



2007
 Partner for Change Award
 (Making Medicine Mercury Free*)
 Application

Organization Name: Saint Francis Hospital and Medical Center
 (As it would appear on the award!)

Health System Name: Saint Francis Care

Subscriber ID #: 017-V-01

Address: 114 Woodland St

City: Hartford

State Code: CT **Zip Code:** 06105

Phone: 860-714-5400

Fax: 860-714-8087

Primary Contact: Robert Falaguerra
 Construction

Title: Vice President of Support Services &

E-mail: rfalagu@stfranciscare.org

Department: Administration

Secondary Contact: David Crowell
 Service

Title: Director of Environmental

E-mail: dcrowell@stfranciscare.org

Department: Environmental Services

***** H2E Award Application Status/History*****

Award Type	Years Won	2007 Consideration	Special Criteria
Partner Recognition			
Partner for Change		✓	10% recycling rate
Environmental Leadership			25% recycling rate, MMMF- Section III criteria
*MMMF			Met all MMMF criteria in award in Section III

Optional: Award winners receive a congratulatory letter and award packet sent to the contacts you designate below. Consider addressing the letter to your CEO or other leadership and let us know up to 2 additional people to copy. If no names are listed below, the letter and packet will be sent to the Primary Contact. Please indicate a different mailing address if necessary.

Award Letter Name and Title: Christopher Dadlez, President and Chief Executive Officer

Cc#1 Name and Title: Robert Falaquerra, Vice President Support Services & Construction

Cc#2 Name and Title: David Crowell, Director of Environmental Services

Award Application Checklist: Please confirm with an "X" in the boxes below.

- X Reviewed the Award Eligibility Guidelines and Application Guidelines?
- X Referenced and attached supporting documentation of no more than 15 pages?
- X E-mailed as much of this application as possible, including supporting documents, to awards@h2e-online.org?
- Included 3 copies of your full application package?
- X Facility is an H2E Subscriber? Subscribe at www.h2e-online.org/Registration/
- X Confirmed no EPA or OSHA Violations in past 12 months?

Name: David Crowell

Signature: David Crowell

All applications must be received at the address below by Feb 14, 2007.

If you have any questions or need assistance, please contact the H2E Awards Coordinator at 603/795-9966 or awards@h2e-online.org.

Application Instructions

Eligibility Guidelines

- ✓ Applicants must be both an H2E Partner & Subscriber to apply for an H2E Award. To become a Partner, please join online at www.h2e-online.org/partners/joinnow.cfm. To become a subscriber, please subscribe at: www.h2e-online.org/Registration/.
- ✓ Applicants must be in compliance with OSHA and EPA regulations for the last 12 months. Facilities that are in significant violation will not be considered. H2E Partners who submitted excellent applications, but had significant violations have been disqualified from receiving an award as a result. Don't let this happen to you. Take the time to check with your colleagues to find out if you've had a violation in the last calendar year, and visit H2E's [Understanding Your Compliance History](#) webpage for guidance. If you are unsure whether a violation is likely to disqualify you, please contact the H2E Awards Coordinator at awards@h2e-online.org.
- ✓ **Partners for Change (PFC) Award** requires a 10% recycling rate and other criteria that can be found at <http://www.h2e-online.org/awards/apply.cfm#pfc>.
- ✓ **Environmental Leadership Award (ELA)** award winners are chosen among the best PFC applications but also must meet a 25% recycling rate and all the Making Medicine Mercury Free criteria. ELA criteria can be found at <http://www.h2e-online.org/awards/apply.cfm#ela>.
- ✓ **Making Medicine Mercury Free (MMMF) Award** requires answering all the questions in Section III of this application. <http://www.h2e-online.org/awards/apply.cfm#mmmf>.

Application Guidelines

- ✓ If this is your first time applying for an H2E award, you may receive credit for pollution prevention/environmental work you've been doing since the H2E program's inception in 1998. If you've previously applied and received any H2E award, please only include the work done since your last award application. H2E is looking for incremental improvements.
- ✓ All award decisions will be made based solely on the merits of the information provided in the award application.
- ✓ If you are using corporate health system policies, please attach policies and describe how these policies are being implemented at your facility.
- ✓ Award application materials become the property of H2E—they will not be returned.

How to Apply

- ✓ Please limit your supplemental materials to no more than 15 pages. Contact the H2E office at 603/795-9966 should you need to exceed the 15 page limit.
- ✓ Supporting documentation refers to sample policies, training programs, tracking forms, posters, and other information that could serve as a model for other Partners. We discourage the use of electronic presentations and meeting minutes as supporting documentation.
- ✓ Applications must be received both by post and electronic mail no later than February 14 at the addresses listed below. Incomplete or late award applications will not be considered for this award cycle. No supplemental materials will be allowed after February 14, 2007.

Mailing Instructions

- ✓ E-mail an MS Word copy of the application by February 14, 2007 to awards@h2e-online.org with as many of the supporting documents as possible in an electronic format. The H2E Awards Coordinator will reply to this e-mail to confirm receipt of your application.
- ✓ Also mail 3 hard copies of application package with all supporting documentation to: Hospitals for a Healthy Environment (H2E), PO Box 376, Lyme, NH 03768, Attention: H2E Awards Coordinator.
- ✓ **For Fed Ex or UPS deliveries, use 1 Lyme Common, Lyme, NH 03768** **Special Note: This application is comprehensive (i.e., it's long). It is meant to cover virtually every aspect of a hospital's environmental initiatives. BUT, H2E recognizes that your facility may not have made significant progress/changes in *all* areas every year. Use the sections as a guide to report on your achievements. Good Luck!**

I. Facility Information—Required

Facility Type	Total
In-Patient/Hospital	Adjusted Patient Days per Year ¹ 282628
	Or Other Metric (e.g. Patient Days) 163199
	# Licensed Beds 617
	# Staffed Beds 574
Ambulatory Care/Outpatient Clinics	# Outpatient Visits per year 82958
Long Term Care	# Beds 0
ALL	# FTE's 3525.33

¹Note: We prefer to use adjusted patient days as our primary standardization metric. Check with your Admitting or Finance Department to see if they track "Adjusted Patient Days." If not, please provide "other" standardizing metric. (Adjusted Patient Days = Ttl Patient Days X (Ttl Patient Revenue (Inpatient + Outpatient))/Inpatient Revenue)

**Please list and describe as necessary in the space provided and attach supporting documents.*

Waste Assessment Summary—Required. (Applications with incomplete waste summaries will not be considered. Please contact H2E for assistance if necessary.)

Baseline Year: 2002 (If the current year IS your baseline year, complete only baseline column)

Current Year: 2006

Waste Management Category	Pounds/Year		Percent of Total Waste		Annual Costs	
	Baseline	Current	Baseline	Current	Baseline	Current
Solid Waste			71	67		
Recycling/Reuse			14	20		
Regulated Medical Waste			14	11		
Hazardous Waste			1	2		
Total			100	100		

Note: Remember to include Universal Wastes within the recycling/reuse category.

Do the waste numbers above include construction and demolition debris? Yes No

Construction and Demolition Debris	Pounds/Year	Annual Costs
Amount of C&D waste going to solid waste	84,000	--
Amount of C&D waste being recycled	0	0

II. General Waste and Environmental Infrastructure

- A. Does your facility have any environmental management policies that guide your program or address overall corporate environmental responsibility. *

Yes- We have the following policies and plans: Environmental Purchasing Policy & Hazardous Material Policy

- B. Does your facility have a committee that is specifically tasked with oversight of environmental programs?

Yes No

Please describe, including department representation and frequency of meetings: Yes

Greening Committee- has members from the following departments: Administration, Construction, engineering, clinical engineering, environmental services, mission integration, patient care services, purchasing, planning and operations.

**Please list and describe as necessary in the space provided and attach supporting documents.*

- C. Do you track your environmental improvement initiatives in the JCAHO structure? If so, what were the related performance improvement projects for this year? Please share the indicators you used to determine success.

NO, We have been using our Greening Committee to set internal goals

- D. Describe your facility's staff training or education on mercury, waste management and pollution prevention.

Staff are trained to deal with any spills. We cover this in our annual Training overview. We utilize both a web-based program and department Visits to do education. Staff follow the Hazardous Material Policy.

- E. Are clinicians involved in your environmental programs? In particular, how have nursing staff contributed to your environmental programs? Please include the titles and/or specialty areas of the nurses involved.

Yes - Nursing is an integral part in our medical waste and pharmaceutical waste handling programs. All were established with how the programs would effect their daily work habits.

We continue to keep this in mind when we create new initiatives. Staff representation comes from our I.V. team, our operating departments and our critical care areas.

III. Mercury Elimination – MAKING MEDICINE MERCURY FREE

The following is the **Making Medicine Mercury Free Award (MMMMF)** criteria checklist. The **Partners for Change Award** requires completion of sections A, B and C and action in many of the other sections. To be eligible for the **MMMMF Award** (as well as the **Environmental Leadership Award**), you must meet **all** of the criteria listed in this Section.

If you previously won the MMMF award as indicated on the cover page, you only need to describe your mercury elimination efforts since that award.

Confirm completion of the work described by checking all boxes and by listing and describing in the spaces provided all attached supporting documents for review.

A. Mercury Policies

Yes 1. Established a facility policy statement (e.g., a resolution, pledge, administrative commitment letter) for the reduction and virtual elimination of mercury. (If you are submitting a corporate health system policy, please describe the implementation at your facility). *Please attach policy/statement.

Yes 2. Established a mercury management policy that includes:

Yes a. Protocols for safe handling;

Yes b. Mercury spill clean up procedures;

**Please list and describe as necessary in the space provided and attach supporting documents.*

Yes c. Disposal procedures - recycling or regulated safe disposal to avoid disposal in the waste stream (including mercury-containing items and dental amalgam, if appropriate);

Yes d. Education and training of employees about facility protocols, including information about mercury and its effects on human health and the environment; and

Yes e. Process to regularly review mercury use reduction and elimination progress for continuous quality improvement.

*Please read through policy to be sure the above components are referenced appropriately, and attach relevant policy(s).

Yes 3. Implemented a mercury-free purchasing policy that bans the purchase of mercury-containing items without prior approval (e.g., purchase may be allowed where a non-mercury device or chemical is not available. In this case, the request should include a plan to receive approval from Safety, manage the mercury safely, and to properly collect all waste). *

B. Clinical Devices

Yes 4. Replaced all patient mercury thermometers, including those sold in pharmacies and sent home with patients.

What non-mercury thermometer are you now using? 3M Tempa-Dot (oral) #5126 (rectal) #5192 Exergen Temporal #TAT-5000

Yes 5. Replaced all or majority (75%) of sphygmomanometers and have a replacement plan and phase out timeline in place for total elimination.

About what percentage has been replaced? 100

If not 100%, what is your timeline for elimination?

What type of non-mercury sphygmomanometers are you now using? Welch Allyn; model #7670-01 (wall mount), model #7670-03LF (mobile)

Yes 6. Replaced all or majority (75%) of clinical devices (bougies, miller-abbott tubes, cantor tubes, esophageal dilators, etc). Inventoried those remaining and have plan in place to substitute non-mercury devices.

Please describe which items have been replaced and explain the plan and timeline to totally eliminate the remaining devices:

100% have been replaced

C. Facilities

Yes 7. Implemented program to recycle fluorescent lamps.

**Please list and describe as necessary in the space provided and attach supporting documents.*

a. Are you using low-mercury lamps? Yes Yes No

b. Who is your recycling vendor and what is the final disposition of your lamps?

We Recycle

c. Is your facility using a lamp crusher? Yes No No

If yes, is glass recycled as well as filter? Yes No

If facility is utilizing lamp crusher, please describe training of employees using crusher equipment, and information regarding personal and area OSHA monitoring for mercury.

Yes 8. Implemented a battery collection program. Please indicate the areas (e.g. units) in the hospital where batteries are recycled.

Centralized collection location, for all units

Please indicate types of batteries you recycle and approximate percentages of total battery waste.

Yes-30% Ni-Cd Yes ,>1% Lead-acid Yes-40%Lithium ion
No Alkaline yes->1% Mercuric oxide Yes-29%Ni-MH

If you recycle batteries, who is your recycling vendor? **Clean Harbors**

Yes 9. Inventoried and permanently labeled all mercury-containing facility devices (boiler switches, relays, thermostats, etc.) and have a plan in place to ensure that these items will be replaced with non-mercury devices AND that the mercury-containing items will be recycled and/or handled and disposed of properly.

Please describe which items have been replaced, and explain the plan and timeline to totally eliminate the remaining devices: **All existing switches have been inventoried and labeled. As areas are renovated these switches are incorporated into the renovation plans. Timeline to change out is planned within the next five years.**

D. Laboratory

yes 10. Replaced B5 fixative and Zenkers stains with a non-mercury substitute.

Which replacement stains are you using for both products?

A 2 F fixative

Yes 11. Inventoried other mercury-containing lab chemicals with plan in place for substitution.

*Please attach inventory list of remaining mercury-containing lab chemicals, and the plan for substitution.

We currently have no mercury containing chemicals other than the phase out of the B5 fixative

**Please list and describe as necessary in the space provided and attach supporting documents.*

N/A 12. Inventoried all mercury-containing lab thermometers - replaced at least 75% with total phase-out plan in place. Please describe plan and timeline to totally eliminate the remaining thermometers:

We have none

Yes 13. Installed amalgam separators for all onsite dental chairs.

Not Applicable, we have no dental clinics associated with the facility.

Please attach information on what kind of amalgam separator(s) have been installed.

Centralized vacuum collection units were installed in 2005

E. Other Areas

Yes 14. The purpose of this question is to ensure that there is awareness that other mercury-containing products are being used in healthcare and to assess opportunities for replacement. The MMMF award requires at least a basic awareness of these issues. Please share your challenges and success stories at identifying and finding replacement products.

a. Pharmacy (thimerosal, phenyl mercuric acetate, phenyl mercuric nitrate)

We currently only have thimerosal still in use. Still looking for an alternative.

b. Cleaning Chemicals (e.g., certain brands of bleach)- We limit the use of Bleach. Bleach is not used as a regular cleaning agent. We are currently trialing the Dedre Imas line of general use chemicals.

c. Certain kinds of x-ray developer solution and film (if your facility has not yet moved to digital imaging).

We are all digital within the hospital

If your facility has eliminated other mercury-containing items that are not covered above, please list:

F. Construction

Yes 15. Have you instructed contractors and included standard contract language that requires recycling of thermostats, switches, and other mercury-containing devices from renovation projects?

Has your facility taken any measures to integrate 'green building' standards into your construction projects? Describe any inroads made in working with contractors to address mercury prevention during the construction process. Are using the Green Guide for Health Care (GGHC) to integrate green building and operations into your facility? Yes All new projects are reviewed with the green and LEED program attributes. We are also using rubber flooring wherever possible.

**Please list and describe as necessary in the space provided and attach supporting documents.*

G. Other Mercury Elimination Projects

X 16. Please describe other successful or innovative programs you have implemented to reduce/eliminate mercury, to educate your staff or community, etc.

*Please list and attach items as necessary.

We are virtually mercury free with the exception of the medication issue and some older switches and thermostats.

IV. Solid Waste Reduction, Recycling and Reuse Initiatives

Waste reduction is an essential component of any comprehensive environmental program. A 25% recycling/reuse rate is a criterion for the Environmental Leadership award and a 10% recycling rate is required for the Partner for Change Award -- thorough responses to the following two areas are REQUIRED for all Partner for Change Applications.

- A. **REQUIRED:** Please complete the Recycling and Reuse Checklist - Appendix A. Please highlight and describe specific programs in supporting documentation. I have attached the checklist: Yes X No
- B. **REQUIRED:** Referring to the data included in Section I, Waste Assessment Summary, and the Recycling Checklist, describe any innovative approaches and/or programs for solid waste recycling and reuse? Describe any programs your facility is particularly proud of: **We do as much source separation as possible. We capture most of our metals and insure that all universal waste is properly disposed of by maintaining central collection sites. Collection areas are also prominently located as to easily keep track of what is used and who is using them.**

V. Regulated Medical Waste Reduction (RMW) and Treatment Technologies

- A. Has your facility engaged in a regulated medical waste reduction program?
Yes X No
- B. Please describe any particularly successful approaches to medical waste minimization, including the quantity of waste reduced, cost savings, and/or environmental improvements. Please attach sample posters, labels, training information or other information related to red bag reduction efforts. We began using re-usable sharps collection equipment two years ago. We have also worked with large generating dept and have been able to reduce our medical waste generation by almost 8%.C. Waste Treatment/Disposal Technologies

**Please list and describe as necessary in the space provided and attach supporting documents.*

Waste Stream	Treatment Technology Incineration (I) Autoclave (A) Other (specify)	Final Disposal Incineration (I) Landfill (L)	If incineration, is there an available alternative?	
			Yes	No
All General RMW	A	L		X
Pathological Waste	I	I		X
Solid Waste	N/A	I		X

*H2E strongly encourages the use of non-incineration technology when alternatives are available. If *your facility uses incineration* for solid and/or general RMW waste disposal, H2E will take that into account when scoring comprehensive environmental performance.

D. Is any pharmaceutical waste being disposed of to the red bag or in a sharps container?
Yes No X

E. Do you have a waste segregation plan that ensures hazardous materials and non-infectious materials are not placed in RMW containers? (e.g., waste signage, training programs, etc.)*
YES

VI. Hazardous Chemical Waste Minimization Programs

Has your facility eliminated or reduced the use of ethylene oxide for sterilization?

Yes Yes No

Comments:

A. We currently use 100% Ethylene Oxide sterilizing gas cartridges in our 3M 5xl sterilizers. We also utilize an Abator system (since 1996) to eliminate Ethylene Oxide emissions during the exhaust faze of the cycle.

A. Has your facility eliminated or reduced the use of glutaraldehyde for disinfection/sterilization?

Yes Yes No If yes, what are you using instead: Cidex

B. Describe any green cleaning chemicals or techniques used by your facility: We are trialing green general cleaning products.

C. Has your facility reduced the use of chemical pesticides through the implementation of an integrated pest management (IPM) program?

Yes Yes No Please describe: Our IPM program uses the least amount of direct use chemicals possible. We utilize non-chemical catching devices both inside and outside.

Please describe your facility's plan or training on segregation of RCRA-regulated pharmaceuticals? (E.g. P- and U-listed, characteristic hazardous wastes) All points of generation have been identified and staff have received in-service education. Ongoing monitoring and collection is done centrally by a certified waste collection company. The pharmacy has an extensive program with its vendors to reduce incoming quantity

**Please list and describe as necessary in the space provided and attach supporting documents.*

- D. Does your facility have a program in place to recycle or reprocess solvents from the lab?
Yes No No
- E. Please indicate which chemicals you recycle and indicate any innovative approaches or cost-savings:
- F. Do you have any other chemical waste minimization programs in place?
Please describe:

VII. Environmentally Preferable Purchasing (EPP) Products and Practices

- A. Describe any environmentally preferable purchasing initiatives in your facility (including products or processes that reduce solid waste or hazardous waste volume or toxicity, have recycled content, are recyclable etc.) Please describe efforts—particularly success stories: We have moved to higher content post-consumer waste in our paper. We have also set up all copiers to default to the two page per copy format wherever possible. Operating room staff continue to look to re-use or donate packaging materials. Much of our Pharmacy shipments all come in re-usable containers vs cardboard.
- B. Does your facility have any specific or general “Environmentally Preferable Purchasing (EPP)” policies in place?* Yes
- C. Does your product evaluation committee consider environmental impacts in its product selection process? If so, provide examples of criteria. We always calculate the costs for disposal during any evaluation
- D. Are you working with your GPO on any EPP initiatives?
Yes Yes No If so, who is your GPO: Premier

VIII. Facilities and Construction

- A. Have you engaged in any of the following initiatives? Please describe efforts.
- Energy Efficiency: Yes- we are in the process of a major lighting initiative. We have also won the energy star award for the past two years
- Are you an EnergyStar Partner? Yes Yes No
- Are you participating in the E²C program (between ASHE and EnergyStar)?
Yes Yes No
- Water Conservation: Yes- we just build a new laundry that has reduced the water usage by two thirds.
- B. Has your facility taken any measures to integrate ‘green building’ standards or specifications into your construction and renovation projects? Please describe: We are in the planning

**Please list and describe as necessary in the space provided and attach supporting documents.*

phase of a new building project. Green Standards are being taken into consideration during this process and will be used wherever feasible.

- C. Describe any credits from the Green Guide for Health Care or LEED that your facility has successfully implemented or is in the process of implementing.

MEP and limited small projects to date as well as rubber flooring in smaller projects.

IX. Other Innovative Environmental Initiatives

Please describe any other unique or innovative environmental initiatives that may not have been covered in the categories above: We utilized an ozone system to save on fuel oil usage in the laundry. Our new ironers use a sealed hot oil drum instead of steam which saves energy. We also donated over eleven hundred (1150) pieces of furniture and equipment last year.

Note: Environmental Leadership award selections will be based on both comprehensiveness of environmental programs implementation, and innovation. H2E particularly wants to recognize those facilities that are 'raising the bar' for healthcare environmental improvements and involvement in sustainability issues.

X. H2E Goals

Please describe 3 key goals your facility plans to focus on in the year ahead. YOUR APPLICATION IS NOT EVALUATED ON THE BASIS OF YOUR FUTURE GOALS, but on the merits of your work in the past year. For more information, consult "How to Develop Your H2E Goals" on the H2E website located at <http://www.h2e-online.org/partners/samplegoals.htm>.

- Goal 1: Energy savings program-complete a full lighting retrofit using high efficient fixtures.**
- Goal 2: Utilize a firm to collect and re-cycle as much demolition waste as possible from two buildings being demolished this year.**
- Goal 3: Increase our "green cleaning" products by a factor of 20%**

**Please list and describe as necessary in the space provided and attach supporting documents.*

APPENDIX A—Recycling and Reuse Checklist

REQUIRED: Please complete the checklist below. Describe level of recycling/reuse program by using the following "Rating System". 5= a comprehensive program available in all areas (e.g., paper recycling). 0= no program. 1= a limited program that is just getting started. 2-4 is the range in between. Please highlight and describe specific programs in the description box and attach any supporting documentation. Under Approx. Revenue or Costs/Yr, please indicate revenue or cost-savings with a (+), and costs with a (-).

ITEMS – RECYCLING, REUSE OR ANY SOURCE REDUCTION	Program Status Rating: 0-5	Lbs. Per Year	Approx. Revenue or Costs/Yr	Description
Cardboard	5			Cardboard & Mixed paper
Paper, white	5			Includes confidential waste
Paper, mixed				
Newspaper				
Boxboard				
Plastic, #1PET				
Plastic, #2 HDPE				
Plastic, #5 polypropylene				
Plastic, #6 PS				
Plastic, mixed				
Shrink wrap				
Glass, clear				
Glass, colored				
Glass, mixed				
Oil (cooking, motor)	5			
Steel cans				
Aluminum cans				
Food waste (composting)				
Food donation				
Pallets				
Wood				
Tyvek				
Transparencies				
Ink jet cartridges	5		0	Includes printer maintenance service
Foam peanuts				
Ice packs / coolers				
Computers /Electronic equipment				
Toner cartridges	5	1800 units	0	Refill program supports printer repair and maintn.
Printer ribbons				
Sharps containers	5			
Batteries				
Fluorescent lamps	5			
Landscape (composting waste)				
Construction/demolition				
Solvents				
X-ray film				
Other				
TOTAL		1,032,075		

Saint Francis Hospital/Medical Center Hospital Waste Management

Regulated Medical Waste

- Items **SOAKED** or **DRIPPING** with blood or body fluids
- Tissues, organs, body parts (pathological waste – special packaging required)
- Containers of blood or body fluids that can not be easily emptied

SHARPS

Opaque Container

- Needles and syringes
- Scalpel blades, surgical staples, etc.
- Any contamination item that can puncture skin or the Red Bag

PLASTIC BAGS

Non-Regulated Waste

- General Waste
- Items with small amount of blood or body fluids
- Items contaminated with urine or fecal matter
- Food or related items
- All other items that are not recyclable
- IV Tubing no Blood/sharps

RECYCLABLES

Recycling Materials

- **White Paper – place in blue containers**
- Newspaper – place in labeled containers
- Cardboard – clean, no packing debris
- Glass, plastic & metal food containers

CHEMOTHERAPY

Regulated Hazardous Waste

- White or yellow containers with Chemotherapy Label
- Any item or material contaminated with a Chemotherapy agent