

Organic Materials
Marine Transfer Facility
and
Regional Composting Facility
Proposal
for
ACWMA
1/24/2006

Prepared by
Louie Pellegrini
Bay Marine Transfer Systems
Delta Composting

Proposal for Marine Transfer Of Organics to a State of the Art Composting Facility



Objective to meet ACWMA Goal

- The goal of the authority is to "secure long-term low-cost, high-quality, high-volume, in-county composting services for alameda county jurisdictions through public-private partnerships".

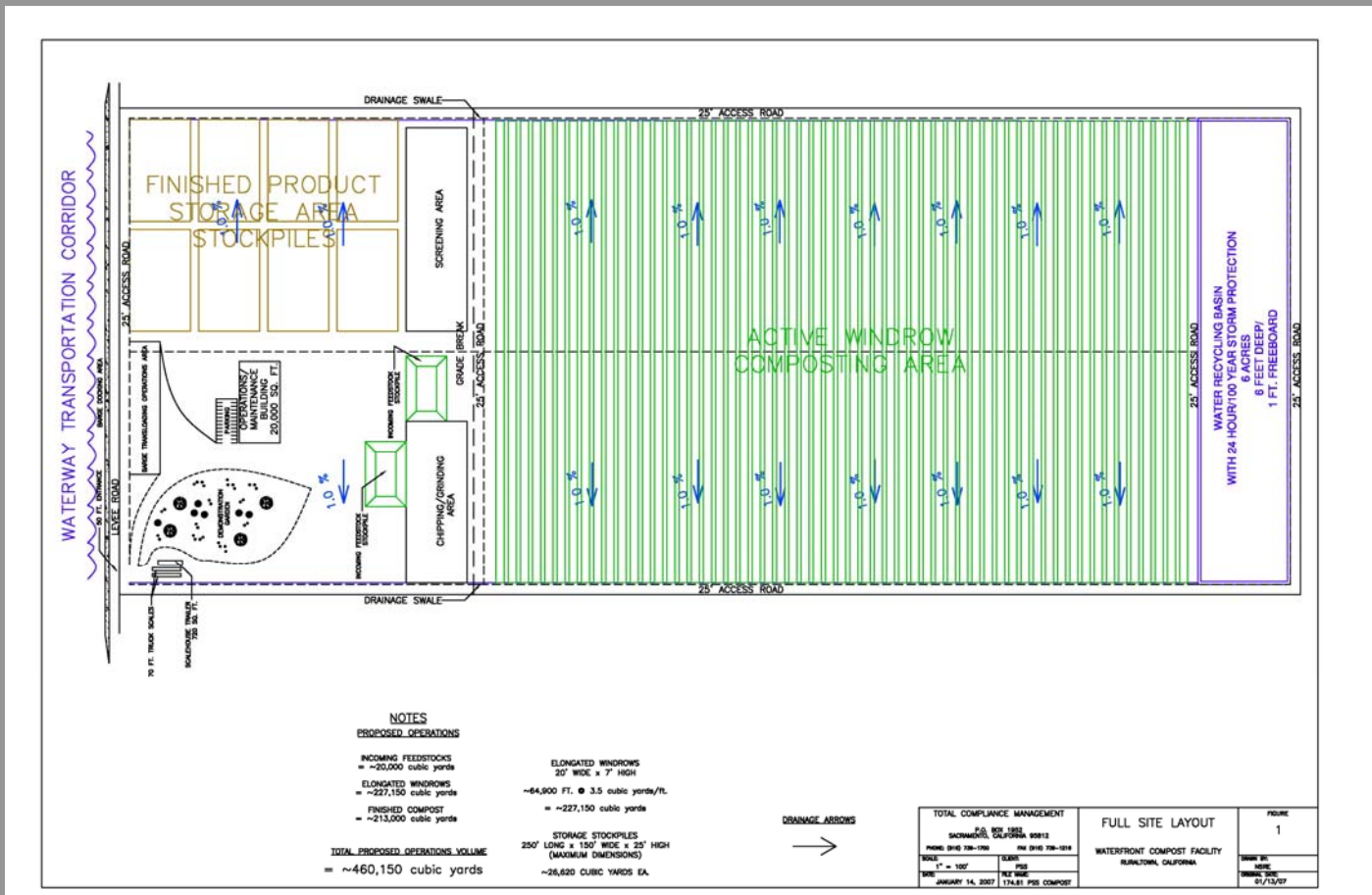
Meeting the Authority's Needs

- We have identified three potential out of county sites for a regional composting facility for long term lease or purchase.
- We would develop in county marine transfer facility.
- Our proposal brings potential for value added options to help achieve 75 % diversion.
- Our proposal for marine transport provides for the greatest reduction in air pollution, greenhouse gases, and traffic congestion.
- We are prepared and capable of designing and operating a state of art composting facility.
- We are committed to provide the highest quality compost product possible.

Will Develop State of Art Regional Composting Facility



Draft Layout for Marine Dependendant Composting Site



Proposed Feedstocks

- GW-green waste
- CCO – co-collected organics - green waste with up to 20% residential food waste
- CFW- commercial food waste

Proposed Size Facility

- 80 to 200 acres
- 50 acres compost pad
- 6 acres of storm water pond
- 24 acres of operations

In-Bound Feedstock

- 20,000 CY's in-bound feedstock storage
- 225,000 CY's of capacity of active compost
- 900,000 CY's/year throughput
- 300,000 tons per year capacity of incoming feedstock
- 1,150 TPD average – 1,500 TPD seasonal peak

Compost Production

- 150,000 TPY of finish compost
- 375,000 CY's of finished compost production
- Storage up to 6 months for growing cycles

Summary of Site Plan Parameters

- 1,500 TPD peak, with 1,150 TPD ave
- 460,000 CY's of capacity
- Technology options for composting

Marine Transfer Of Organics



HOPPER BARGES

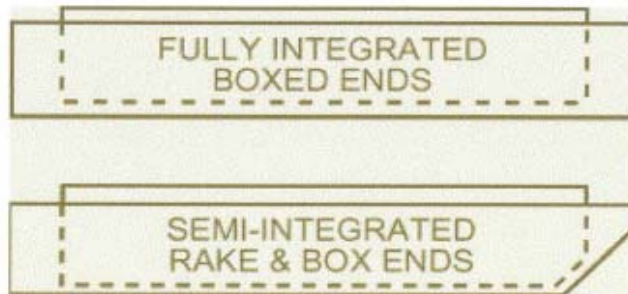
Hopper Barges

Hoppers are usually of double-hull construction, wherein the sides and bottom of the cargo hold are separated from the hull by void spaces. These barges are designed for efficient transport of commodities in bulk, such as grain, coal, sugar, ore, steel, aggregates, timber products and numerous other cargos.

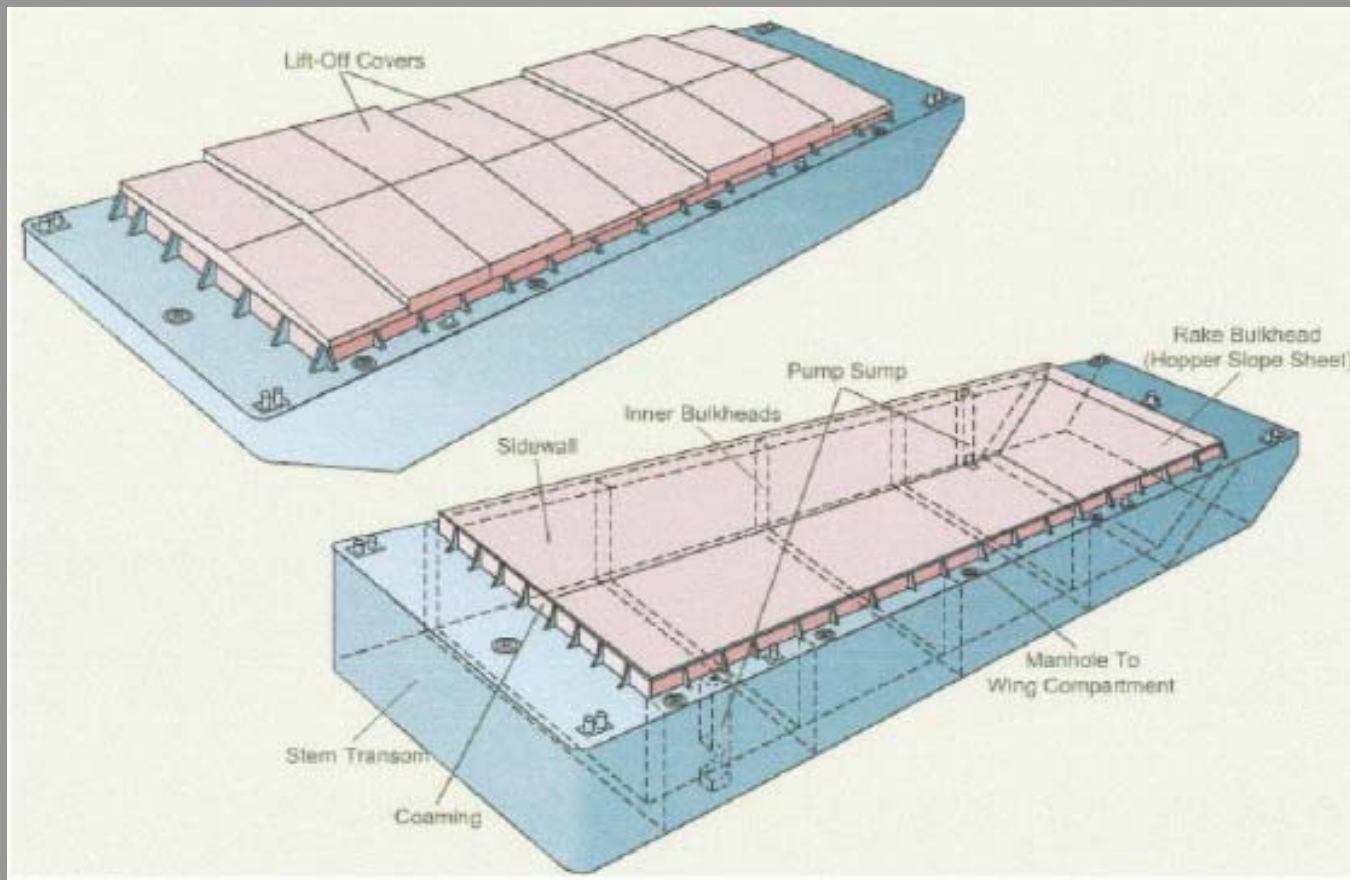
Hopper barges have a boxed, single raked, or double-raked hull configuration. The hoppers may be covered or open. Covers provide protection of cargos from outside elements. Covers may be roll-top (telescoping), or lift-off (stacking) type.

McDonough Barge Size	Approximate Short Ton Cargo Capacity at Freeboards of:		
	2'	3'	4'
195' x 35' x 12'	1630	1450	1245
195' x 35' x 13'	1880	1670	1460
200' x 35' x 13'	2100	1880	1660

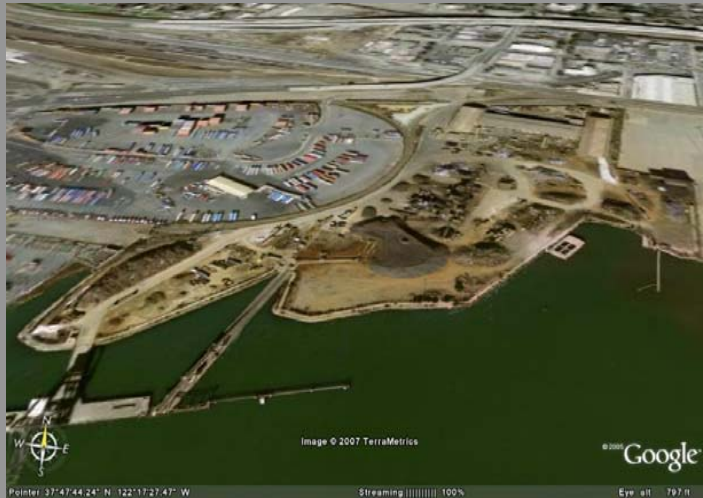
These sketches show the typical configurations of hopper barges.



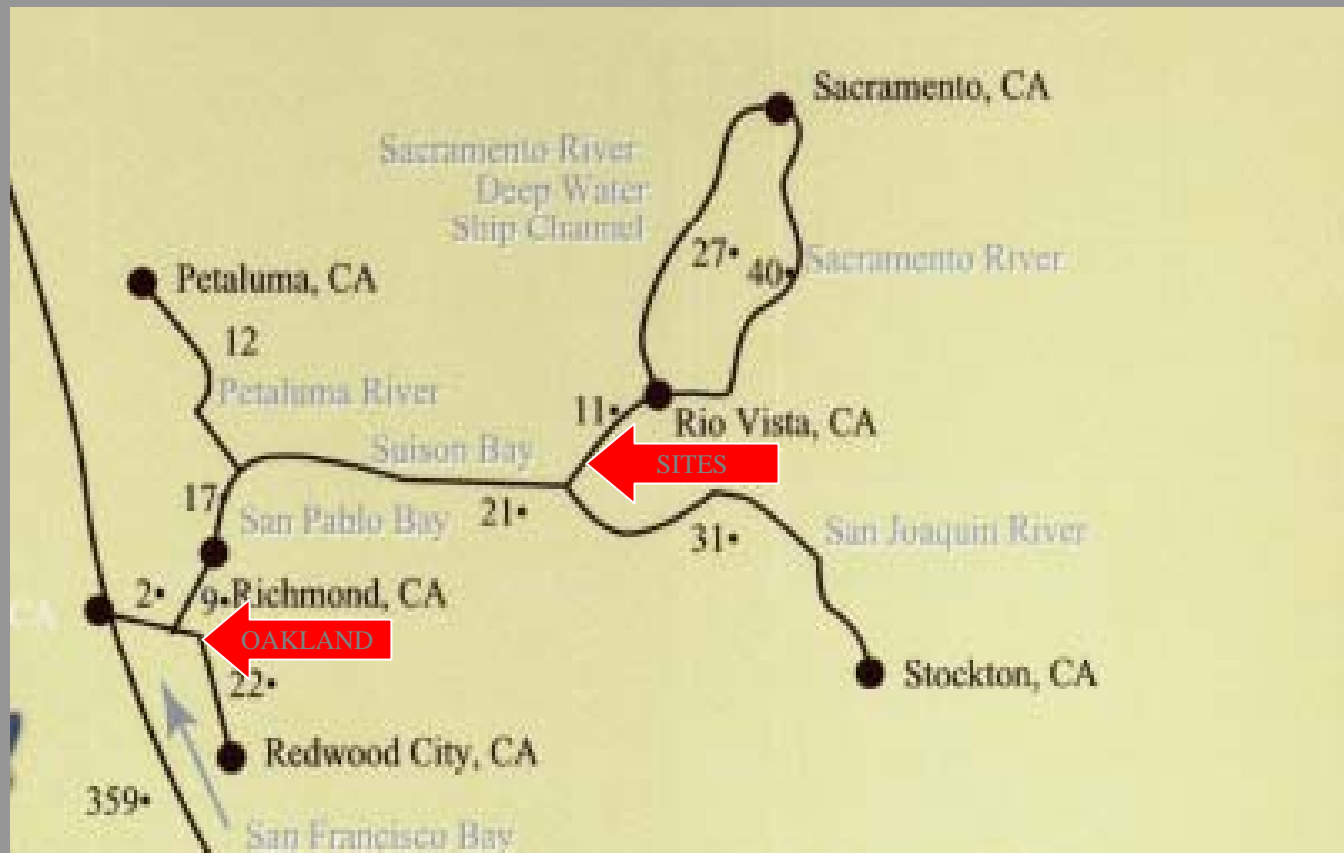
HOPPER BARGE DESIGN



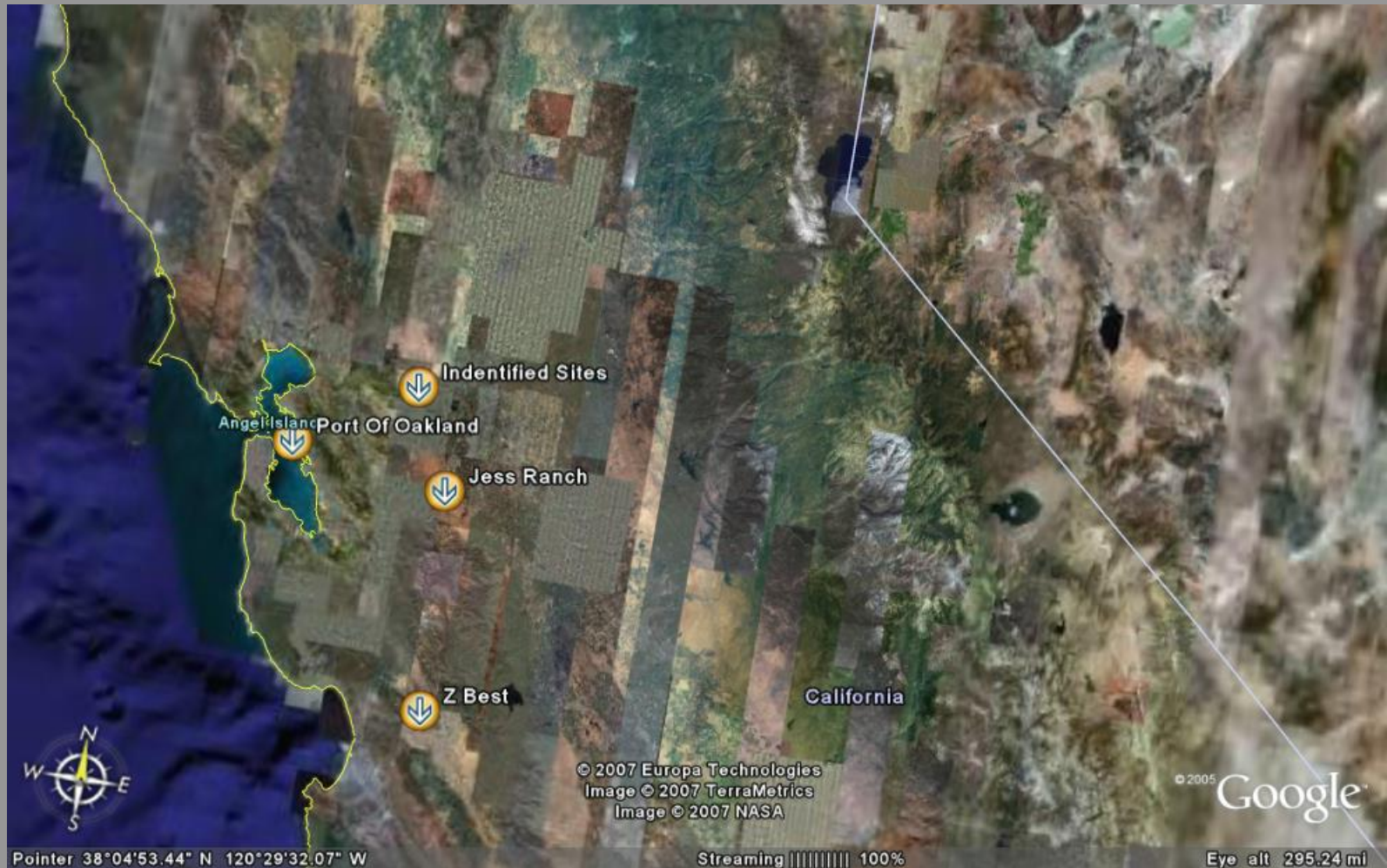
Existing Barge Loading / Unloading Facilities At and Near Port of Oakland



Identified Sites 47 Miles by Water from Port of Oakland



Comparison of Proposed Locations



Identified Sites Have Marine Access



1/24/2006

Cost Analysis / Benefit

- Based on 1000 tons per day all preliminary cost estimates show this project to be cost effective
- With 10 to 15 year contracts for delivery of material to proposed facilities this project can be self-funding

Our Strengths

- Who we are

Alameda County Industries



Alameda

San Leandro

ACI's history is based exclusively in California's Bay Area and dates back to the late 1800's through its affiliate, South San Francisco Scavenger, when refuse was collected using horses and carts. Independently owned and operated, ACI partners collectively embody generations of solid waste and recycling experience. Most of the old photographs posted on this site are from ACI's own archives. The recent trend toward environmental conservation through recycling is but a return to the very roots of ACI. Recycling waste, or "scavenging" as it was often termed in the early years, was being performed under the direction of individuals linked to the current ACI team more than 50 years prior to the advent of compaction collection vehicles in the 1950's - which nearly eliminated recycling efforts for approximately 30 years.



South San Francisco Scavengers

SOUTH SAN FRANCISCO
SCAVENGER
— COMPANY, INC. —

PO Box 348 • 500 East Jamie Ct.
South San Francisco, CA 94080-0348
650.589.4020

BLUE LINE
TRANSFER, INC.

PO Box 348 • 500 East Jamie Ct.
South San Francisco, CA 94080-0348
650.589.5511



Peninsula Sanitary Service



339 Bonair Siding
Stanford, CA 94305

(650) 321-4236
pssi@pssi.stanford.edu



- Peninsula Sanitary Service, inc. Is a family-owned, independent hauling company that has serviced the Stanford community for over 50 years. PSSI provides garbage and recycling services, including collection, processing, and marketing of recyclables, operates a community drop off center, and provides recycling education and information for Stanford university community. PSSI is dedicated to servicing the university's needs as it does not service any other jurisdiction. PSSI is dedicated to the highest quality customer service delivered with pride and professionalism. Our success is based on our employees dedication to their jobs, PSSI, and Stanford university.



Recovery Products & Services Inc.

- Recovery Products & Services, Inc. (RPS) is owned by Greg Kelley and William Bacigalupi. RPS provides commercial recycling and recycling material brokerage services throughout Northern California and Nevada at the present time. The Bacigalupi family has been part of the Napa waste disposal and recycling history since 1916, when Archangelo Bacigalupi started collecting in waste and recycling with a single horse and wagon. As the City of Napa has grown, the family business has grown with it. Important milestones in developing Napa's recycling and collection business include the following: The company began recycling bottles, cans, wool clothing and rags, and disposing of trash in 1916. The company recycled food scraps with its herd of pigs from 1920 to 1950. In 1930, the company bought its first truck, a Model "A". In 1950 the company expanded its recycling to include cardboard and newsprint. The company signed the existing franchise with the City of Napa in 1967. In 1987, the company expanded daily commercial recycling of glass and cardboard routes. The company began curbside recycling and yardwaste collection for all residential customers at the street in 1990. The company processed and sold all of the recyclables and compost from the Clay Street facility. In 1993 the City of Napa agreed with the company that a new location was needed for our facilities and the site was developed. The company acquired the land on Tower Road in 1993 and designed and permitted the current City Material Diversion Facility (MDF). We switched to automated collection of residential garbage in 1996. Automated residential yardwaste collection began in 1998.



COMPOST:
make the most of your yard

AVAILABLE FOR PURCHASE

Organic Compost	High Quality Topsoil
\$7/cubic yard	\$17/cubic yard

NRWS will deliver for a fee - 10 cubic yard minimum.

Do you have yardwaste? We take leaves, branches, grass and other trimmings. As a NRWS customer, you can use your brown yardwaste cart. Place it curbside on your regular garbage service day. For larger loads, contact us and order a yardwaste debris box. To drop off yardwaste, go to 820 Levitt Way in American Canyon. (The gate fee is \$35/ton.) Call 255-5200 for additional service information.

 **NAPA RECYCLING & WASTE SERVICES 707-255-5200**

WESTAR Marine Services



WESTAR
MARINE SERVICES

Pier 50, Building C
San Francisco, CA 94158
westar50c@aol.com

415-495-3191
www.westarmarineservices.com



- ◆ Tugboats
- ◆ Barges
- ◆ Water Taxis
- ◆ Ship Assists
- ◆ Crane Barge Service
- ◆ Stores Handling
- ◆ Warehousing
- ◆ Fresh Water Delivery
- ◆ Tanker & Barge Escorts



PHOTOGRAPHY BY JAMES BERRY



Our Strengths

- What we have accomplished
- Our commitment to the environment
- The innovative approach to this project
- Our need and desire to accomplish this project
- Our financial ability

Key Benefits

- State of art composting facility
- Comprehensive environmental solution
- Reduced traffic
- Reduced greenhouse gases
- Cost effective long term solution
- Potential renewable energy option

Next Steps

- Would like to further discuss our proposal with ACWMA in private so we may disclose more information we are holding confidential at this time
- Would like ACWMA to participate in discussion with port of Oakland for siting of transfer facilities
- Would like to discuss to what level the authority would want to participate