



Public Scoping Meeting

Glenn County Solid Waste Conversion Facility

Environmental Impact Report (EIR)

Glenn County Board of Supervisors' Chambers,
2nd Floor Willows Memorial Hall
525 West Sycamore Street, Willows, CA
January 21, 2015



Meeting Agenda

Introduction & Welcome

Overview of the Environmental Consulting Team

Project Overview

CEQA Process and Environmental Issues

Public Input

Introductions

- Di Aulabaugh, Deputy Director – Planning and Public Works
- Matt Gomes, Deputy Director – Planning and Public Works
- Andy Popper, Associate Planner – Planning and Public Works
 - **Role:** County day-to-day management of the EIR process
- Paul Miller – EIR Project Manager (RCH Group)
 - **Role:** Day-to-day management of the EIR team

Notice of Preparation (NOP)

- NOP released January 12, 2015
- Comment period closes February 12, 2015.
- Members of the public can submit verbal comments today Or Comment Card today Or submit written comments until February 12, 2015.
- Please submit written comments to:
 - Andy Popper, Associate Planner
 - Glenn County Planning & Public Works Agency
 - 777 North Colusa Street
 - Willows, CA 95988
 - Attn: GCSWCF EIR



Overview of the Environmental Consulting Team

Environmental Science Associates (ESA) is the Prime Contractor

RCH Group – Paul Miller (former ESA Director)

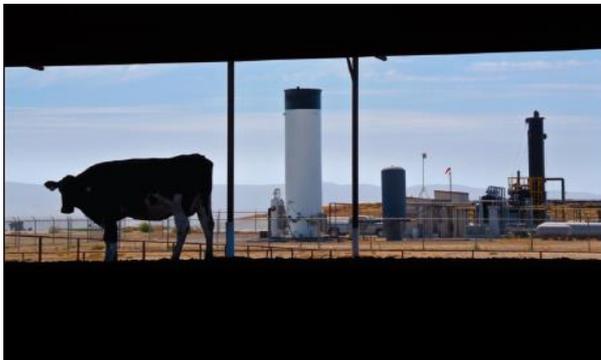
SCS Engineering - Expertise in engineering and permitting of Anaerobic Digestion, Biogas, and other Conversion Technologies

ESA's Team Solid Waste CEQA Experience (1989-present)

- Landfills throughout California (new landfills, landfill expansions, landfill closures)
- Material Recovery Facilities (MRFs)
- Transfer Stations
- Compost Sites
- City and County Integrated Waste Management Plans

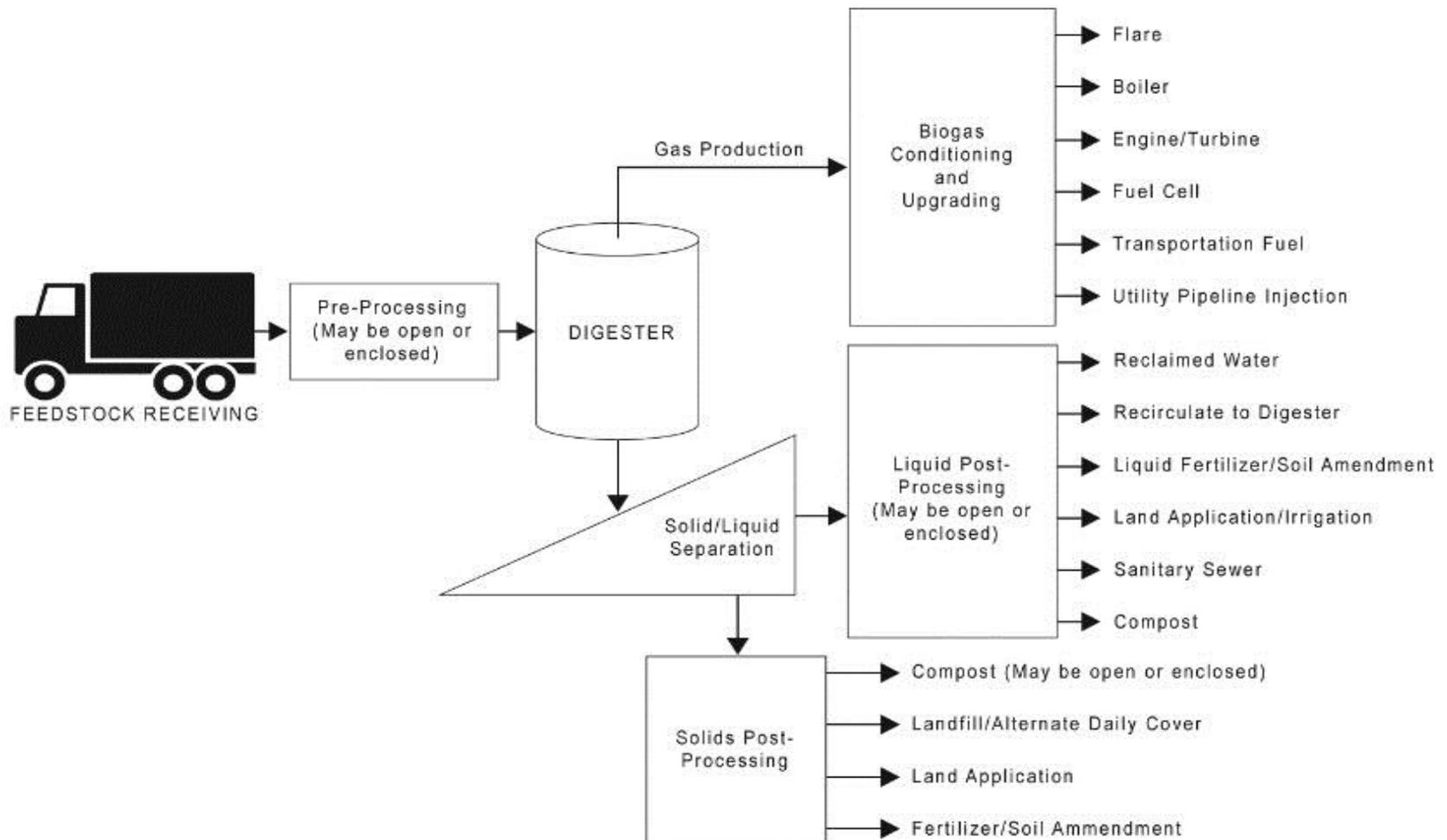
ESA's Team Anaerobic Digester CEQA Experience

- Cal Recycle – Statewide Program EIR for Anaerobic Digestion Facilities for the Treatment of Municipal Organic Solid Waste
- Central Valley Regional Water Quality Board (Region 5) – Dairy Manure Digester and Manure Co-Digester Program EIR
- Blue Line Transfer Station Biogenic CNG Project -- City of South San Francisco Anaerobic Digester Facility CEQA (Negative Declaration)



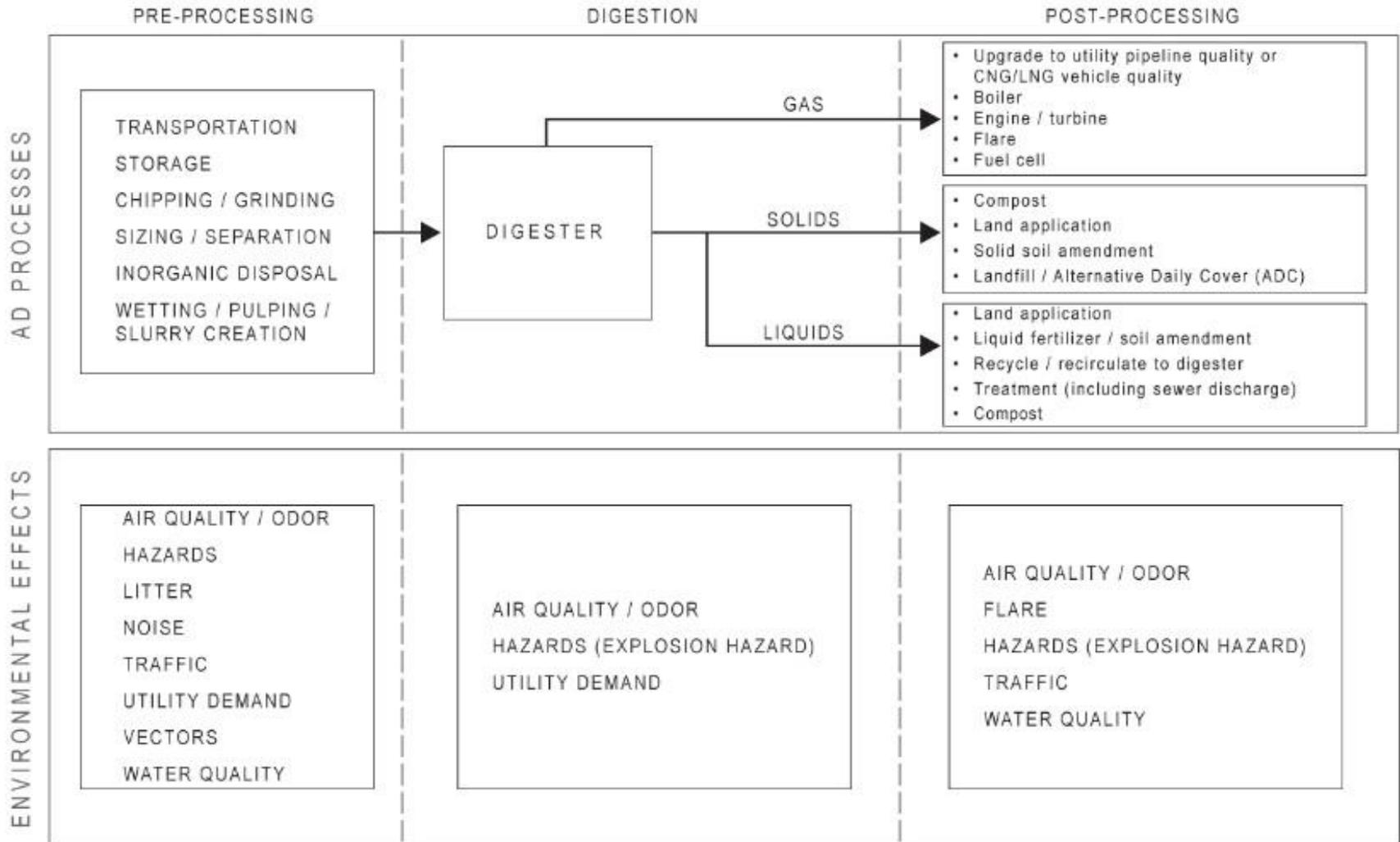
CalRecycle AD Programmatic EIR

Understand the Systems & Impacts

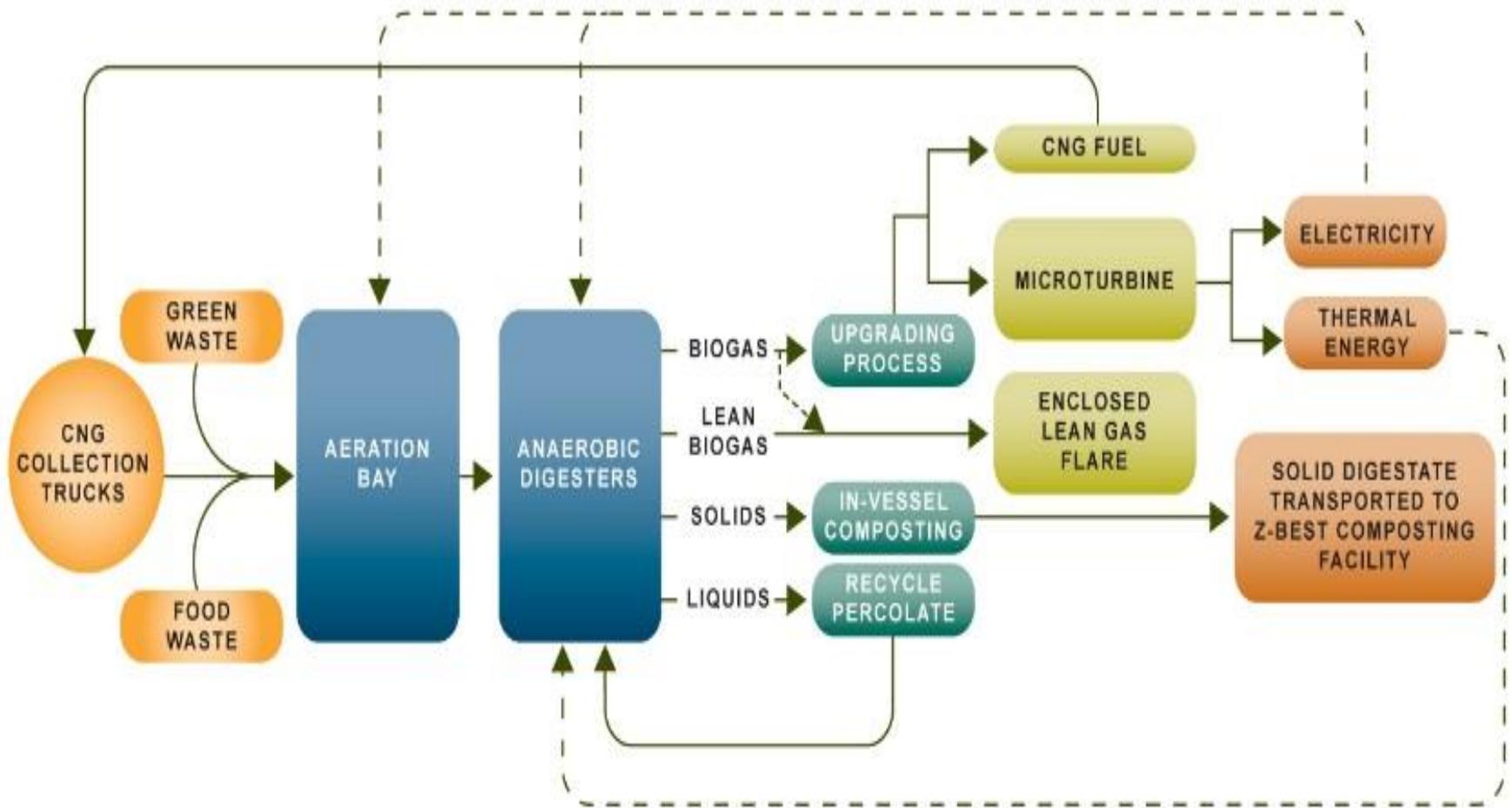


CalRecycle AD Programmatic EIR

Understand the Systems & Impacts



Example MRF/Transfer Station AD + Biogenic CNG

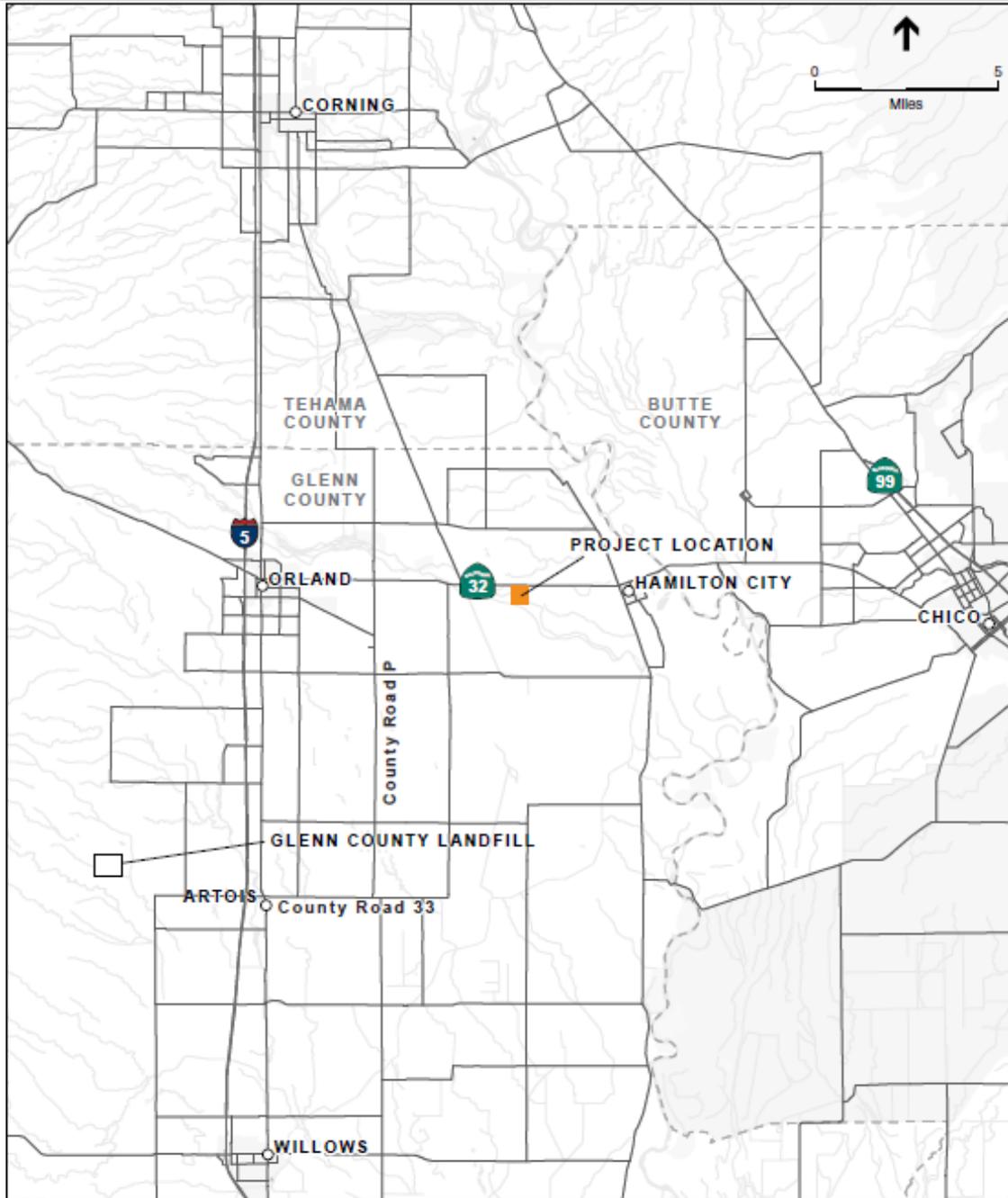


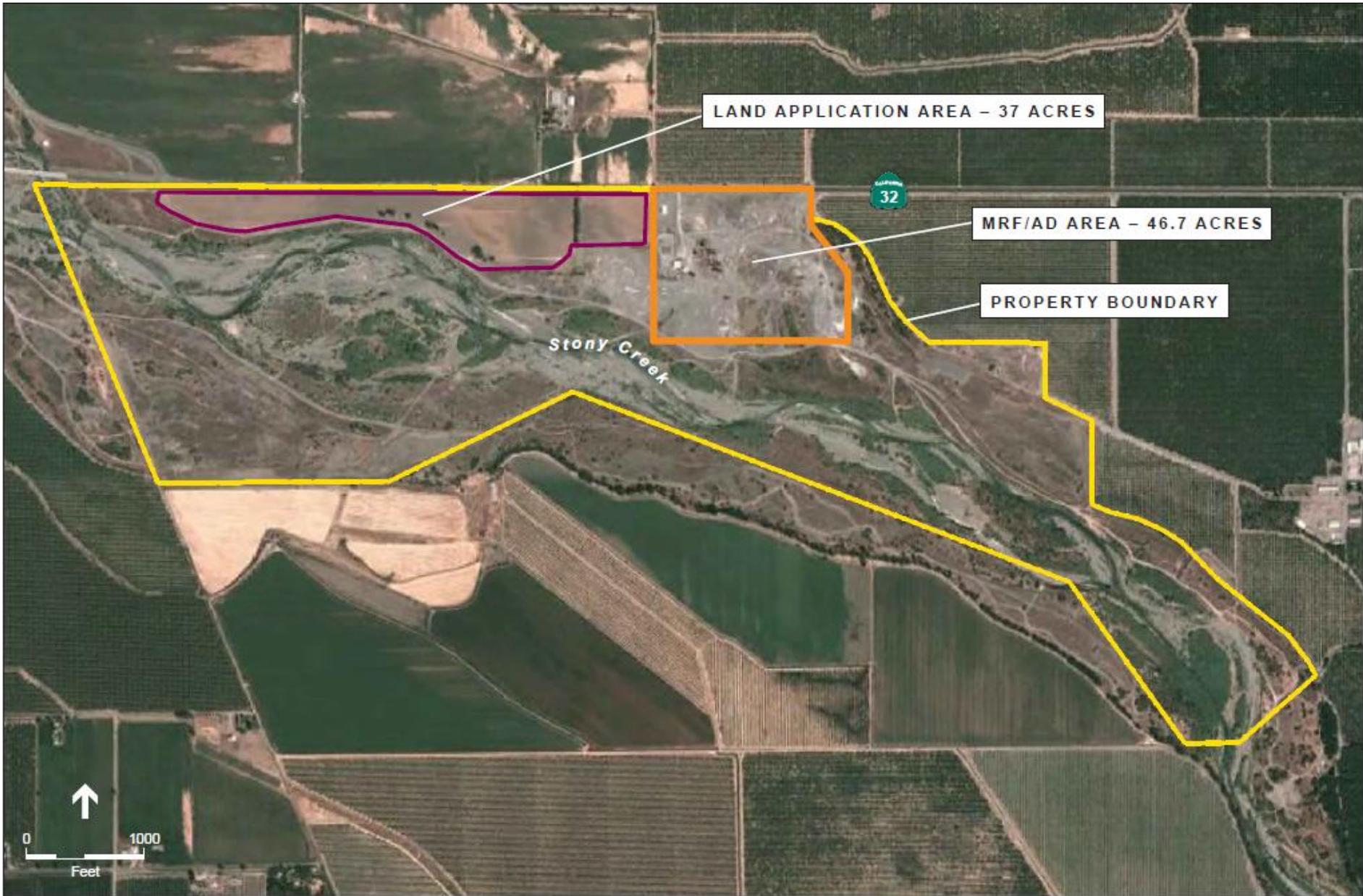
Project Overview

- KVB, Inc, (KVB) has proposed the Glenn County Solid Waste Conversion Facility (GCSWCF) as a combination Materials Recover Facility (MRF), transfer station, and anaerobic digestion (AD) system for diversion and recycling of solid waste.
- The GCSWCF would provide a replacement solid waste management system for Glenn County, up to the currently permitted waste management level of 200 tons per day, due to the pending closure of the Glenn County Landfill (GCLF).

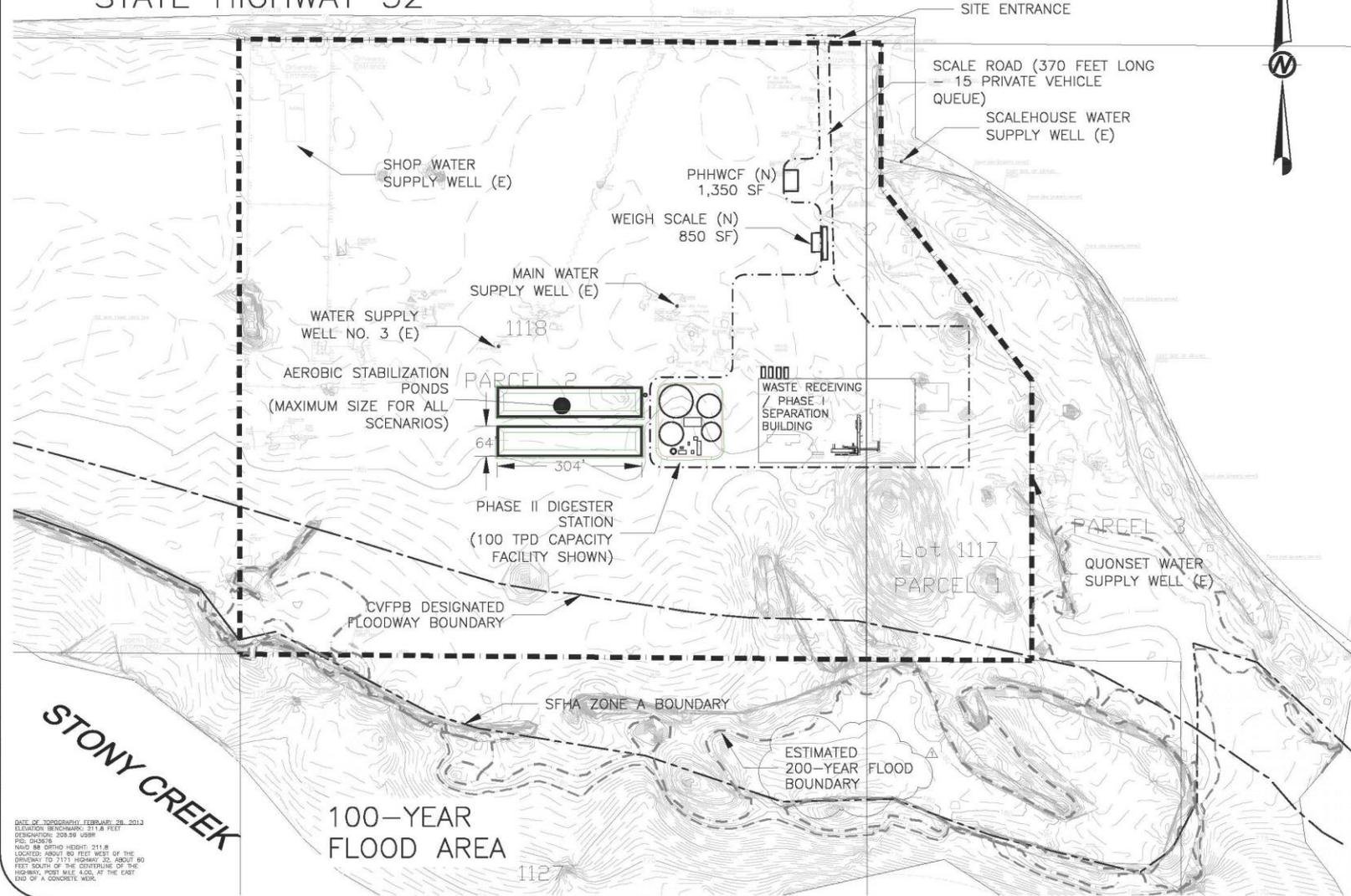
Project Overview (Cont.)

- The Project would also provide increased compliance of the solid waste diversion goals set on the County by the State of California
- The City of Chico has expressed interest in the Project in its pursuit of greater waste diversion technology.
- With Glenn County and Chico the capacity would be up to 500 tons per day





STATE HIGHWAY 32



General Notes

LEGEND

- POWER LINES (E)
- FENCE (E)
- EDGE OF PAVEMENT (E)
- EXISTING GRADE CONTOUR LINES
- LOT LINES (E)
- PROJECT AREA
- EDGE OF PAVEMENT (N)
- SPECIAL FLOOD HAZARD AREA LIMIT
- SPECIAL FLOOD HAZARD AREA ZONE A BOUNDARY
- CVFPB DESIGNATED FLOODWAY
- ESTIMATED 200-YR FLOOD BOUNDARY
- POWER POLES
- POWER GUY WIRES

1	200-YEAR FLOOD BNDY	12/13
No.	Revision/Issue	Date

RICHGELS
ENVIRONMENTAL SERVICES
1001 AVENIDA ALVARADO
ROSELVILLE, CALIFORNIA

SITE PLAN
GLENN COUNTY SOLID WASTE
CONVERSION FACILITY
GLENN COUNTY, CALIFORNIA

KVB, INC.	FIGURE
03/01/13	9
1" = 200'	

DATE OF TOPOGRAPHY: FEBRUARY, 2013
ELEVATION BENCHMARK: 31.6 FEET
DESIGNATION: 200-50 USBR
FILE: 200-50
NAVD 88 BENCHMARK HEIGHT: 211.8
LOCATION: 100 FT WEST OF THE
CENTERLINE OF HIGHWAY 32, ABOUT 90
FEET SOUTH OF THE CENTERLINE OF THE
HIGHWAY, FOUR MILES EAST OF THE EAST
END OF A CONCRETE WEIR.

EXISTING WATER SUPPLY FOR FACILITY

CONSTRUCTION AND DEMOLITION RECEIVING AND PROCESSING AREA

EWASTE, MATTRESS, BULKY, AND WOOD WASTE BINS



BACKUP FLARE

DIGESTER PAD

EDDY CURRENT SEPARATOR

MANUAL SORT LINES

BALER

COMMERCIAL RECEIVING AREA

AEROBIC STABILIZATION LAGOON 1

PUBLIC RECEIVING AREA

MANUAL SORT LINES

AEROBIC STABILIZATION LAGOON 2

POLISHING DIGESTOR TANK H2

GAS STORAGE

METHANOGENIC DIGESTOR TANK M1

HYDROLYSIS DIGESTOR TANK H1

BUFFER TANK B

180'

CP TROMMEL SCREEN

MAGNET

H2S SCRUBBER
SILOXANE REMOVAL
COMPRESSOR SKID

MICROTURBINE GENERATOR
TROMMEL LOADING
HOPPER AND CONVEYOR

MAIN CP SCREEN

EXPANSION CP SCREEN
(200 TPD PERMITTED
SCENARIO OR
GLENN/CHICO SCENARIO)

2-INCH MINUS
ORGANIC CONVEYOR
AND ORGANIC
SEPARATION PROCESS

General Notes

No.	Revision/Issue	Date

RICHGELS
ENVIRONMENTAL SERVICES
1301 AVENIDA ALVARADO
ROSENVILLE, CALIFORNIA

FACILITY LAYOUT PLAN
GLENN COUNTY SOLID WASTE
CONVERSION FACILITY
GLENN COUNTY, CALIFORNIA

KVB, INC.	FIGURE
06/21/13	10
1" = 60'	

2/20/13 10:43 AM 07-20 208 2/20/13 10:43 AM 07-20 208 2/20/13 10:43 AM 07-20 208

Project Overview– Design Features

- KVB is now working with The CP Group and CleanWorld.
- The CP Group is a leader in the field of MRF design and has a facility in Sunnyvale, California.
- CleanWorld is a leader in commercial scale AD facilities that digest food wastes. CleanWorld has three operating digesters in the Sacramento region.

Project Overview– Design Features

- Phasing options handle Glenn County wastes or additional wastes from Chico or other locations.
- Phase I – MRF - Waste Receiving / Separation Building / Transfer Station
 - Advanced sorting equipment and manual sort lines
 - For source separated wastes or co-mingled wastes (Dirty MRF sorting)
 - Recycled materials to markets; residual waste taken to a permitted landfill
- Phase II – Anaerobic Digestion facility
 - Includes aerated stabilization ponds
 - Land Application Area for digestion solids (digestate) – used as a soil amendment (fertilizer)

Project Overview– Design Features

- Biogas is a key product of the anaerobic digester facility
 - There are many possible uses of biogas to produce energy.
 - The Project plans to use biogas to power a microturbine to generate on-site power.
 - If enough biogas is generated the Project plans to develop a CNG fueling station onsite to fuel CNG vehicles.

Environmental Review

- Determination on level of environmental review
 - The County and Applicant (KVB) have agreed on an EIR
- Next steps after the 30-day review period closes:
 - Administrative Draft EIR
 - Review period by the County
 - Draft EIR
 - 45-day comment period for the public and agencies
 - Final EIR
 - Project brought before Planning Commission

Environmental Review

- EIR team will peer review background reports prepared for the applicant
 - Background reports include: Air Quality, Greenhouse Gas Emissions, Biological Resources, Cultural Resources, Geology, Hydrology, and Transportation/Traffic.
- EIR will analyze the maximum impact scenario (now assumed to be 500 tons per day with waste from Glenn County and Chico).

Environmental Review

- EIR will identify potentially significant impacts and identify mitigation measures that could reduce impacts.
- EIR will consider Alternative to the project that could reduce project impacts.

Environmental Review

EIR will consider all of the CEQA Appendix G environmental factors:

- Aesthetics
- Agriculture & Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/ Soils
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology/ Water Quality
- Land Use/ Planning
- Mineral Resources
- Noise
- Population/ Housing
- Public Services
- Recreation
- Transportation/ Traffic
- Utilities/ Service Systems
- Mandatory Findings of Significance

EIR: Key Environmental Issues

- **Air Quality/GHGs** – short term temporary/construction; long term operational emissions (criteria pollutants, TACs, GHGs, odors)
- **Traffic** – need to analyze traffic from Chico
- **Hydrology** – floodplain; porosity; water quality

EIR: Key Environmental Issues

- **Mixed Waste Stream and Process Byproducts**
 - **Uncertainty in feedstock → uncertainty in products**
 - **Liquid Effluent** – managed through aeration stabilization ponds
 - **Digestate** – metals, pathogens, other contaminants; what standards apply
 - **Agriculture** – suitability of digestate for agricultural use (crops are not for human consumption) / 503 regulations

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Time for Public Comments

- Now is an opportunity for the public to express views regarding the scope of the environmental issues (or Project Alternatives) to be addressed in the EIR.
- Please sign in on the public sign in sheet and fill out a speaker card if you are submitting verbal comments.
- You can also fill out a Comment Card and submit today at the scoping meeting (See Comment Card for other submittal options)

EXTRA SLIDES- DO NOT PRINT



The ESA Team

Glenn County
Planning & Public Works Agency

PROJECT MANAGEMENT

Project Director
Dan Sicular, PhD

Project Manager
Paul Miller

Deputy Project Manager
Robert Eckard

TECHNICAL STAFF

AQ/GHG
Matt Morales
Tim Rimpo
Pat Sullivan *(SCS)

Hazards and
Hazardous Materials
Eric Schniewind

Geology/Soils/Seismicity
Eric Schniewind

Biological Resources
Erich Fischer
LeChi Huynh ISA CA

Noise
Paul Miller
Matt Morales

Project Description
Paul Miller
Matt Morales
Kelly Runyon

Hydrology & Water Quality
Minta Schaefer

Project Alternatives
Todd Gordon
Kelly Runyon
Dan Sicular, PhD

Other CEQA Sections
Todd Gordon

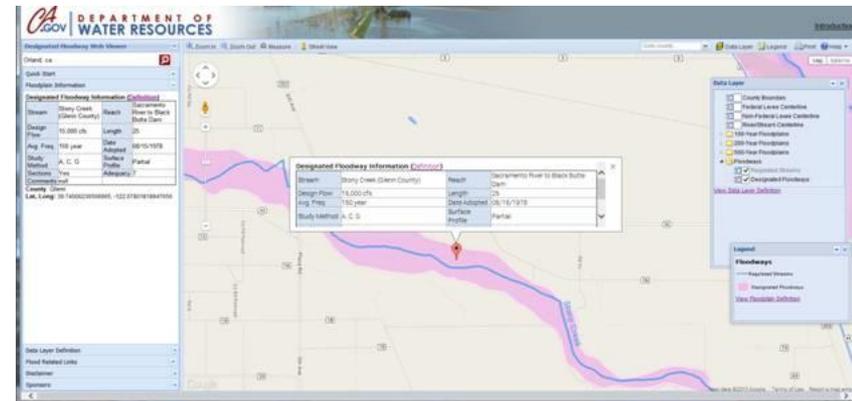
Transportation & Traffic
Jack Hutchison, PE

Cultural Resources
Kathy Anderson, M.A.
Rebecca Allen, PhD, RPA

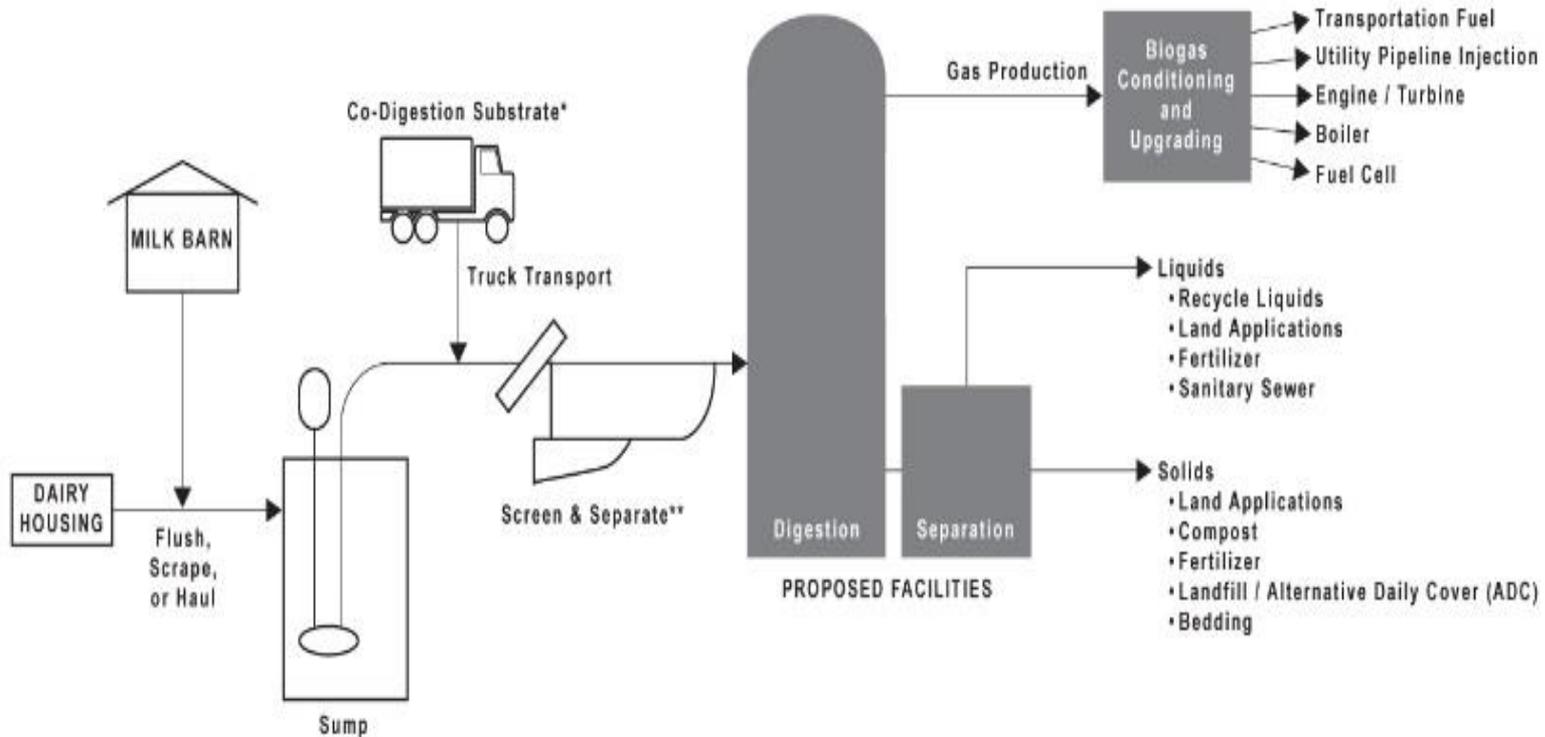
**Subconsultant*

Flooding

- Existing LOMA on site
 - Parcel out of floodplain
- May be within CVFPB jurisdiction... or possibly not



State Water Board Dairy Digester Program EIR



* If co-digestion will be implemented at facility

** Screen & Separate - this step may be needed to remove straw, sand, and silt (Burke, 2001)

State Water Board Dairy Digester and Co-Digester Program EIR

- Many varieties of digesters (tanks, plug-flow and lagoon digesters)
- Co-digestion (manure + other organic materials) was critical for high gas generation
- NO_x control in the Central Valley makes electrical generation less desirable than developing transportation fuel (biogenic Compressed Natural Gas)
- Nutrient Management Plans required for land application of digested solids

SCS Engineers – Part of Review Team

- Largest Solid Waste consulting firm in U.S.
- Completed over 40 CEQA support projects
- Expertise in engineering/permitting of Anaerobic Digestion, Biogas, and other Conversion Technologies

SCS: Engineering Review

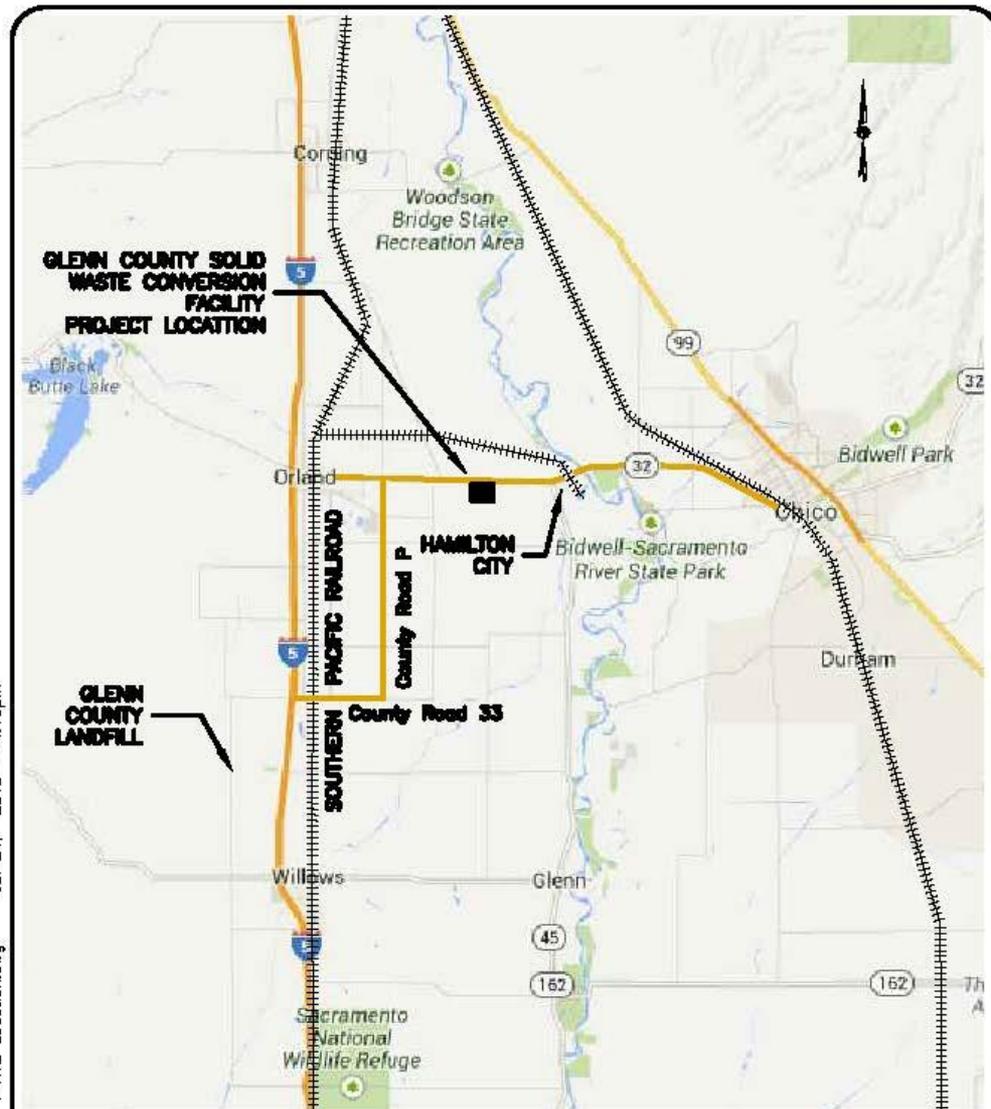
- Assistance in Formulation and Review of Project Description
- Engineering Review of Waste Processing Operations
 - Technical review of system processes
 - Assessment of products, by-products, and effluents
 - Help refine impact statements
- Development of Waste Management Alternatives
 - Alternatives for organics management
 - Alternative anaerobic digestion technologies
 - Alternative waste separation processes
 - Alternative power generation equipment

Project Overview (Cont.)

- Typically, without conversion, organic waste is unrecyclable.
- This project will convert organic waste into biogas for use in onsite power generation. The remaining digestate solids will be used as fertilizer replacement in local animal feed crop production.
- Combined these inorganic and organic diversion processes will allow Glenn County to divert up to an estimated 70% of solid waste from landfill disposal.

South San Francisco Blue Line Transfer Station AD + Biogenic CNG

- 11,000 tons per year high-solids AD has been approved.
- AD process will use source separated food waste and green waste as feedstock
- Construction completed 2014 – in operation
- Biogenic CNG fuel they will use has been rated as “carbon negative”



Drawing File: Figure 1 KV8 Location.dwg Jul 24, 2013 - 4:16pm

RICHGELS
 ENVIRONMENTAL SERVICES
 1301 A AVENIDA ALVARADO
 ROSEVILLE CALIFORNIA



Glenn County SWCF

Project Location

7/16/2013

NTS

FIGURE

1



General Notes

PROJECT SITE 7551 HIGHWAY 32
 ADDRESS: HAMILTON CITY, CA
 95951

ASSESSOR'S
 PARCEL
 NUMBERS: AS SHOWN ON
 MAP

OWNER: KARA VARIAN
 BAKER

No.	Revision/Issue	Date

RICHGELS
 ENVIRONMENTAL SERVICES
 1301 AVENIDA ALVARADO
 BONAVILLE, CALIFORNIA

SITE VICINITY MAP
 GLENN COUNTY SOLID WASTE
 CONVERSION FACILITY
 GLENN COUNTY, CALIFORNIA

KVD, INC.	FIGURE
07/24/13	2
1" = 1000'	