are completed in 2012, and if none of the delivery vehicles are CNG fueled, then SCAQMD CEQA significance threshold could still be exceeded by 14%. Even if a small fraction of the delivery fleet was CNG fueled, the NOx threshold would not be exceeded.

The increase in deliveries of digestible feedstock from Stanton was determined to have already been included in the previously analyzed and approved facility expansion from 1,800 to 3,000 TPD. With implementation of Mitigation Measure AQ-1 below, air quality impacts from on-road delivery vehicles will be less than significant.

Mitigation Measures to reduce air quality impacts were included in the Initial Study from the overall site expansion (Major Modification 06-0158), and these measures remain in place as project Conditions of Approval.

Mitigation

AQ-1: At completion of Phase 3 of the Green Energy project, at least 25% of the feedstock delivery shall be transported by CNG-fueled trucks.

(Source: 3, 22, 23, 24)

Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
5.d.	Although residential developments are located immediately north and west of the project site, and a school is located within a quarter mile of the site, local wind patterns generally blow west to east from the residences toward the facility. Currently CR&R handles all municipal solid waste within an enclosed 57,540 square foot waste transfer/MRF building. The Green Energy Facility will utilize the adjacent 39,900 square foot MRF addition approved by Administrative Development Plan Review 10-05-0009 on the south side of the property. See odor discussion below: 5.e. (Source: 3, 15, 22)			
5.e.	State health requirements limit the time that wastes and recyclables may be stored onsite to further control odors. The CR&R was previously required to prepare and implement an Odor Control Program as part of its State Solid Waste Facility Permit (Perris Transfer Station/MRF SCAQMD Rule 410 Odor Management Plan). The existing land use permit and State Solid Waste Facility Permit for the expansion contain a number of Conditions restricting the allowable duration of any bio-degradable materials in storage piles, inside vehicles, or on the tipping floor. The combination of normally favorable meteorology and state of the art odor control measures will accommodate the proposed expansion without any perceptible change in odor character at nearby homes. Digestible organic materials generate many potentially odorous compounds. During oxygen-deficient (anaerobic) conditions, whether intentionally in a digester or accidently because the refuse has sat around too long, the biogas production rate increases dramatically. The anaerobic process of the Green Energy Facility is a fully enclosed system that has no airborne pathways except through emergency pressure relief valves or through a backup flare. Neither pathway is normally active. The potential odor impact from the project derives from delivery and loading of the feedstock, and from the residual digestate to be delivered to a composting/soil amendment processing facility offsite. The feedstock receiving station and digestate load-out area are in an enclosed building maintained under negative air pressure. Ventilation air is drawn from the building and directed by four large capacity ducts from the building, assisted by blower fans, direct air from the building to a 20,000 square foot exterior bio-filter where it is then distributed through a series of perforated pipes into a rock bed of approximately three feet in depth covered by up to 10 feet of shredded wood. The air rises out of the pipes and works its way to the surface of the bio-filter within about 60 to 90 seconds. The atmosphere within the bio-filter is moist like a sponge. The moisture comes from the moist air in the receiving building (waste is typically 30% or greater moisture by weight) and from the misting system inside the building used to control dust and to cool the building environment during warm days. Microorganisms grow on the surface of the wood chips and as the air passes through the moistened wood chips the microorganisms feed off the odorous compounds, thus eliminating odor. SCAQMD requires a permit for the biofilter because it is designed to control air pollution and to ensure its proper operation. When adequately sized and properly operated, the biofilter removes more than 99% of odorous molecules, according to . CR&R pioneered the use of bio-filtration in the waste industry. The CR&R Material Recovery and Transfer Facility in Stanton, CA has an approximately-sized one-acre, 16 foot high biofilter designed by the engineering firm CH2MHILL. This biofilter system went into operation in October of 2000, with a permit to construct and operate from the SCAQMD. It has been successfully operating for more than ten years. The biofilter receives air from nearly three acres of buildings or some 145,000 sq. feet, about three times the size of the building that will be served by the proposed biofilter in Perris. Bio-filtration is considered by the AQMD as Best Available Control Technology (BACT) for odor control at MRF facilities. The proposed bio-filter at Perris will be similar to the one operating in Stanton. With probes and direct observation, the Perris plant manager will monitor the biofilter and on a weekly basis, check that the air is circulating through the biofilter properly, and that the moisture level is sufficient to maintain the microorganisms. This practice will ensure the biofilter is performing adequately to consume the odor compounds generated in the municipal waste feedstock, and is listed as Mitigation Measure AQ-2, below.			

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
5.e., cont.	**Mitigation** **AQ-2:** The Perris CR&R plant manager, using probes and through direct observation, shall monitor the biofilter on a weekly basis to ensure that air is circulating through the biofilter properly, and that the moisture level is sufficient to maintain the microorganisms. (Source: 15, 16, 22)				
6. TRANSPORTATION/TRAFFIC. Would the project:					
a.	Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
b.	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e.	Result in inadequate emergency access?				X
f.	Result in inadequate parking capacity?				X
g.	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks?				X
Comments:					

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
6.a.	The traffic impacts associated with the expansion of the CR&R facility approved by Major Modification 06-0158 from 1,800 to 3,000 tons per day were examined in the Traffic Impact Analysis (TIA) prepared by Kunzman Associates, Inc. dated June 15, 2006. Extensive traffic mitigation was included as part of the Mitigation Monitoring Plan to address the potential traffic impacts associated with the expansion. The proposed Green Energy Facility project will not increase daily tonnage or traffic above currently permitted levels. The proposed project is an extension of an existing facility to increase recycling efficiency and to create renewable transportation fuel from the process. The Green Energy Facility is designed to divert and recover up to 95% of the waste stream due to the combined recovery of renewable energy, digestate from the anaerobic digester, sand and other inert materials found in the municipal waste stream. About 15% of the incoming waste will be converted to energy, approximately 65% to digestate, an inert material that will be processed at an off-site compost facility into soil amendment for agricultural and horticultural uses. The renewable energy is biofuel produced from methane, a biogas by-product of the anaerobic digestion process that will be refined and utilized as a transportation fuel for CR&R trucks. For the Green Energy facility, Kunzman Associates provided an additional trip generation analysis to determine whether the proposed project would add truck trips beyond what was analyzed in 2006. The initial phase of the Green Energy facility will convert up to 150 tons per day of processed municipal waste to Renewable Natural Gas (RNG) for CR&R trucks and a digestate product that will eventually be used for horticultural mulch. The first phase is anticipated to be completed and operational by 2013. Subsequent phases may ultimately have a daily conversion capacity of 450 tons per day. The initial phase is anticipated to have a total of 20 employees, with 60 employees at ultimate buildout. Approximately 240 daily vehicle trips in Passenger Car Equivalents will be generated for the ultimate employee and truck trips. These trips include seven (7) truck trips per day to and from the Stanton CR&R to acquire the organic waste called feedstock needed for the digester. Approximately 75% (112.5 tons) of the feedstock will come from outside the area, and 25% (37.5 tons) will be available onsite at the CR&R MRF as part of the local municipal waste stream. As Perris develops, all feedstock for the Green Energy facility will be available locally. The earlier Perris MRF Project Traffic Impact Analysis analyzed an increase of 1,200 tons per day at the facility. The Green Energy project tonnage of an initial phase of 150 tons per day to an ultimate 450 tons per day is included in the approved trip generation increase to 3,000 tons per day. It should be noted that, according to the daily tonnage report for April 2011, the CR&R facility was averaging approximately 1,100 tons per day due to the downturn in the economy. The facility is not permitted to exceed 3,000 tons a day without new review and entitlements. The Green Energy project has no potential to create a significant increase in traffic as a result of a substantial increase in vehicle trips, or by contributing to the volume to capacity ratio on roads, or congestion. (Source: 18, 19, 22)				
6.b.	The proposed project will not result in exceeding a level of service standard established by the County Congestion Management Plan. Although Ellis Avenue is designated as a Secondary Arterial by the Perris General Plan, the Green Energy Project will not add a significant number of additional trips, and to maintain land use compatibility, trucks are restricted from accessing the CR&R MRF/Transfer Station from Ellis Avenue. (Source: 1, 19, 24)				
6.c.	The project site is located immediately west of the Perris Valley Airport and approximately 1,200 feet from the existing runway. The Green Energy Facility was subject to review by the Riverside County Airport Land Use Commission (ALUC) to determine whether the Project was consistent with the recently adopted Perris Valley Airport Land Use Compatibility Plan (PVALUCP). ALUC also required review and approval by the FAA for the height of two of the Green Energy Facility structures, the anaerobic digester (97') and the MRF/transfer station addition (45') within Zone D. The FAA determined that neither structure will present a hazard to aviation, and that markings and lighting are not necessary for aviation safety. The ALUC presented a finding of Conditional Consistency for the project on September 8, 2011. See ALUC Conditions in Section 10.e., below. No changes in air traffic patterns will result from the proposed project, therefore, no impacts are anticipated. (Source: 9, 22)				

Issues and Supporting Information Sources		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
6.d.	The project is located on the interior of an existing site and does not have the potential to create sharp curves, dangerous intersections, or incompatible uses. (Source: 22)				
6.e.	The project uses Goetz Road for primary access. Emergency site access is also provided from Ellis Avenue. Both roads are City-maintained public streets. Access was previously reviewed by the City Engineer and the City's traffic consultant and determined to be adequate. A paved fire lane will serve the Project area. (Source: 22)				
6.f.	Onsite parking for the Green Energy facility complies with the office parking ratio of the City of Perris zoning ordinance, including disabled access requirements, and has been determined to be adequate for the proposed uses. Therefore, no impacts are anticipated. (Source: 2, 22)				
6.g.	The proposed project does not conflict with adopted policies, plans, or programs supporting alternative transportation. A public transit bus stop is currently located in front of the CR&R site on Goetz Road. Bike racks and ride share programs are currently in place at the existing operation and will be maintained with the proposed expansion. (Source: 1, 22)				
7. BIOLOGICAL RESOURCES: Would the project:					
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				X
c.	Have a substantial adverse effect of federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filing, hydrological interruption, or other means?				X
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
Comments:					
7.a.	The project site is an existing waste transfer facility. The area proposed for the new Green Energy facility was previously graded during construction of the original facility, and is currently used for empty cargo container storage. The proposed parking and RNG fueling lot north of the Green Energy facility is currently used for collection truck parking. The biological survey performed by Kidd Biological, Inc. in April 2011 found that the site did not possess habitat that would support any endangered or sensitive species, and no sensitive species, including the burrowing owl, were found on site. (Source: 13)				

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
7.b.	The site is not located near any riparian habitat. (Source: 13)				
7.c.	The site is not located near any identified wetlands subject to Section 404. (Source: 12, 13)				
7.d.	Per the MSHCP, the site does not lie within any known wildlife corridors. (Source: 12)				
7.e.	The site is previously disturbed and does not possess any significant biological resources, and does not conflict with the City's Urban Forestry Ordinance. (Source: 2, 13)				
7.f.	The site is not located in a biologically sensitive area that would conflict with the provisions of Riverside County Multiple Species Habitat Conservation Plan. (Source: 12)				
8.	**MINERAL RESOURCES. Would the project:**				
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				**X**
b.	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				**X**
Comments:					
8.a. & b.	No regionally or locally important mineral resource sites or recovery sites have been identified on any plan. Accordingly, no impacts to regionally or locally important mineral resources will occur. (Source: 1)				
9.	**AGRICULTURE RESOURCES. Would the project:**				
a.	Convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to farmland mapping and monitoring program of the California resource agency, to non-agricultural use?				**X**
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				**X**
c.	Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses?				**X**
Comments:					
9.a.	The project is located within an area dominated by existing industrial development and an airport. Although the general area was previously in agricultural use, it has been designated for industrial development for decades. The site is not shown as agriculturally significant on General Plan Exhibit CN-2: Agricultural Resources. (Source: 1)				
9.b	The site is not subject to a Williamson Act contract and is zoned General Industrial. (Source: 1)				
9.c	The site is not zoned for agriculture and will not result in the conversion of local farmland to non-agricultural uses. (Source: 1)				
10.	**HAZARDS AND HAZARDOUS MATERIALS. Would the project:**				
a.	Create a significant hazard to the public or the environment through the routine transportation, use, or disposal of hazardous materials?			**X**	
b.	Create a significant hazard to the public or the environment				

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
	through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles or a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			X	
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h.	Expose people or structures to a significant risk or loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X
Comments:					

Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
10.a., b.				

The proposed project is an expansion of an existing waste transfer station to include a Green Energy facility that will take organic municipal waste and partially converts it to Renewable Natural Gas (RNG). The biogas (RNG) production takes place in a 97' tall anaerobic digester that "cooks" the organic material and continuously produces biogas (methane). Biogas produced in the digester will be transferred to the above ground biogas storage structure via natural pressure differential. The biogas is then purified and transmitted to the onsite fueling facility. In circumstances when biogas production exceeds the consumption, excess biogas will be diverted and burned in the enclosed emergency flare structure.

Biogas/RNG Storage

The biogas storage unit is a double membrane system with a useful storage capacity of about 19,000 cubic feet. It has a dual function: (1) maintaining a minimum biogas amount so that biogas can always flow back to the digester in case of under-pressure, and (2) leveling off biogas production peaks to the Purac upgrading equipment and then, the energy conversion equipment. Condensate of the biogas that is spontaneously produced is collected in the condensate vessel. After the biogas storage, the biogas flows to the Purac purification process. In case of emergency, e.g., when the biogas production exceeds the biogas consumption or if the biogas consumers are not functioning at all, biogas will be diverted and burned in an emergency flare, which is fully enclosed, at high temperature.

The biogas composition in the storage unit will have a methane concentration much greater than and outside the range required for combustion (which is approximately 10- 20% methane). The storage unit will be under very low pressure (< 20 WC, which is < ¾ psi). The gas storage unit will be in a classified area (Class 1, Div 1), where sources of ignition will be nonexistent. Safety equipment and gas monitors will be installed appropriately in the vicinity of all gas handling equipment. Extensive training and startup assistance will be provided by the vendors.

The truck parking area will be reconfigured for angled parking to accommodate the proposed slow-fill RNG fueling apparatus. Trucks will pull up to the dispensers for fueling. RNG is not in liquid form, thus any potential leak will evaporate as gas into the atmosphere.

The Southern California Gas Company will design and install the RNG system. The Gas Company will also test the quality of the gas for transportation use. The project is required to acquire a Small Generator Permit from the Department of Toxic Substance Control as well as approvals from the Riverside County Fire Department regarding the storage and use of hazardous materials. The Fire Department and City Building Inspector will also inspect and approve the gas handling process. Regular inspections of the facility by the County Fire Department and County Local Enforcement Agency are also required. The City is required to amend Table A-1 (Perris Transfer Station and MRF/Composting Facility) of the NDFE to address the proposed expansion of the facility to include the Green Energy Facility.

Hydrogen Sulfide Control

A byproduct of the anaerobic process is Hydrogen Sulfide (H_2S) gas, the rotten egg smell. Hydrogen sulfide is commonly found in natural gas and biogas. Being highly toxic and flammable, a mixture of H_2S and air is explosive, so H_2S is controlled within the digester with Ferric Chloride ($FeCl_3$). Ferric Chloride has many benefits in anaerobic digestion, and processing wastewater and potable water. Low levels of ferric chloride will be used in the CR&R digester to capture and remove hydrogen sulfide. Ferric Chloride ties up the sulfur as iron sulfate ($FeSO_4$), which is a relatively harmless solid that precipitates into the digestate. The levels of iron sulfate in the digestate will be very low, in parts per million. The only possibility for H_2S exposure from the Green Energy facility is from a leak in the system. When the system is working properly, there should be no trace of H_2S in the ambient environment. As a precaution, H_2S sensors will be installed in several locations around the process area. Also, personnel will be equipped with H_2S sensors when they work in the process area. As required by OSHA, eyewash stations will be located strategically in the process area. The storage and use of Ferric Chloride

Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
10.a, b., cont.				

will be subject to an updated hazardous materials business plan reviewed and approved by the Fire Department and Riverside County Department of Environmental Health (serving as the State Local Enforcement Agency).

The digestion technology used by the Green Energy Facility was adapted from the spontaneous "dry" digestion that occurs in a landfill. The dry process limits the amount of water that is added to the input waste to keep the total solids of the digestate as solid as possible. The process takes place in an enclosed digester and the final product is a hygienically safe and stabilized product.

The feedstock obtained from the Stanton MRF is pre-processed and will have been previously inspected for hazardous materials. None are expected to be present.

The following mitigation measures are intended to reduce hazards to the level of less than significant to the public or the environment through the routine transportation, use, or disposal of hazardous materials:

Mitigation Measures:

HAZ-1: Prior to issuance of occupancy permits, the facility operator shall update and implement an approved hazardous materials business plan subject to review and approval by the Fire Department and Riverside County Department of Environmental Health (serving as the State Local Enforcement Agency). The plan will identify all hazardous materials used onsite and their storage and handling procedures.

HAZ-2: Prior to issuance of occupancy permits, the project shall acquire a Small Generator Permit from the Department of Toxic Substance Control, and approvals from the Riverside County Fire Department regarding the storage and use of hazardous materials.

HAZ-3: Prior to issuance of occupancy permits, to control vectors such as flies, rats and birds to avoid the potential spread of health hazards such as disease and litter the Vector Control Plan will be updated to include the new facilities for ongoing site maintenance and the timely removal of recyclables and residual wastes to avoid the attraction of vectors and vector deterrent and eradication procedures.

HAZ-4: All operations shall comply with the approved Amended Water Quality Management Plan (WQMP 06-0158) incorporating Best Management Practices for the control of potentially hazardous materials spills.

HAZ-5: The biogas storage unit and anaerobic digester shall be surrounded by bollards for protection from vehicles.

HAZ-6: Plant Operations shall be as described in the Training and SOP (Standard Operating Procedures) Manual.

HAZ-7: Prior to issuance of occupancy permits, the facility's Fire Control Plan and Emergency Response Plan shall be updated to reflect the new facilities and operations, and be reviewed and approved by the Riverside County Fire Department.

HAZ-8: Portable methane and H2S detectors shall be provided for workers in area.

HAZ-9: Extensive Safety Training shall be provided to workers.

HAZ-10: Process Vessels shall be clearly signed with content and quantity. NFPA placards will be posted on all vessels.

HAZ-11: Classified Areas shall have signage indicating spark danger and "No Smoking."

HAZ-12: Process Components and Control Panels shall be clearly labeled with instructions for proper operation.

HAZ-13: To avoid sparks and accidental ignition, "No Smoking" signs shall be posted throughout the facility.

Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
10.a., b., cont.	HAZ-14: To avoid chemical contamination and injury, Hazmat Placards, MSDS information, and Safety Training shall be provided. Eyewash stations shall be installed in appropriate locations. HAZ-15: To prevent gas leaks, regular inspections and electronic detectors for methane and hydrogen sulfide shall be provided. All piping will be labeled with its contents and direction of flow. Fire extinguishers will be readily available. Extensive training and startup assistance will be provided by the vendors. HAZ-16: Emergency Biogas Shutoff Valves shall be clearly indicated on the Fire Plan and labeled on site. (Source: 22, 24)			
10.c.	Perris Lake High School is located approximately 1,100 feet northwest of the project's northwest corner. However, the Green Energy Facility is approximately 900 feet east of the property's northwest corner for a total of approximately 2,000 feet between the operations area and the school. Although technically not within a ¼ mile of a school, the mitigation measures listed above and under 10.e., below, are anticipated to be adequate to reduce hazards to schools and other sensitive receptors near the Green Energy facility. (Source: 25)			
10.d.	The City of Perris Comprehensive Land Use Permit Application Form requires all applicants to review the State Water Resources Control Board's GeoTracker site to determine whether the site is identified as a Leaking Underground Fuel Tank (LUFT) site or a Spills, Leaks Investigation and Cleanup (SLIC) site. The subject site is not listed as a LUFT or SLIC site on the Board's database, nor are there any LUFT or SLIC sites within the immediate area of the site. The proposed project is not located on a site included on the list of hazardous sites per Government Code Section 65962.5.			
10.e.	The project site is located generally across Goetz Road to the west from the Perris Valley Airport. The new Perris Valley Airport Land Use Compatibility Plan (PVALUCP) was adopted on March 10, 2011. Perris Valley Airport is a small, privately owned public airport known primarily as a skydiving destination (drop zone). The 54 acre CR&R site is located in Zones C and D of the PVALUCP, with the Green Energy Facility is located in Zone D. Zone D allows an average of 100 persons per acre overall and a concentration of up to 300 persons on one acre for regular activities. Due to the newness of the Airport Land Use Plan for the Perris Valley Airport, the Perris General Plan has not yet been amended to include the PVALUCP, therefore this development project was subject to a determination of consistency with the PVALUCP by the Riverside County Airport Land Use Commission (RCALUC). The ALUC Staff Report indicates the project proposes to generate and store fuel above ground on a project site which lies below the General Traffic Pattern Envelope as indicated on the Perris Valley Airport Compatibility Factors Map in Zone D of the PVALUCP. The biofuel generated in the 97' foot tall digester structure (10,000 cubic feet) will be transferred to the 35 foot tall spherical gas storage tank (19,000 cubic feet). According to the applicant, the digester would contain 5.32 million BTUs (MMBtu) (equivalent in energy to 43 gallons of gasoline), and the storage tank would contain 10.11 MMBtu (equivalent in energy to 81 gallons of gasoline). If an aircraft were to crash into one of these structures, gas could escape and the escaping gas would likely be ignited. This could result in a burn or explosion equivalent to 26 or 81 gallons of gasoline, respectively, for the digester and storage tank. According to the PVALUCP, aboveground bulk storage of hazardous materials is not a prohibited use within Compatibility Zones C or D. However, according to ALUC, this does present a hazard to aircraft if the aircraft were to direct impact the digester or the fuel tank. To offset this potential hazard, the open space required within Zone D is generally aligned with the above flight path. The project proposes a total of 4.8 acres of open space within Zone D. con't.			

Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

10.e. The project includes an enclosed emergency flare that under normal operating circumstances will be rarely used and is not anticipated to present a potential hazard. However, during the startup phase of the project during the first three months of operation, the flare will be utilized on average 3 hours per day. According to the applicant, the fully enclosed combustion and refractory of the flare eliminates smoke, plume, and sound from the flare.

Both the 97' foot tall digester and 39,000 sf MRF/transfer station structures were submitted to the Federal Aviation Administration Obstruction Evaluation Service (FAA) for review and received a Determination of No Hazard to Air Navigation. The ALUC presented a finding of Conditional Consistency for the project on September 8, 2011, at the regularly scheduled hearing for the project, subject to the Conditions specified below, which include FAA requirements.

ALUC CONDITIONS:

1. Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

2. The following uses shall be prohibited:

   (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.

   (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.

   (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, artificial marshes, wastewater management facilities, composting operations, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

   (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

3. Any ground-level or aboveground water retention or detention basin or facilities shall be designed so as to provide for a detention period for the design storm that does not exceed 48 hours and to remain totally dry between rainfalls. Vegetation in and around such facilities that would provide food or cover for bird species that would be incompatible with airport operations shall not be utilized in project landscaping. Landscaping shall utilize plant species that do not produce seeds, fruits, or berries. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature.

4. Prior to issuance of building permits, the project developer shall submit to Airport Land Use Commission staff evidence that the Federal Aviation Administration has issued a determination of "Not a Hazard to Air Navigation" for the proposed building expansion.

5. All reflective metal components of exterior surfaces shall be painted or covered with a non-reflective material.

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
10.e., con't.	**ALUC CONDITIONS, cont.:** 6. The open areas indicated on the exhibit provided by the applicant to ALUC titled "Open Space Per ALUC Plan" shall be kept free and clear of all obstructions as defined by the Riverside County Airport Land Use Compatibility Plan. 7. The Federal Aviation Administration has conducted aeronautical studies of the proposed anaerobic digester (Aeronautical Study No. 2011-AWP-3914-OE) and the approved Building MRF Expansion (Aeronautical Study No. 2011-AWP-5071-OE) and determined that neither marking nor lighting of the proposed structures is necessary for aviation safety. However, if marking and/or lighting for aviation safety are accomplished on a voluntary basis, such marking and/or lighting (if any) shall be installed in accordance with FAA Advisory Circular 70/7460-1K Change 2 and shall be maintained in accordance therewith for the life of the project. 8. The maximum height of the anaerobic digester, including all roof-mounted appurtenances (if any), shall not exceed 100 feet above ground level, and the maximum elevation at the top of the structure shall not exceed 1,530 feet above mean sea level. 9. Within five (5) days after construction reaches its greatest height, FAA Form 7460-2, Notice of Actual Construction or Operation, shall be completed by the project proponent or his/her designee and submitted to the Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group, 2601 Meacham Boulevard, Fort Worth, TX 76137. The requirement for submittal is also applicable in the event the project is abandoned. 10. The specific coordinates, height, and top point elevation of the proposed anaerobic digester shall not be amended without further review by the Airport Land Use Commission and the Federal Aviation Administration; provided, however, that reduction in building height or elevation shall not require further review by the Airport Land Use Commission. 11. Temporary construction equipment used during actual construction of the anaerobic digester shall not exceed the height of the digester (100 feet above ground level), unless separate notice is provided to the Federal Aviation Administration through the Form 7460-1 process. (Source: 8, 9, 22, 23)				
10.f.	The project site is not located within the general vicinity of any private airport.				
10.g.	The project site is located within an existing industrial zone. It is not located along a major evacuation route.				
10.h.	This area is not adjacent to any wildlands or underdeveloped hillsides where wildland fires might be expected. The General Plan does not designate this area to be at risk from wildland fires. (Source: 1)				
11.	**NOISE. Would the project result in:**				
a.	Exposure of people to severe noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b.	Exposure of persons to or generation of excessive ground born vibration or ground born noise levels?				X
c.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing			X	

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
	without the project?				
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	
f.	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
Comments:					

Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
11.a., c. & d.				

CEQA Guidelines identify significant impacts as those that cause standards to be exceeded where they are currently met. The City of Perris Noise Ordinance restricts the maximum noise emanating from the property to 80 dB during the day and to 60 dB at night. The ordinance also limits the allowable off-site noise increase at any residential property line to +1.0 dB above ambient. Noise measurements from the Noise Impact Analysis performed in January 2006 by Giroux and Associates suggest that the existing daytime ambient level is approximately 56 dB for current CR&R activities. As traffic grows along Ellis Avenue in the future, the ambient level will increase.

Operational Noise

For the Green Energy facility, most of the machinery is contained within structures. The machines are designed to have limited sound emissions and to meet the current sound standards (i.e. the sound pressure level measured at a distance of 3 feet is lower than 80 dBA and in most cases lower than 75 dBA). Most of the machines which do not meet the standards can be equipped with additional sound insulation sheathing or can be surrounded with a suitable structure. Examples: the hydraulic units are equipped with a sound insulating sheathing, the shredder equipment can be surrounded by a concrete structure. The feeding pump, the extraction pump and the hydraulic group produce short duration peaks up to 93 dB(A) at 3 feet. Also the hydraulic group for the valves can generate up to 85 dB(A) at 3 feet intermittently, since this equipment doesn't operate continuously. Some equipment is placed on ultrasound silencing devices. Rubber strips are positioned between the equipment and the exhaust air piping, and the complete exhaust system is fastened firmly yet is elastic. The equipment is operated from a control room and is mostly automated.

Construction Noise

Temporary construction noise will result during demolition grading, site preparation and building assembly. Such sources are short-term and thus will not affect the long-term noise exposure in the project vicinity. The City of Perris generally exempts construction activities from performance limits in various sections of the noise ordinance as long as these activities are conducted during hours/days of lesser noise sensitivity. Section 7.34.060 prohibits construction activities during the "quiet" hours of 7 p.m. to 7 a.m. the next day, and at any time on Sundays or major holidays. The ordinance does, however, limit construction activity noise to 80 dB at any residential zone. Given that the peak noise level of some equipment is 90 dB, equipment operations within 160 feet of a residence could constitute a violation of the ordinance. Project construction activities will generally occur beyond 160 feet of any residence, and non-construction baseline noise levels periodically exceed 80 dB. The proposed project is not anticipated to have a significant impact related to any noise ordinance limits, however, to reduce the potential for noise and air quality nuisances, the following items are Conditions of Approval that shall be listed as "General Notes" on the construction drawings:

a. Construction activity and equipment maintenance is limited to the hours between 7:00 a.m. and 7:00 p.m. Per Zoning Ordinance, Noise Control, Section 7.34.060, it is unlawful for any persons between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on a legal holiday, or on Sundays to erect, construct, demolish, excavate, alter or repair any building or structure in a manner as to create disturbing excessive or offensive noise. Construction activity shall not exceed 80 dBA in residential zones in the City.

Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
11.a., c. & d., cont.				

b. Stationary construction equipment that generates noise in excess of 65 dBA at the project boundaries must be shielded and located at least 100 feet from occupied residences. The equipment area with appropriate acoustic shielding shall be designated on building and grading plans. Equipment and shielding shall remain in the designated location throughout construction activities.

c. Construction routes are limited to City of Perris designated truck routes.

d. Water trucks or sprinkler systems shall be used during clearing, grading, earth moving, excavation, transportation of cut or fill materials and construction phases to prevent dust from leaving the site and to create a crust after each day's activities cease. At a minimum, this would include wetting down such areas in the later morning and after work is completed for the day, and whenever winds exceeds 15 miles per hour.

e. A person or persons shall be designated to monitor the dust control program and to order increased watering as necessary to prevent transport of dust off-site. The name and telephone number of such persons shall be provided to the City.

f. Project applicant shall provide construction site electrical hook ups for electric hand tools such as saws, drills, and compressors, to eliminate the need for diesel powered electric generators or provide evidence that electrical hook ups at construction sites are not practical or prohibitively expensive.

g. All construction equipment will be provided with approved muffler systems.

The current proposal for the Green Energy facility is located over 1,000 feet from the closest residences north of Ellis Avenue, and approximately 1,500 feet from the Hunt Club apartments. Any noise from the Green Energy facility (other than temporary construction noise) is not anticipated to be discernible from regular operational noises in these locations.

Traffic Noise
Site access traffic noise was examined prior the CR&R expansion approved under Major Modification 06-0158. The on-road traffic noise from up to 500 trucks per day is 63 dB CNEL at 50 feet from the centerline. The General Plan build-out traffic noise forecast for Goetz Road is 69 dB CNEL at this distance. The combined noise level is 70 dB, or a 1dB increase. The project truck noise contribution is well below the 3 dB significance threshold. Ambient noise levels will mask any project contribution on public roadways. For the Green Energy facility, approximately 240 daily vehicle trips in Passenger Car Equivalents will be generated for the ultimate employee and truck trips. These trips have been previously accounted for in the projected trip generation increase.

In summary, operational noise will result from the disposal and recycling of waste within an enclosed building. Mobile equipment (refuse trucks, recycling trucks and materials movement) will also create noise, as will the temporary construction activities. Because most such activities will occur within an enclosed building with substantial distance setback from residential development, noise impacts from the operation of the Green Energy Facility will not exceed City standards and will be a less than significant impact.

(Source: 1, 14, 18, 22, 23)

11.b.	Ground vibrations may occur during the waste transfer operations. Incoming wastes will be dumped on a concrete tipping floor within the transfer building, creating some ground vibration within the building. The extent of ground vibration will be limited to within the transfer building and will not migrate offsite, therefore any potential impact will be minimal and considered insignificant. (Source: 14)			

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
11.e.	The project site is located less than one mile from the Perris Valley Airport, on the east side of Goetz Road. The Perris Valley Airport Land Use Compatibility Plan (PVALUCP) was adopted on March 10, 2011. Perris Valley Airport is a small, privately owned public airport known primarily as a skydiving destination (drop zone). CR&R is located in Compatibility Zones C and D, and the Green Energy facility is located in Zone D. Zone D allows an average of 100 persons per acre overall and a concentration of up to 300 persons on one acre for regular activities. According to Map PV-3 of the PVALUCP, Ultimate Noise Impacts, the Green Energy facility site is located in the 55 dB CNEL noise contour, which is considerably less than the maximum noise level typical in the General Industrial (GI) Zone. General Plan Exhibit N-1, Land Use/Noise Compatibility Guidelines, indicates that a CNEL under 60 is normally acceptable for low density residential development, meaning no special noise insulation is required. Thus, since the Green Energy facility will comply with the PVALUCP, and the CNEL of the Perris Valley Airport activity is less than 60, the proposed project would not expose people residing or working in the project area to excessive noise levels. (Source: 1, 6)				
11.f.	The proposed project is not located in the vicinity of a private airstrip.				
12.	**PUBLIC SERVICES: Would the proposal have an effect upon, or result in a need for new or altered Government services in any of the following areas:**				
12.a.	Would the project result in substantial adverse physical impacts associates with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?			X	
12.b.	Fire protection?			X	
12.c.	Police protection?			X	
12.d.	Schools?			X	
12.e.	Parks?				X
12.f.	Other public facilities?			X	
Comments:					
12.a. & f.	Development of the proposed project will not create an increase in the demand for governmental and public services beyond that required for the current land use, which are considered mitigated by the City of Perris through the payment of development impact fees. The Green Energy Facility will reduce landfill trips by recycling municipal waste. (Source 1, 22)				
12.b	Fire protection is provided by the City of Perris and the Riverside County Fire Department. The closest City fire station to the project is located approximately ½ mile north of the site. Onsite fire protection will include fire hydrants and fire extinguishers located as required by the City of Perris Fire Marshal. Sprinkler systems will be installed in Green Energy Facility buildings as required by the Fire Marshal. A fire protection plan has been prepared and implemented for the existing facility which includes training for all employees, procedures for handling potential onsite fires, and evacuation routes. The facility will be connected to domestic water lines provided by the EMWD. Prior to issuance of occupancy permits, all onsite fire protection systems shall be reviewed and approved by the Fire Marshal. (Source: 1, 2, 23, 25)				
12.c.	Police protection for the proposed project will be provided by the Perris Police and Sheriff's Department as part of the existing land use. Onsite security features include perimeter walls and fencing, security lighting, and detection systems. The project will be conditioned to submit a lighting plan for review and approval by the Development Services Department prior to issuance of building permits. (Source: 1, 22, 23)				

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
12.d.	The project is industrial in nature and is not likely to significantly impact local schools. The proposed Green Energy facility is expected to generate up to 20 new jobs. New employees could move into the City from outlying areas, possibly resulting in an increase in school-aged children to the local school district. The project is required to pay school mitigation fees as adopted by the local school districts to offset the impact of additional school-aged children. (Source: 1, 22, 23)				
12.e.	The proposed project is an industrial use and not subject to the Quimby Act. It will not induce adverse impacts to existing park facilities, and therefore, impacts are not anticipated. The project is required to pay development impact fees that include park fees. (Source: 1, 22, 23)				
12.f.	The proposed project will not result in a significant impact to other public facilities such as general City administrative services, libraries, or other public facilities. (Source: 22)				
13.	**UTILITIES AND SERVICE SYSTEMS: Would the project:**				
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c.	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e.	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
g.	Comply with federal, state, and local statutes and regulations related to solid waste?			X	
Comments:					
13.a	The proposed project is currently connected to existing sanitary sewer mains which transport wastewater to a treatment plant operated by Eastern Municipal Water District (EMWD). The proposed Green Energy facility expansion will generate a small amount of wastewater from the anaerobic process. The proposed project requires the use of approximately 7,200 gallons per day of potable water in the anaerobic digester for the processing of recyclable materials. The system is designed to use a recirculating water system to minimize any wastewater to the sewer. The expansion will also require a small increase in total employee count that will result in a minor increase wastewater generated by restroom facilities. The proposed project does not require the use of clarifiers. (Source: 22)				
13.b	All existing and proposed plumbing fixtures are connected to sewer laterals. A sewer main maintained by EMWD located in Ellis Avenue provides domestic wastewater collection. Domestic water is also provided by EMWD through water mains located in both Ellis Avenue and Goetz Road. No additional water or wastewater facilities are required for the proposed Green Energy facility. (Source: 22)				

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
13. c.	The proposed expansion will result in the creation of a small amount of impervious paving for the required fire lane and a 5-stall parking lot to serve the Green Energy facility. Any increases in drainage resulting from the creation of new impervious surfaces will be managed onsite through an amended WQMP and existing detention basins. No new public drainage improvements are required for the proposed expansion. The project will be conditioned to prepare and submit an updated drainage plan and hydrology study to the City Engineer as part of the Amended WQMP prior to the issuance of grading permits. All public and private drainage facilities shall be designed in accordance to the standards of the City of Perris and the Riverside County Flood Control and Water Conservation District. (Source: 11, 23)				
13.d.	EMWD owns and maintains all domestic water lines servicing the project site. The proposed expansion will require the extension of onsite fire protection systems to the Green Energy facility area. The anaerobic process will use a recirculating water system to reuse its water and therefore significantly reduce its demand. Design and construction of all onsite water facilities shall be in accordance with the standards and requirements of the EMWD and City of Perris. (Source: 22, 23)				
13.e.	The proposed project is served by existing sanitary sewer mains that will transport wastewater to an Eastern Municipal Water District treatment plant. The expanded facility will not generate significant quantities of wastewater that would require expansion of the EMWD plant. (Source: 22)				
13.f.	The remaining approximately 10-20% non-renewable/nonrecyclable materials remaining from the anaerobic processing from the Green Energy facility will be transferred to landfill along with other CR&R solid waste. The CR&R facility is intended to transfer local municipal solid wastes to any approved landfill. The primary landfills designated to receive wastes from this facility include the Badlands Landfill located approximately 14 miles northeast of the project site and the El Sobrante Landfill located approximately 17 miles west of the project site. The Badlands landfill is owned and operated by the County of Riverside and has a remaining capacity of approximately 21,866,000 cubic yards with a permitted capacity of 4,000 tons per day. The El Sobrante Landfill is owned and operated by Waste Management, Inc., and has a remaining capacity of 172,531,000 cubic yards with a permitted capacity of 10,000 tons per day. The Green Energy facility is designed to reduce this waste stream by up to 150 tons a day in the first phase. (Source: 20, 22)				
13.g.	The existing CR&R facility is compliant with federal, state, and local statutes and regulations related to solid waste as required by the City of Perris and Riverside County. CR&R has a State Operating Permit from the Riverside County Local Enforcement Agency and clearances from the South Coast Air Quality Management District. An amendment to the City's Nondisposal Facility Element (NDFE) is required, and in process (90-day noticing period). The NDFE amendment is tentatively scheduled for a December, 2011 Perris City Council public hearing for approval. All permits will be updated through the appropriate agency for the operation of the Green Energy Facility prior to commencement of operations of the expanded facility. (Source: 17, 20, 22, 23)				
14. AESTHETICS. Would the project:					
14.a.	Have a substantial adverse effect on a scenic vista?			X	
14.b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcropping, and historic building within a state scenic highway?				X
14.c.	Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
14.d.	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			X	
Comments:					

	Issues and Supporting Information Sources	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
14.a. & c.	The proposed project is an expansion of an existing waste transfer/MRF facility. The site is located within an existing industrial area and is designated as a General Industrial land use on the City of Perris General Plan and Zoning Map. Existing heavy industrial development is located immediately east and south of the facility. Existing residential development is located to the north and west, however these properties are not adjacent to the expansion area for the Green Energy Facility. According to the Line of Sight exhibit prepared with the development plans, the most noticeable feature of the Green Energy facility will be the 97' foot tall anaerobic digester that will likely be partially visible from the entrance to the CR&R facility from Goetz Road and Ellis Avenue. Aerial map measurements indicate the digester will be approximately 960 feet from Malbert Street to the south and Ellis Avenue to the north, 1,050 feet from the AT&SF rail lines to the west, and 1,370 feet from Goetz Road to the east. Other equipment including a gas storage tank (35 feet), gas upgrade silos (45 feet), flare silo (25 feet) and bulk scrubber (22 feet), will not be visible from adjacent right-of-ways due to intervening screen walls (Ellis Avenue) and adjacent properties. The tallest equipment, the anaerobic digester, is not anticipated to be noticeable from Goetz Road (except at the CR&R entrance) either by pedestrians on the sidewalk or to passing vehicles. To buffer views from Ellis Avenue and the entrance to the site, the digester and tank farm will be painted in earth tones of Khaki (digester, equipment building) and Snowdrift White, a grayish white that will be utilized for the gas storage tank and gas upgrading equipment. Roofing for buildings will be a low-reflecting galvanized metal, Galvalume. To mitigate views onto the CR&R operations site, prior Conditions of Approval for Major Modification 06-0158 required the installation of approximately 147,277 square feet of landscaping along the entire frontage of both Ellis Avenue and Goetz Road, and construction of a 12-foot high decorative masonry wall along Ellis Avenue and Goetz Road. The proposed project also includes a truck fueling area in an existing parking lot located approximately 10 feet from the Ellis Avenue right of way, however the 12-foot high screen wall will prevent views into the site. With these measures incorporated into the project design, the Green Energy Facility will have a less than significant impact on the existing visual character or quality of the site and its surroundings. (Source: 1, 2, 22, 23, 25)				
14.b.	The project is not located near a state scenic highway. Therefore, there will not be any potential impacts to trees, rock outcroppings, or historic buildings within a state scenic highway. (Source: 1, 22)				
14.d.	The site will be lighted at night for security purposes, however this lighting will not adversely affect day or nighttime views in the area. The maximum height of all exterior lights including those lights mounted on structures will not exceed 18 feet. All on-site lighting will comply with the City of Perris Lighting Ordinance and the requirements of Zone B of the Palomar Observatory dark skies regulations. The site will utilize lighting fixtures with full cut-off features to prevent light escaping above the horizontal plane of the bottom of the light fixture to minimize glare onto adjacent properties. (Source: 2, 22, 23)				
15. CULTURAL RESOURCES. Would the project:					
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 1506.5?				X
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 1506.5?				X
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d.	Disturb any human remains, including those interred outside of formal cemeteries?				X
Comments:					

Issues and Supporting Information Sources		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
15. a, b, c, & d	The site is located within an existing industrial development on a previously graded pad. There are no areas of undisturbed earth remaining on the site. No historic, archeological, or paleontological artifacts were identified in the 1991 survey. (Source: 1, 24)				
16. RECREATION. Would the project:					
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				X
Comments:					
16.a. & b.	The proposed project is industrial in nature and provides a public service to its local service area. The site does not require any recreational services. (Source: 22)				
17. MANDATORY FINDINGS OF SIGNIFICANCE.					
a.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number of restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				X
b.	Does the project have the potential to achieve short-term, to the disadvantage of long term, environmental goals?				X
c.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				X
d.	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?			X	
Comments:					
17.a.	The proposed project will be developed on previously disturbed industrial land currently used for storage of empty cargo containers. The project has no potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels or threaten the elimination of a plant or animal community. No endangered or threatened were observed onsite, and no important examples of California history or prehistory are present at the site. (Source: 24)				

Issues and Supporting Information Sources		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
17.b.	The proposed project is designed to reduce the amount of waste going to landfill and increase recycling of recoverable organics associated with the projected future demand for waste management services in southwest Riverside County. The byproducts from the anaerobic process, mulch and natural gas, are renewable resources, and the recovery and reuse of secondary materials from the main facility will result in a long term savings of natural resources. (17, 20, 22)				
17.c.	The project site has been designated for industrial development under the City's General Plan. Cumulative impacts associated with future development, including the ultimate development of the site for general industrial use, was evaluated as part of the General Plan's EIR. This included the cumulative impacts associated with traffic and circulation, public services and facilities, population, and air quality. (Source: 1)				
17.d.	The project will not result in environmental effects that may cause substantial adverse effects on human beings, including, air quality emissions and hazardous materials, because mitigation has been incorporated into the project that will reduce all potential impacts to humans to a level of insignificance. (Source: 1, 23)				
18. EARLIER ANALYSES. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case a discussion should identify the following on attached sheets.					
a.	Earlier analyses used. The sources of earlier analysis used for this environmental analysis are listed below under sources. All documents are available at the City of Perris, Development Services Department, Planning Division, 135 North "D" Street, Perris, CA 92570.				
b.	Impacts adequately addressed through the proposed Mitigation Monitoring Program 11-04-0001 for Air Quality and Hazards.				
c.	Mitigation measures: For effects that are identified as "Less than Significant with Mitigation Incorporated," the mitigation measures are described in the above sections, which include site-specific conditions for the project.				

SOURCES

1. City of Perris General Plan 2030 (2005): www.cityofperris.org
2. City of Perris Zoning Code (Chapter 19): www.cityofperris.org
3. Air Quality Impact Analysis, Green Energy Facility, City of Perris, CA. Giroux & Associates (June 7, 2011) with appendices (CalEEMod Output Annual & Summer)
4. Geological Investigation for Design and Construction of the CR&R expansion prepared by Harrington Geological Engineering, December 13, 2005, with Addendum dated January 17, 2006.
5. Federal Emergency Management Agency Flood Insurance Rate Map #060258-0010-D (July 2, 1992)
6. Perris Valley Airport Land Use Compatibility Plan, March 10, 2011: www.rcaluc.org/plan_perris_valley2010.asp
7. Countywide Policies of the 2004 Riverside County Airport Land Use Compatibility Plan: www.rcaluc.org
8. Riverside County Airport Land Use Commission (ALUC) Staff Report ZAP1004PV11 – CR&R Inc., September 8, 2011
9. Federal Aviation Administration Aeronautical Studies No. 2011-AWP-3914-OE and 2011-AWP-5071-OE.
10. Stormwater Hydrology Report, CR&R Perris Transfer Station, J.R. Miller & Associates, Inc. (November, 2008)
11. Green Energy Project Amended Preliminary Water Quality Management Plan (WQMP) 06-0158, J.R. Miller & Associates (approved August 8, 2011); CR&R WQMP 06-0158 (approved August 24, 2006)
12. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Volume 1, "The Plan", Part 1 of 2, and Part 2 of 2, 2003: http://www.rctlma.org/mshcp/
13. Focused Habitat Assessment and Protocol Survey for the Burrowing Owl, Report Date 5-9-2011, Kidd Biological, Inc.
14. Noise Impact Analysis, CR&R Perris Recycling Facility Expansion, Giroux & Associates (January 26, 2006)
15. Odor Impact Discussion, CR&R Perris Recycling Facility Expansion, Giroux & Associates (January 26, 2006)
16. Perris Transfer Station/MRF SCAQMD Rule 410 Odor Management Plan
17. California Department of Resources Recycling and Recovery (CalRecycle): www.calrecycle.ca.gov
18. Traffic Impact Analysis, Perris MRF Project, Kunzman Associates, Inc. (June 15, 2006, revised November 8, 2006).
19. Trip Generation Analysis (Revised) Supplement, Green Energy Project, Kunzman Associates, Inc. (May 25, 2011) with Appendices (A: Glossary of Terms and B: see Project Description, No. 22, below).
20. Riverside County Waste Management District website: www.rivcowm.org
21. CARB Expanded List of Early Action Strategies (October 2007); CARB website accessed May 31, 2011: www.arb.ca.gov/cc/ccea/meetings/ea_final_report.pdf
22. "Project Descriptions – Process Flow Diagrams and Photographs of Similar Facilities," CR&R, Inc. for the Green Energy Project/Slow-fill CNG Truck Fueling Facility, April 5, 2011/Revised April 25, 2011
23. Major Modification 11-04-0001 [Project] Draft Conditions of Approval
24. Initial Study for Major Modification 06-0158 (August 15, 2007)
25. Digital Map Central, copyright 2010 Digital Map Products: http:// maps.digitalmaps.central.com

GREEN ENERGY FACILITY - CR&R, INC.
MAJOR MODIFICATION 11-04-0001 MITIGATION MONITORING PROGRAM

MITIGATION MEASURE	TIMING	VERIFICATION OF COMPLIANCE		
		Dept.	Signature	Date
AIR QUALITY				
AIR-1: The Perris plant manager, using probes and through direct observation, shall monitor the biofilter on a weekly basis to ensure that air is circulating through the biofilter properly, and that the moisture level is sufficient to maintain the microorganisms.	During ongoing facility operations	Facility Operator, County LEA		
AIR-2: At completion of Phase 3 of the Green Energy project, at least 25% of the feedstock delivery shall be by CNG-fueled trucks.	By completion of Phase 3 of project	Facility Operator, County LEA		
HAZARDS & HAZARDOUS MATERIALS				
HAZ-1: The facility operator shall update an approved Hazardous Materials Business Plan subject to review and approval by the Fire Department and Riverside County Department of Environmental Health (serving as the State Local Enforcement Agency). The plan will identify all hazardous materials used onsite and their storage and handling procedures.	Prior to issuance of occupancy permits/ Ongoing facility operation	Building & Safety Division, County LEA		
HAZ-2: The facility operator shall acquire a Small Generator Permit from the Department of Toxic Substance Control regarding the storage and use of hazardous materials.	Prior to issuance of occupancy permits	Facility Operator, County LEA		
HAZ-3: To control vectors such as flies, rats and birds to avoid the potential spread of health hazards such as disease and litter, the Vector Control Plan will be updated to include the new facilities for ongoing site maintenance and the timely removal of recyclables and residual wastes to avoid the attraction of vectors and vector deterrent and eradication procedures.	Prior to issuance of occupancy permits	Facility Operator, County LEA		
HAZ-4: All operations shall comply with an approved Water Quality Management Plan (WQMP) incorporating Best Management Practices for the control of potential hazardous materials spills.	Ongoing facility operation	Facility Operator, City Engineer, County LEA		
HAZ-5: The anaerobic digester, biogas storage tank, and biogas dispensing unit shall be surrounded by bollards to protect it from vehicle damage in the operations area and fueling area.	Prior to issuance of occupancy permit	Building & Safety Division, County LEA		
HAZ-6: Prior to issuance of occupancy permits, the facility's Fire Control Plan and Emergency Response Plan shall be updated to reflect the new facilities and operations, and be reviewed and approved by the Riverside County Fire Dept.	Prior to issuance of occupancy permits	Facility Operator, County Fire (CalFire)		

GREEN ENERGY FACILITY - CR&R, INC.
MAJOR MODIFICATION 11-04-0001 MITIGATION MONITORING PROGRAM

MITIGATION MEASURE	TIMING	VERIFICATION OF COMPLIANCE		
		Dept.	Signature	Date
HAZ-7: All facility employees shall be trained in hazardous materials spill response and cleanup.	Ongoing facility operation	Facility Operator, County LEA		
HAZ-8: The Renewable Natural Gas (RNG) piping, fueling plans and gas product shall be reviewed, tested and accepted by the Southern California Gas Company.	Prior to issuance of building permits	Southern California Gas Co., Building & Safety Div., County LEA		
HAZ-9: For plant operations, a Training and SOP (Standard Operating Procedures) Manual shall be prepared and in place.	Prior to issuance of occupancy permits	Facility Operator, County LEA		
HAZ-10: To prevent gas leaks, regular inspections and electronic detectors for methane and hydrogen sulfide shall be provided. All piping will be labeled with its contents and direction of flow.	Ongoing facility operation	Facility Operator, County LEA		
HAZ-11: Process vessels will be clearly signed with content and quantity. NFPA placards will be posted on all vessels.	Ongoing facility operation	Facility Operator, County LEA		
HAZ-12: Classified or Restricted Areas will have signage indicating spark danger and "No Smoking."	Ongoing facility operation	Facility Operator, County LEA		
HAZ-13: All Process Components and Control Panels shall be clearly labeled and only trained personnel will operate.	Ongoing facility operation	Facility Operator, County LEA		
HAZ-14: To avoid sparks and ignition, signage indicating spark danger and "No Smoking" shall be posted throughout the facility site.	Ongoing facility operation	Facility Operator, County LEA		
HAZ-15: To avoid improper contact with chemicals, Hazmat Placards, MSDS information, and Safety Training will be provided. Eyewash stations shall be installed in appropriate locations.	Ongoing facility operation	Facility Operator, County LEA		
HAZ-16: Emergency Biogas Shutoff Valves shall be clearly indicated on Fire Plan and labeled on site.	Ongoing facility operation	Facility Operator, County LEA		

California Energy Commission

STAFF REPORT

LOCALIZED HEALTH IMPACTS REPORT

Addendum For Selected Biomethane Production Projects Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation PON-09-003

MARCH 2011

CEC-600-2010-004-AD

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ADDENDUM

The *Localized Health Impacts Report for Selected Biomethane Production Projects Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation PON-09-003* was posted May 18, 2010, and the 30-day public comment period ended June 17, 2010. On January 28, 2011, the California Energy Commission posted a Revised Notice of Proposed Awards resulting in an additional project proposed for funding under PON-09-003. This addendum assesses and reports on the potential localized health impacts of this additional fuel production project recommended for funding in the current 2010-2011 funding cycle.

The project assessed in this addendum is:

- CR&R Incorporated's, "CR&R MSW to Biomethane Project"

This project requires a full assessment and will be subject to the 30-day public review period that applies to projects that have a potential effect on low-income communities highly impacted by pollution. The table below summarizes the project and its surrounding community.

Table 1: Community Status and Project Overview

Project	At-Risk Community	CEQA Completed	Air District Permit Status	Attainment Status for Ozone, PM(2.5), PM(10)
CR&R	X	X	In Progress	Non-Attainment (All)

Source: Energy Commission staff analysis

The following is an overview of the project including a project description, information on the existing site, discussion of the potential health impacts related to air pollutants, and outreach efforts explicitly identified in the project proposal. In addition, demographic data for the known or planned project location is provided in Table 4.

Staff reviewed results from the Environmental Justice Screening Method (EJSM) to identify projects that are located in areas with social vulnerability indicators (for example, race/ethnicity, income, proximity to sensitive land use, and exposure to air pollution) and the greatest exposure to air pollution and associated health risks. For communities not yet assessed in the EJSM, the Energy Commission identified high-risk areas as those in non-attainment air basins for ozone, particulate matter (PM) (2.5), and PM (10) that have high poverty and high minority rates, as well as a high percentage of sensitive populations.

Project Name

CR&R Incorporated's "CR&R MSW to Biomethane Project

Project Description

CR&R will construct a municipal solid waste (MSW) processing facility that will convert 50,000 tons per year of mixed municipal waste into renewable natural gas that will be used as a transportation fuel. CR&R is a large waste and recycling firm that serves 2.5 million customers and 40 municipalities in Southern California. The MSW processing facility will be constructed at CR&R's Perris, Riverside County, Material Recovery and Transfer Station (Perris MRF). The MSW will be separated from the general waste stream at the transfer station. CR&R will process the waste using a first-in-North America wet separation technology from Arrow Ecology to extract recyclable materials and segregate nonrecyclable inert waste. Biodegradable materials that are separated from the balance of the waste stream will be pumped into a two-stage anaerobic digestion system to produce renewable natural gas.

CR&R originally configured this project to produce biogas for power generation. Energy Commission funds will support CR&R's efforts to use this fuel for transportation fuel for their fleet. CR&R operates an alternatively fueled truck fleet of more than 100 refuse hauling vehicles and plans to add more alternatively fueled vehicles to its fleet. CR&R will use all of the renewable natural gas produced by this project for this fleet. The renewable natural gas will be cleaned to pipeline quality natural gas using proven technology from Purac of Sweden. The renewable natural gas will be injected into Sempra's natural gas pipeline where it will be distributed by Shell for use as a transportation fuel by CR&R's off-site fueling station in Garden Grove, California. The system upgrades funded by this project will include installation of new equipment to inject the renewable natural gas into the existing gas pipeline. CR&R will own and operate the facility; the City of Los Angeles will provide a long-term source of waste to the facility and a revenue base to support the project.

Project Site

The project will be located at the Riverside County/Perris Material Recovery and Transfer Station at 1706 Goetz Road, Perris, California. The project will use anaerobic digesters to make biogas from mixed municipal solid waste (MSW) from the Los Angeles at the existing material recovery and transfer facility. The location is currently permitted to accept the MSW feedstock for digestion. CR&R completed a mitigated negative declaration CEQA agreement with the City of Perris/Riverside County to increase the MSW tonnage from 1,800 tons per day to 3,000 tons per day. The biogas will be injected into an existing Sempra natural gas pipeline to CR&R's existing offsite fueling station for use in its natural gas vehicle fleet, which eliminates the need for an additional pipeline.

This facility is located in a nonattainment area for ozone, particulate matter (10 micron), and particulate matter (2.5 micron) pollutants. There are three schools, no day care centers, and no health care facilities within a mile of the project site.

Potential Impacts and Benefits

According to the CR&R Environmental Assessment conducted in 2007, some impacts are expected from expansion of the facility and the increased truck traffic needed to transport larger volumes of waste to the facility. Impacts from the expansion and increased tonnage include water runoff, increased hazardous materials at the facility, air quality impacts from increased waste and traffic into the facility, and short-term construction emissions. The Energy Commission is funding a modification to the original project that will allow the renewable natural gas to be used for transportation. The only identified net increase in emissions will be from emergency flaring on the anaerobic digester. These emissions are difficult to quantify, as the emergency flare will be not by used on an ongoing basis.

According to the California Air Resources Board's *Air Quality Guidance for Siting Biorefineries in California* there are criteria emissions associated with anaerobic digestion processes. However the emissions are considered minimal, and with the Best Available Control Technology, the most stringent emission limits for the criteria emissions can be achieved. The environmental assessment indicated that the following factors may have an impact on the surrounding communities. However, it is important to note that these impacts are not attributed to the expansion of the project that will enable transportation fuel production. The environmental impact report analyzed project impacts and criteria and toxic emissions. Energy Commission staff summarized these impacts below.

For a five-acre disturbance area with the use of only minimum construction dust control, daily PM1O emissions during site grading could reach 132 pounds per day. The South Coast Air Quality Management District (SCAQMD) significance threshold of 150 pounds per day would not be exceeded. With the use of Best Available Control Measures (BACM), daily PM_{10} emissions are reduced to 50 pounds per day, or well below the AQMD's significance threshold. Use of BACMs is required for all construction activities. Since the threshold for PM_{10} is three times the generation rate for a mitigated five-acre site, up to 15 acres may be graded per day without exceeding the threshold.

The proposed expansion requires the construction of approximately 10.85 acres of paved parking lots and processing areas. This will increase the amount of impermeable surface and, thus, increase site runoff. Without proper mitigation, this runoff could contribute to the local area and regional storm flows. There is also a potential for any storm water leaving the site to contain pollutants, such as grease and oil from parking lots. Waste materials coming into contact with storm water may result in a degradation of surface and groundwater quality. To protect surface and groundwater, all material handling activities occur within enclosed buildings or on paved surfaces. The operations area is completely paved in asphalt concrete or Portland concrete to further protect surface and groundwater from possible contamination.

Operational impacts will result from a combination of onsite activities (waste handling, sorting, recycling, and loading transfer vehicles) and from on-road travel by collection recycling and transfer vehicles. Onsite emissions will include exhaust from on-road vehicles and from materials handling equipment, dust from refuse and construction and demolition processing, and odors from trash and green waste.

CR&R expects this project to bring improvements to air quality, especially as more firms adopt the anaerobic digester technology to generate vehicle fuel. The anaerobic digestion project will improve air quality by reducing odors and emissions from the MSW at the landfill. Anaerobic digestion of the waste eliminates the need to landfill the waste. By diverting this waste to digesters, emission reductions are realized. Since the biomethane will be compressed and injected into the Sempra natural gas pipeline, there will be no onsite emissions as there would be if the biomethane were burned in an internal combustion engine to make electricity. Additionally, no new emissions are generated through the delivery of the fuel to offsite stations because the biogas is injected directly into the pipeline.

The emissions associated with the disposal of 3,000 tons per day (tpd) in 2008 at the transfer station will generate fewer emissions than those currently generated by on-road traffic from the disposal of 1,800 tpd in 2006. Furthermore, it is anticipated that the use of the anaerobic digester to process some of this waste will further reduce emissions and odors coming from the facility.

Any impact associated with the project will be mitigated to less than significant levels by the mitigation monitoring plan prepared with the mitigated negative declaration. The Plan finds that no new impacts are anticipated by construction of the building addition. CR&R has also taken all steps to prevent any negative impacts from occurring from the expansion of the facility. Potential emissions may result from the use of the emergency flare from the anaerobic digester; however, this flare is used only on an emergency basis and should not result in any negative impacts.

The project will further reduce air pollutants and air toxics by providing the CR&R natural gas truck fleet with a supply of locally produced renewable natural gas. CR&R plans to add 100 CNG/LNG vehicles to its fleet over the next five years. CR&R also plans to install two new alternative fueling stations to support its fleet and will use the biomethane produced from this project at the stations.

The reduction in tailpipe diesel emissions from fleet trucks is expected to bring a net benefit to the region's air quality. The renewable natural gas used in this project will displace the equivalent of 865,000 gallons of diesel fuel, enough to power between 60 and 80 heavy-duty trash recycling trucks and reduce an estimated 57,740 tons of carbon dioxide between 2013 and 2020.

This project is not expected to result in adverse health effects to sensitive populations at the project sites or in the city where the station will be located.

Furthermore, this project is expected to bring economic benefits to the Perris community. This project will create approximately 100 construction jobs and eight permanent facility operation jobs in Perris, which currently has an unemployment rate of more than 20 percent. These jobs will include plant operators, truck mechanics, truck drivers, and plumbers, electricians, and pipe fitters for the facility construction.

Outreach Efforts

CR&R has reached a mitigated negative declaration CEQA agreement with the City of Perris/Riverside County to increase the MSW tonnage from 1,800 tons per day to 3,000 tons per day.

The SCAQMD will determine if it needs to conduct a new source review at the existing facility that already has the appropriate permits, as modifications to the facility may increase emissions. The air district will also adhere to federal and state regulations to notice residents within 1,000 feet of the site if the project will result in an increase in emissions above the threshold. The air district will post notices to the Air Resources Board and Environmental Protection Agency websites and in local newspapers if the project is using emission offsets or emission reduction credits.

Aggregate Location Analysis and Community Impacts

Energy Commission staff used data gathered from the recipient via the project proposal and a follow-up survey. The information presented in this table reflects total expected emissions that could have a potential impact on surrounding communities based on anticipated fuel production and feedstock blends. These emission numbers include emissions from fuel production, plant operation, and fuel/feedstock transport.

Table 2: Emission Increases Associated With Plant Operation, Fuel Production, and Feedstock/Fuel Transport

Project	NO^x	PM (2.5)	PM (10)	NO 2	SO2	Lead	H2S	Formaldehyde	DPM	Benzene	Acetaldehyde	1,3 Butadiene
CR&R	0	0	0	0	0	0	0	0	0	0	0	0

Source: Energy Commission staff

The following table indicates that two or more environmental justice indicators[1] exist in Perris, California. Based on the above assessment and CEQA analysis, and considered with the other projects funded under this solicitation, Perris is not disproportionately affected by this project.

Some of the notable benefits from the project include improved air quality from more efficient processing of municipal solid waste and conversion of fleets to use cleaner alternative fuels. Additionally, the project explores the use of efficient processing of waste products to produce renewable natural gas. The project is anticipated to improve the environment and result in socioeconomic benefits by generating jobs and revenue for local communities that would otherwise not be available.

Table 3: Environmental Justice Indicators

City	Minority	Poverty Level	Unemployment Rate	Age
Perris	X	X	X	

Source: Energy Commission staff

1 For this analysis, staff used the following criteria: unemployment rate exceeds the state unemployment rate (12.6 percent), statewide percentage of persons below the poverty level (13.3 percent), a minority subset represents more than 30 percent of the city population, and population under 5 years or over 65 years is 20 percent higher than the state average (7.4 percent <5 years, and 11.2 percent >65 years).

The last table in this addendum provides city-level data for the city project location to give additional insight on the community demographics where the project will be located.

Table 4: Demographic Data for Biofuel Facilities
(Percentage of total population)

City	Perris
Below poverty level	20.4
Ethnicity	
Black	15.9
American Indian or Alaskan Native	1.5
Asian or Pacific Islander	3.0
Hispanic	56.1
White	41.2
Age	
< 5 years	10.8
> 65 years	6.2
Unemployment rate	22.2

Source: Unemployment Information, EDD Labor Market Information Division; Age/ethnicity demographics, U.S. Census