



OMNI

Hydroxyl Radical Laundry System Case Study

Client: Rockport Healthcare Services

Point Loma Convalescent Hospital, San Diego CA

Four Seasons Healthcare & Wellness Center, W. Hollywood CA

York Healthcare & Wellness Centre, Los Angeles CA

Highland Park Skilled Nursing & Wellness Centre, Los Angeles CA

Goals:

Conserve Water, Conserve Natural Gas, No Installation Cost,
Improve Linen Quality, Streamline Laundry Operations

Results Total for 4 Facilities

Annualized Water Savings 2,817,360 Gallons

Annualized Gas and Water Savings \$37,496

Method:

During pre-installation site visits Omni technicians observed and reported on sorting and loading, wash formulas, rewash rates and general linen condition. Areas to improve through in-servicing were targeted. Omni Lux Generators and chemical dispensers were installed in each laundry. Water temperatures, chemical doses, and water levels were optimized to produce hygienically clean linen at lowest possible water level and temperature achievable with existing washers. At 90 days post-installation Omni prepared a measurement and verification study of savings compatible with the Department of Energy's *September 2000: Measurement and Verification Guidelines for Federal Energy Management Projects*.



Actual water and gas bills pre-installation vs. post installation showing change in gallons of water and therms of natural gas were charted for 3 months each facility. Average monthly savings were annualized to produce total annual savings data.

February 12, 2016

Case Study Data

GAS	2015			2014			Price
	October	November	December	October	November	December	
Facility	October	November	December	October	November	December	Per Therm
Four Seasons	2129	1938	1529	2314	2223	1156	\$0.79
York	1155	1103	1845	1141	1129	1746	\$0.79
Highland Park	651	1279	2104	877	1254	1603	\$0.79
Point Loma	1295	1580	2388	2147	2118	2545	\$0.69

WATER	2015			2014		
	October	November	December	October	November	December
Facility	October	November	December	October	November	December
Four Seasons	4488	27794	28908	5623	32231	30785
York	7597	7597	6755	9048	9048	7971
Highland Park	3565	3765	3763	4239	4385	4103
Point Loma	12535	12691	13054	17101	15833	13799

Change	2015 vs. 2014		3 Month Total	Annual Savings
	October	November		
\$ 146.15	\$ 225.15	\$ (294.67)	\$ 76.63	\$ 306.52
\$ (11.06)	\$ 20.54	\$ 288.45	\$ 297.93	\$ 1,191.72
\$ 178.54	\$ (19.75)	\$ (59.16)	\$ 99.63	\$ 398.52
\$ 587.88	\$ 371.22	\$ 897.28	\$ 1,856.38	\$ 7,425.52
SAVINGS	NATURAL GAS		Total	\$ 9,322.28

Reduction	2015 vs. 2014		Annual Gallons	Annual Savings \$0.01 per Gallon
	October	November		
34050	133110	56310	408600	\$ 4,086.00
43530	43530	36480	522360	\$ 5,223.60
20220	18600	10200	242640	\$ 2,426.40
136980	94260	22350	1643760	\$ 16,437.60
SAVINGS	WATER	Total	2817360	\$ 28,173.60

Water Use Restrictions
 On May 5, 2015 the State Water Board adopted a new water conservation Emergency Regulation. The Emergency Regulation mandates a 20% reduction in potable water use for all City water users focused on reducing non-essential water use including landscape irrigation. The State has made non-compliance with such prohibitions punishable by a fine of up to five hundred dollars (\$500) for each day in which the violation occurs



Market Conditions
 Executive Order B-36-15 State of California
 Governor Mandated State-wide Water Conservation

	Nov 14	Nov 15
Total Therms used	2,118	1,580
Daily average Therms	66.2	49.4
Days in billing cycle	32	32
		- 25.4%

CONSERVATION INFORMATION				
	DAYS	USAGE BILLED IN HCF*	AVERAGE GALLONS PER DAY	% CHANGE
THIS YEAR	29	486	12,535	-26.70
LAST YEAR	29	663	17,101	
Thank you for conserving water				
*1 HCF (HUNDRED CUBIC FEET) = 748 GALLONS				