

# Report

## MEETING OF THE PLANNING COMMISSION

**MEETING DATE:** May 16, 2011

**SUBJECT:** San Marcos Energy LLC  
CUP 88-12 (10M)

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### **Recommendation**

Conditionally approve a modification for the replacement of two turbine engines with two gas engines, and the continued operation of a methane recovery and conversion to energy facility through a Major Conditional Use Permit.

### **Background**

A Conditional Use Permit was approved for a methane recovery and conversion energy (MRCE) facility in August 1988. Upon approval, the facility was constructed, and began operation. The landfill stopped receiving trash in 1997 and formally closed in 2007. Per the closure plan, native vegetation has been planted on the closed landfill area and this area will remain as open space.

Since the previous Conditional Use Permit (CUP) set to expire, a CUP application was filed for the continued operation of the methane recovery and conversion to energy facility, but was modified to request replacement of the two existing turbine engines with two new gas engines in order to provide a more efficient methane recovery and conversion to energy system.

### **Introduction**

The lease area for the existing methane recovery and conversion to energy facility comprises a .25 acre lease area within the 80.58 acre closed landfill. The facility includes a 1,440 square foot equipment building used to house the engines and accessory components. The MRCE facility is accessed from Questhaven Road through a secondary rear access to the site. The facility operation involves the collection of methane gas from the landfill and use of the engines to convert the gas to energy. The electric energy is then sold to SDG&E and transported offsite through the onsite SDG&E interconnection.

Two methane gas flares operated by the County of San Diego and unrelated to the MRCE facility are located adjacent to the MRCE lease area. Open space is located adjacent to the site on the north, south, and west. The San Elijo Hills Community is located further north of the site, across San Elijo Road and Elfin Forest Road and low density residential homes are located to the east.

### **Discussion**

The subject site is currently zoned Solid Waste Management (SWM) and has a land use designation of Solid Waste Management. The Conditional Use Permit (CUP) is consistent with the Solid Waste Management Zone in that a methane gas recovery facility is allowed upon

issuance of a Major CUP. This assures that activities within the Solid Waste Management Zone have minimal impacts to existing and proposed residential uses in the area.

The MRCE facility is proposing to continue to operate with new gas engines (in replacement of the turbine engines) within the same equipment building as the prior engines. This is because as landfills age, less landfill gas is produced. As a result, declining volumes of gas from the landfill necessitates the use of gas engines in order to produce the same amount of energy as the old turbine engines. The same number of engines (two) will be replaced, and the installation of the new engines/related equipment will require a building permit. There is no proposed expansion to the current .25 acre lease area or 1,440 square foot equipment building.

During the CUP staff review public comments were received from two residents regarding potential noise and air pollution generation. As to noise, concern was expressed regarding noise generation from the turbine to gas engine replacement. A noise analysis was conducted to evaluate the noise levels generated from the two new gas engines to nearby receptors (residences), which concluded that the noise levels from the new engines would not exceed 25 dBA to any nearby receptor (residence), which is well below the 65 dBA General Plan exterior noise standard.

The second concern was regarding the emissions generated by the MRCE with the replacement of the engines. The applicant has a current San Diego Air Pollution Control District (SDAPCD) permit. The new equipment will require a new permit which will mandate initial engine source testing, annual testing, and the maintenance of an operator log, to include records of the periodic inspections, and engine maintenance conducted by the operator. Upon installation of the equipment, the operator will be subject to compliance with applicable SDAPCD emission standards.

The operator currently is in compliance with the State Water Resources Control Board (WDID #9-371009503) and the County of San Diego Department of Environmental Health (HK07-134647).

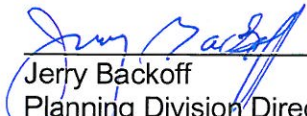
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#### **Attachment(s)**

##### **Adopting Resolution**

- A - Aerial Vicinity Map
- B - Aerial Site Plan
- C - Site/Floor Plan
- D - Requested Entitlement
- E - Site & Project Characteristics

Submitted by:

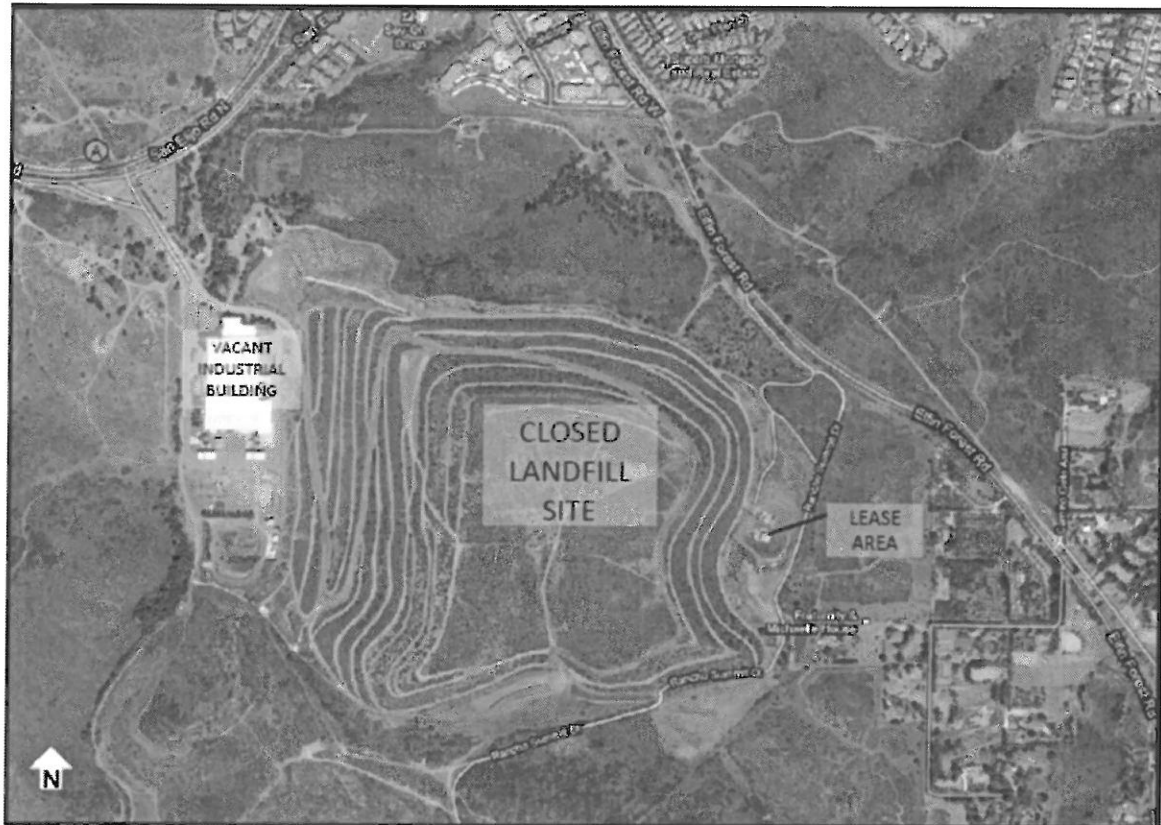
  
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Jerry Backoff  
Planning Division Director

  
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Michael D. Edwards  
City Engineer

Reviewed by:

  
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Charlie Schaffer  
Development Services Director

## ATTACHMENT A Aerial Vicinity Map



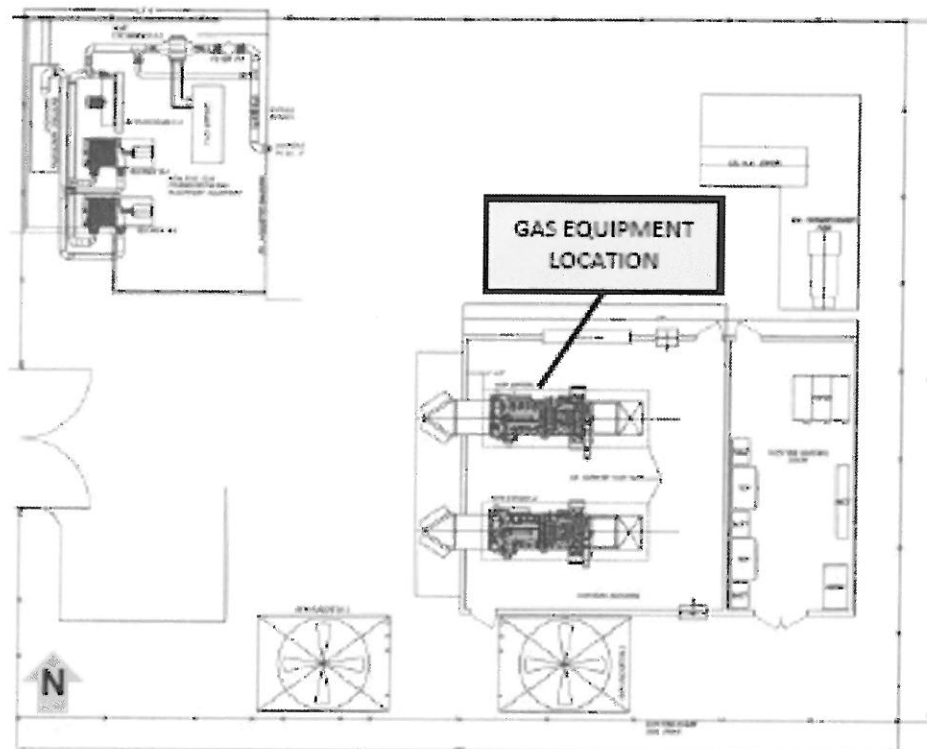
## ATTACHMENT B

### Aerial Site Plan



# ATTACHMENT C

## Site Plan/Floor Plan



## ATTACHMENT D

### Requested Entitlements

- A Conditional Use Permit modification for the replacement of the two turbine engines with two gas engines, and the continued operation of a methane recovery and conversion to energy facility on an existing .25 acre lease area at the existing 80.58 acre Closed County Landfill in the Solid Waste Management Zone (SWM) of the Questhaven/La Costa Meadows Community Plan Area.

## ATTACHMENT E

### Site & Project Characteristics

<u>Property</u>	<u>Existing Land use</u>	<u>Zoning</u>	<u>General Plan Designation</u>
Subject	Closed Landfill	SWM*	SWM
North	Closed Landfill/ San Elijo Hills	SWM/SPA SPA – SEH	SWM/SPA OS SPA/SF**
South	Res. – Low Density	SWM/AG.RES. A-1	SWM/SPA LU – .125
East	Open Space Res. – Low Density	SPA-OS AG RES. A-1	SPA-OS SPA LU – .125
West	Vacant	SPA LM	SPA LIGHT INDUSTRIAL

\*SWM-Solid Waste Management

\*\*Single-Family

Flood Hazard Zone	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
Resource Conserv. Area	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
Redevelop. Proj. Area	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
Sewers	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
Septic <sup>1</sup>	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
Water <sup>1</sup>	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
Gen. Plan Conformance <sup>2</sup>	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
Land Use Compatibility	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no

<sup>1</sup>Closed landfill; open space; <sup>2</sup>With approval of CUP.



RESOLUTION PC 11-4228

A RESOLUTION OF THE CITY OF SAN MARCOS PLANNING COMMISSION APPROVING A MAJOR CONDITIONAL USE PERMIT MODIFICATION FOR THE REPLACEMENT OF TURBINE ENGINES WITH GAS ENGINES (TWO) AND THE CONTINUED OPERATION OF A METHANE RECOVERY/CONVERSION FACILITY AT THE CLOSED SAN MARCOS LANDFILL SITE IN THE SOLID WASTE MANAGEMENT (SMW) ZONE WITHIN THE QUESTHAVEN/LA COSTA COMMUNITY PLAN AREA

CUP 88-12 (10M)  
San Marcos Energy LLC

WHEREAS, on July 27, 2010, an application was received from San Marcos Energy LLC requesting a Major Conditional Use Permit to allow the continued operation of a methane recovery and conversion to energy facility;

WHEREAS, on December 9, 2010, a modification to the July 27, 2010 applicant was submitted to request a replacement of two turbine engines with two gas engines in a 1,440 square-foot equipment structure along with replacement of accessory components (radiator, oil tank, gage panel, etc.) for the continued operation of a methane recovery and conversion to energy facility, located within a .25 acre fenced lease area at 1615 San Elijo Road, within an existing Solid Waste Management (SWM) Zone in the Questhaven/La Costa Community Plan, more particularly described as:

A portion of Section 33, Township 12 South, Range 3 west,  
San Bernardino Base and Meridian  
Assessor's Parcel Number: 223-080-36 and 223-082-07

WHEREAS, the Development Services Department did study said request and does recommend approval of said request; and

WHEREAS, the required public hearing held on May 16, 2011, was duly advertised and held in the manner prescribed by law; and

WHEREAS, the Planning Commission did find the project Categorically Exempt pursuant to Section 15301 Class 1, in that this is an existing facility with no expansion, of the California Environmental Quality Act (CEQA); and

WHEREAS, the Planning Commission's decision is based on the following findings and determinations:

1. The granting of the Conditional Use Permit will not adversely affect the implementation of the General Plan for the Questhaven/La Costa Community Plan in that the continued operation of a methane recovery and conversion to energy facility shall be operated in compliance with the City of San Marcos General Plan

AGENDA ITEM  
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Noise Element as well provide for electric energy generation to the region.

2. The granting of the Conditional Use Permit will not be materially detrimental to the public health, safety and welfare or injurious to property or improvements within the area in that the methane recovery and conversion to energy facility equipment and operation will comply with the City of San Marcos General Plan, the Air Pollution Control District, State Water Resources Control Board, and the County of San Diego Department of Environmental Health.

NOW, THEREFORE, the Planning Commission resolves as follows:

- A. The foregoing recitals are true and correct.
- B. The Conditional Use Permit is approved per the submitted site plan (.25 acre lease area) and floor plans (1,440 square feet equipment building), and shall not be expanded unless a modification to this permit is approved.
- C. The Conditional Use Permit is approved subject to compliance with the following conditions:
  1. The site and floor plan shall be modified as follows:
    - a. The site and floor plan shall clearly indicate all new, relocated, and replaced equipment on the project site, including the square footage for each area.
    - b. The lease area (.25 acre) and equipment building square footage (1,440 square feet) shall be indicated on the site plan.
    - c. The site plan shall indicate the San Marcos Energy LLC facility equipment from any on-site County of San Diego flares and equipment.
  2. The operation shall comply with the San Diego Air Pollution Control District (APCD). A new SDAPCD permit (file number 870535) shall be obtained for the gas engines, and a copy of said permit shall be submitted to the City of San Marcos. All conditions of said permit are incorporated by reference. The applicant shall comply with all conditions to include, but not limited to, initial engine source testing, annual testing, and maintenance of an operator log to include records of the periodic inspections, and engine maintenance conducted by the operator. Initial and routine compliance checks shall be conducted by the San Diego Air Pollution Control District (SDACPD).
  3. The State Water Resources Control Board WDID number 9-371009503 shall be maintained in the City files at all times. The project shall comply with the State Water Resources Control Board for water quality standards applicable to the facility operation.
  4. The project shall comply with the County of San Diego Department of

Environmental Health, and a current copy of the permit (HK07-134647) shall be maintained in the City files at all times.

5. The property owner shall submit executed versions of separate petitions to annex into and establish, with respect to the property, the special taxes levied by the following community facilities districts ("CFD"):

- (a) CFD 98-01, Improvement Area No. 1, Police Only
- (b) CFD 2001-01, Fire and Paramedic
- (c) CFD 98-02, Lighting & Landscaping Open Space Preserve Maintenance

No development entitlement permit will be issued without receipt of an executed petition for annexation into the above-referenced CFD and establishment of the special taxes. The applicant/developer shall comply with all rules, regulations, policies and practices established by the City with respect to the CFD including, without limitation, requirements for notice and disclosure to future owners or residents.

6. Reflective shields extending below the light source shall be maintained on all exterior lighting on site. All exterior lighting shall be low pressure sodium vapor or as approved by the City.
7. The onsite fencing shall be maintained in good condition through the term of the Conditional Use Permit.
8. Noise levels generated by the methane recovery and conversion to energy facility shall not exceed .25 dBA at the nearest residence, which is below the City of San Marcos General Plan exterior noise standard of 65 dBA.
9. The project shall comply with all applicable standards for the proposed use of the Urban Runoff Management Program adopted by the City of San Marcos.
10. Any new construction, alteration, improvement, or modification to an existing building requires the issuance of a building permit and compliance with the minimum code requirements of the latest adopted California Building Code.
11. Prior to issuance of any building permits, the following conditions shall be complied with:
  - a. The site plan and floor plan shall be modified as required in Conditions C.1.a., C.1.b., and C.1.c.
  - b. Buildings and structures shall be designed to conform to the latest standards adopted by the State of California in the California Building Code, Part 2, Title 24, and California Code of Regulations.
  - c. Building plans and instruments of service shall be signed and sealed by a

California licensed design professional as required by the State Business and Professions Code.

- d. The City of San Marcos is located in Seismic Design Category "D". Buildings and structures shall be designed to adequately transmit the dynamic lateral forces in accordance with the requirements of the latest adopted California Building Code.
  - e. The storage, use or handling of hazardous, toxic or flammable materials shall be clearly indicated on all floor plans submitted for a building permit. Materials shall be identified in accordance with Health and Safety Code Section 25101.
  - f. An automatic fire extinguishing system shall be maintained in accordance with the latest adopted California Building Code and San Marcos Fire Code Ordinance. Fire suppression systems as required by the San Marcos Fire Protection District shall conform to the National Fire Protection Association standards.
  - g. The proposed development shall comply with Federal Law, Americans with Disabilities Act ("ADA-90"), and State Law, California Code of Regulations, Title 24, for accessibility standards for the disabled.
  - h. The applicant/developer for the proposed development, redevelopment, or discretionary use is required to pay Public Facilities Fees as established by the latest adopted Public Facilities Fee. The fee shall be based on the proposed land use and shall be paid prior to the issuance of the first permit for the development.
  - i. The proposed new development is subject to approval by the Vallecitos Water District and all applicable fees and charges shall be paid to the District prior to permit issuance.
12. During the construction phase, the following conditions shall be complied with:
- a. All construction operations authorized by building permits, including the delivery, setup, and use of equipment shall be conducted on premises during the hours of 7:00 AM to 6:00 PM on Monday through Friday, and on Saturday between 8:00 AM and 5:00 PM. No work shall be conducted on Sundays or holidays observed by the City of San Marcos. Failure to comply will result in the issuance of STOP WORK NOTICES, REVOCATION OF PERMITS and the issuance of citations as appropriate. Citations for hours of work violations require a mandatory court appearance in North County Superior Court.
  - b. During construction the owner/developer/contractor shall implement and maintain the storm water pollution prevention measures as required on the

approved plans. Violations of the City's Storm Water Management Ordinance will result in Stop Work Orders, Notices of Violation and citations. Work on the project may be delayed until the City determines that the project is in compliance with the storm water requirements.

13. Any change in occupancy in an existing building shall be approved by the City Building Official as required by the latest adopted Uniform Building Code. A new Certificate of Occupancy will be issued after the City has inspected and approves the modified use. Buildings or structures shall not be used or occupied until the appropriate City departments and agencies have accepted or approved the buildings for occupancy, including the State Water Resources Control Board, San Diego Air Pollution Control District, and the County of San Diego Department of Environmental Health. A Certificate of Occupancy ("C of O") shall not be issued until the conditions of approval for the proposed development have been satisfied.
14. The applicant shall be responsible for compliance with all relevant portions of the City of San Marcos Municipal Code.
15. Use of the site shall be conducted so as not to become obnoxious by reason of parking impacts, noise, odor, refuse or maintenance of grounds and in such a manner as will not detrimentally affect adjoining properties and uses.
16. To the extent feasible and as permitted by law, developers and contractors are requested to first consider the use of San Marcos businesses for any supplies, materials, services, and equipment needed, and the hiring of local residents in order to stimulate the San Marcos economy to the greatest extent possible.
17. Any future expansion of the methane recovery and conversion to energy facility shall require a modification to CUP 88-22 (10M). The Conditional Use Permit application must be submitted for review and approval by the Development Services Department prior to the issuance of any building permits.
18. The Planning Division shall inspect the premises annually to ensure compliance with all conditions of the use permit approval. If the Planning Division determines that compliance is not being achieved, then a public hearing shall be scheduled for possible use permit modification or revocation.
19. This Conditional Use Permit shall have a term of ten (10) years from approval of this permit, ending on May 16, 2021. Any request for permit extension shall be applied for by the permittee no later than ninety (90) days prior to the expiration date.
20. This Conditional Use Permit shall become null and void if not acted upon within twelve (12) months of the adoption of this resolution, or the approved use ceases to operate at the subject property for a period more than twelve (12) months.
21. To the extent permitted by law, the Applicant shall defend and hold the City of San

Marcos ("City"), its agents and employees harmless from liability from: (i) any and all actions, claims, damages, injuries, challenges and/or costs of liabilities arising from the City's approval of any and all entitlements or permits arising from the project as defined in the conditions of approval, or issuance of grading or building permits; (ii) any damages, liability and/or claim of any kind for any injury to or death of any person, or damage or injury of any kind to property which may arise from or be related to the direct or indirect operations of the Applicant or its contractors, subcontractors, agents, employees or other persons acting on Applicant's behalf which relate to the project; and (iii) any and all damages, liability and/or claims of any kind arising from operation of the project. Applicant further agrees that such indemnification and hold harmless shall include all defense related fees and costs associated with the defense of City by counsel selected by the City. This indemnification shall not terminate upon expiration of the conditions of approval or completion of the project, but shall survive in perpetuity.

PASSED AND ADOPTED by the Planning Commission of the City of San Marcos, State of California, at a special meeting thereof, this 16<sup>th</sup> day of May 2011, by the following roll call vote:

AYES:

NOES:

ABSENT:

APPROVED:

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Steve Kildoo, Chairman  
SAN MARCOS CITY PLANNING COMMISSION

ATTEST:

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Lisa Kiss, Planning Secretary  
SAN MARCOS CITY PLANNING COMMISSION