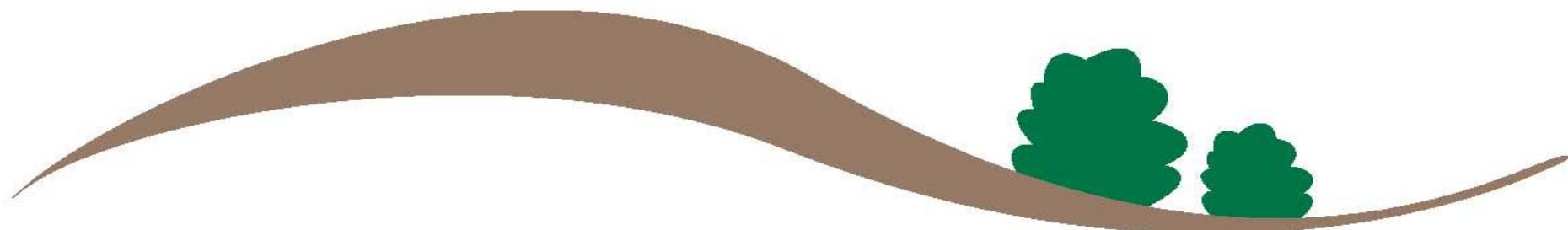


Inland Empire Regional
Composting Facility



INLAND EMPIRE REGIONAL

COMPOSTING

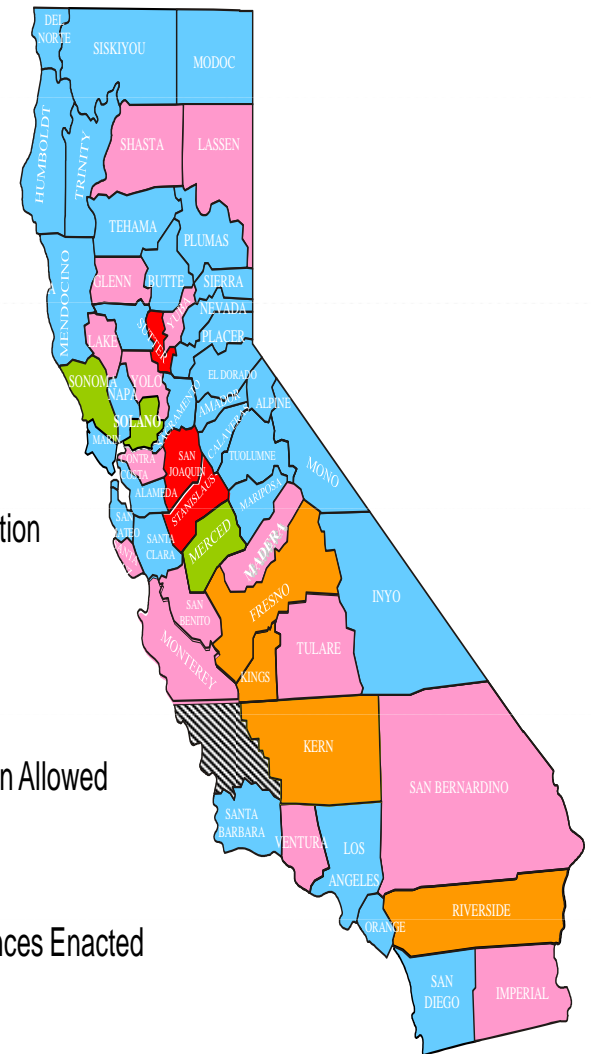
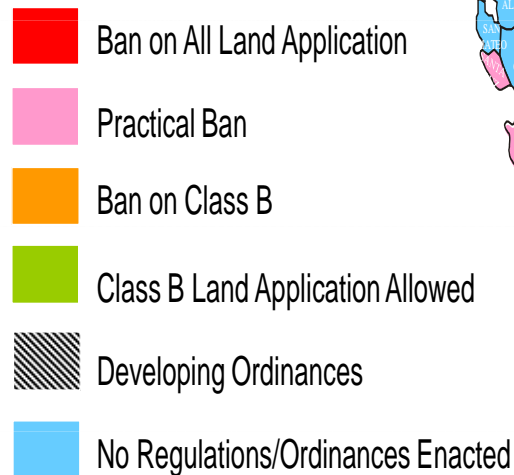
A U T H O R I T Y

Project Need

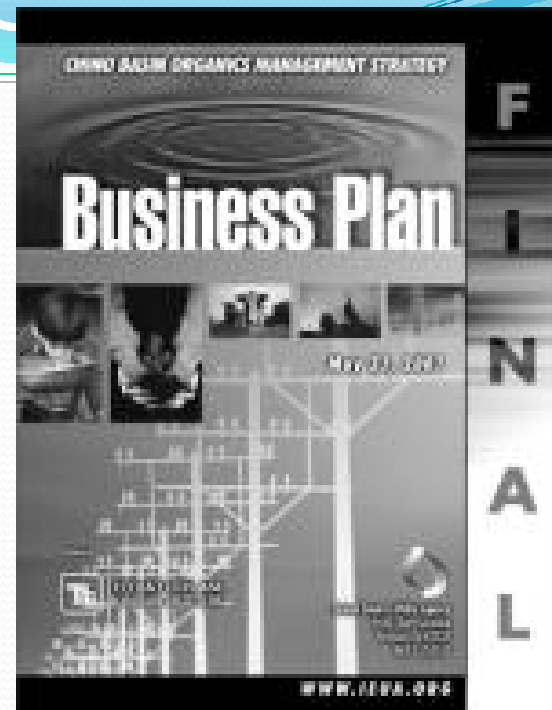
- Cost going Up
- Options going down
- Regulations
 - SCAQMD 1133.2
- Urban Encroachment

Biosolids Land Application in California

Status of County Ordinances



Organics Management Strategy Final Business Plan August 2002



“A comprehensive strategy for implementing a coordinated, cost-effective approach to managing organics in a phased incremental manner consistent with sound public works

and Empire Regional Composting Facility

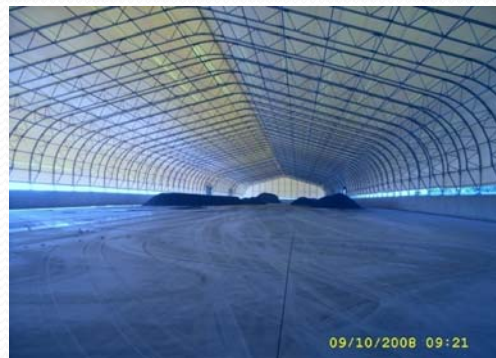


- *50/50 partnership IEUA and LACSD*
 - *JPA in 2001 (consistent w/IEUA Organics Business Plan)*
 - *Construction 2004 to 2007*
 - *Started operations April 2007*
- *Total cost \$85m (\$15m for property and IKEA warehouse, \$70m for improvements)*
- *\$5.8m/year O&M.*
 - *21 full-time staff*
 - *\$40/wet ton biosolids. Less than other recycling alternatives*
 - *Revenue from compost sales, delivery service, amendment tip fees*

and Empire Regional Composting Facility



- *Receives 205,000 wet tons/year*
 - *150,000 tons biosolids*
 - *All of IEUA's*
 - *17% SDLAC's*
 - *55,000 tons greenwaste*
 - *20 different sources*
 - *Net revenue*



Out with the Old

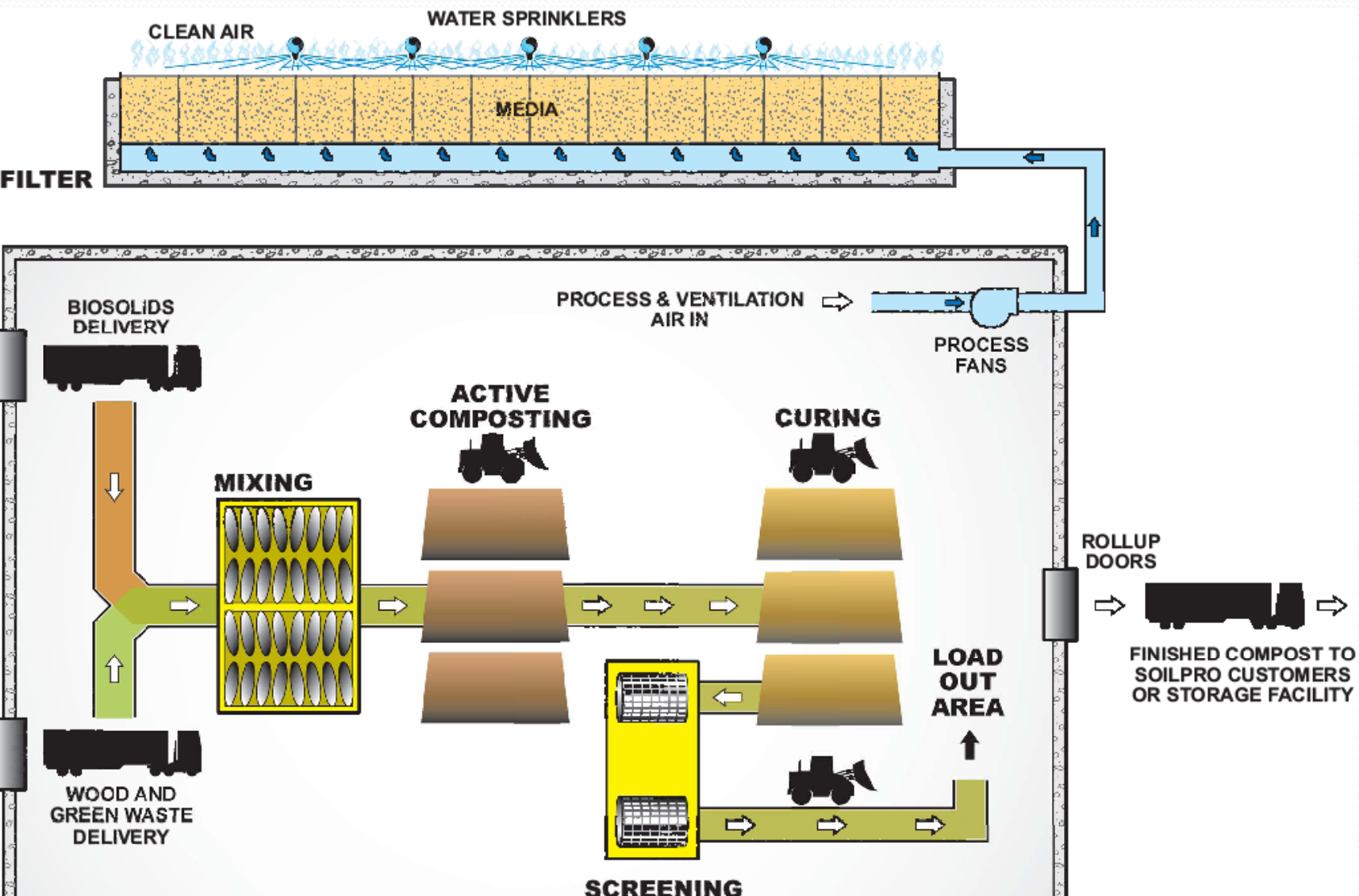
**Existing IEUA Composting Facility
Decommissioned in 2006**



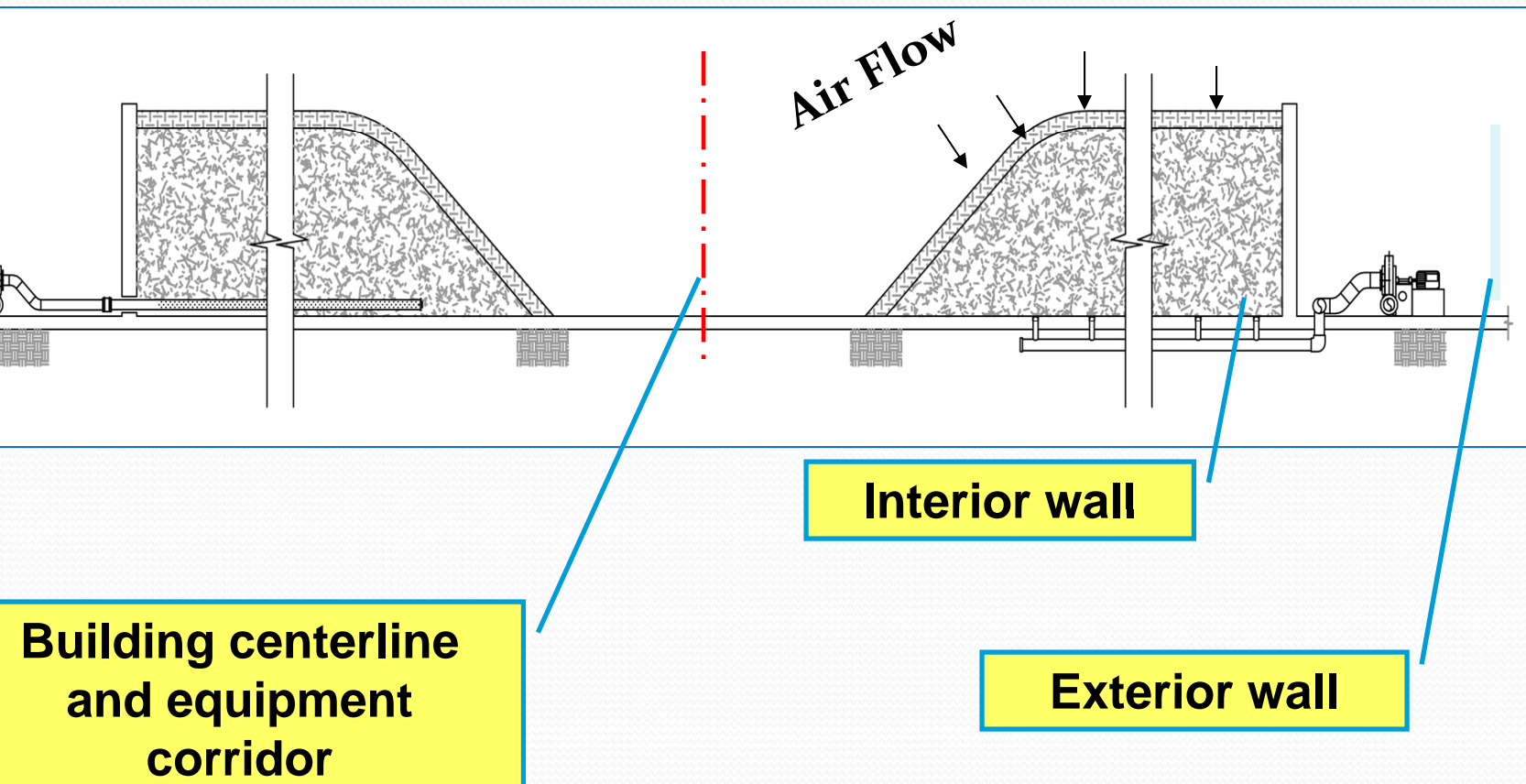
**IERCF – Constructed to Meet Rule 1133.2
Commissioned in 2007**



ility Description



Aerated Static Pile Composting



Construction Started 2004



IKEA Before and After



Source Test Scope & Methods

Filter Sampling
50+ Samples Collected
Testing Over 5-days
High & Low Flow
Tested 2009 – Passed!
Tested 2011 – Passed!



April 2011	Required	Actual
DOCs	80%	98.3%
Ammonia	80%	98.4%



Source Test Conducted April 2011




Compost Sales and Marketing

40,000 cubic yards per year

0 customers

products:

- Base
- Premium
- Topdressing



PREMIUM COMPOST BENEFITS

- Adds valuable organic matter - improving soil structure
- Improves the moisture holding capacity of light, sandy soils
- Reduces the bulk density of heavy, clay soils - increasing moisture infiltration and aeration, slowing soil compaction
- Reduces soil erosion and nutrient leaching
- Provides plant nutrition, improving plant vigor

HOW MUCH PREMIUM COMPOST DO I NEED?

ONE CUBIC YARD OF COMPOST COVERS:

648 sq. ft.	↔	1/2" depth
324 sq. ft.	↔	1" depth
162 sq. ft.	↔	2" depth
108 sq. ft.	↔	3" depth

CUBIC YARDS REQUIRED TO COVER 1,000 SQUARE FEET

1/2" layer	↔	1.5 yd ³
1" layer	↔	3 yd ³
2" layer	↔	6 yd ³
3" layer	↔	9 yd ³

GUARANTEED MINIMUM NUTRIENT ANALYSIS

Total Nitrogen (N)0.75%
Water Insoluble Nitrogen*0.75%
Available Phosphate P ₂ O ₅1.0%
Soluble Potash (K ₂ O)0.25%
Iron (Fe)1.0%

Nutrients are derived from composted biosolids (treated sewage sludge).


*Slow release nitrogen

Soil Amendment Ingredient List
Composted biosolids (treated sewage sludge), forestry products, yard trimmings, and stable bedding.

Information regarding the contents and levels of trace elements in this product is available on the internet at <http://www.aapfco.org/metals.htm>.

SoilPro Products Premium Compost is sold in bulk form, by the cubic yard or ton.

MANUFACTURED BY:



12645 Sixth Street, Rancho Cucamonga, CA 91739 Telephone (909) 993-1500
www.ierca.org






Quality Control

All products meet and exceed compliance requirements using the static aerated pile method

- EPA §503.32(a)(7) for pathogen reduction
- EPA §503.33(b)(5) for vector attraction
- CalRecycle Title 14 (similar to EPA 503 but includes a separate oversight)
- US Composting Council Seal of Testing Assurance (STA)

US COMPOSTING COUNCIL
Seal of Testing Assurance

Island Empire Organic Composting Authority
Jen Cleveland
12445 Pacific Street
Kaiser Center
CA 94726 (925) 995-1910
Product ID/Signature: Compost
September 2011 STA

Date Sampled/Received: 07 Sep. 11 / 08 Sep. 11

COMPOST TECHNICAL DATA SHEET

Compost Parameter	Reported on basis of sample	Test Results	Test Results
Plant Materials	% wet weight basis	Not reported	Not reported
Minerals Content	% wet weight basis	25.0	
Organic Matter Content	% dry weight basis	49.7	
pH	none	7.43	
Stable Solids	After (months/years)	15	
Particle Size or Screen Size	maximum aggregate size, inches	0.30	
Stability (in Residue) (percentage)			Stability Rating:
CO ₂ Evolution	mg CO ₂ /g 10d-Mg	6.4	Stable
Stability Indicator (Stability)	mg CO ₂ /g 10d-Mg	2.8	
Percent Biodegradation	average % of compost	6.0	
Relative Germination Vigor	average % of compost	104	
Index Pathogens	INDEX PATH: per TST-01A, Class A, except, at CFR § 193.15(a)	Pass	Partial compliance
Trace Metals	INDEX PATH: per TST-01A, Class A, except, at CFR § 193.15, Table 1 and 2	Pass	Substantial

Participants in the US Composting Council's Seal of Testing Assurance Program have shown the commitment to test their compost products on a prescribed basis and provide this data, along with compost and test instructions, as a means to better serve the needs of their compost customers.

Laboratory Group: Reg 11 B Laboratory Number: 1999111-11
Facility: Island Empire *Jen Cleveland* www.compostcouncil.com



Energy

Solar installed 2008

*Wind power Installed
2011*



Solar Panels generate 1 megawatt – 50% of
the power required to operate the IERCF

12/18/2008 09:13



wards

AAEE Leadership in Engineering

CRRA Dave Hardy Leadership in Organics

SWANA Excellence in Composting Systems

USCC Excellence in Marketing Program Presentation

