HCA Sustainability Plan

Overall Policy

HCA is a responsible and concerned citizen of all communities where it operates. Therefore, the minimum standard for HCA's environmental stewardship is meeting or exceeding all environmental legal and regulatory standards. In addition, HCA will protect and preserve the environment through, at a minimum, the following practices:

- HCA will encourage the recycling of materials where recycling is commercially practical and the minimization, consistent with the law, of waste streams which require additional processing.
- HCA facilities will consider the effect on the indoor environment before introducing a new product into the facility.
- HCA will encourage the continued reduction of energy usage throughout its facilities.
- HCA will evaluate, and where appropriate, incorporate environmentally-preferable alternatives when designing new construction and major renovations.

Also, as a Practice GreenHealth member, HCA seeks to:

- Virtually eliminate mercury in its facilities
- Reduce the quantity and toxicity of health care waste – from manufacturing, purchase and use of products and materials, to improved end-of-life management
- Minimize the use and exposure to hazardous chemicals, including persistent, bio-accumulative and toxic (PBT) substances
- Reduce health care's environmental footprint through resource conservation and other measurable environmental improvements
- Integrate sustainable design and building techniques with environmentally-sound operational practices to create true healing environments.

Organizational Structure

Sustainability Steering Committee – The Sustainability Steering Committee provides the overall guidance for HCA's Sustainability Program. The Committee is chaired by the Senior Vice President and Chief Ethics and Compliance Officer. It includes representatives from Operations, Quality, Finance, Facilities Management and

Engineering, the HealthTrust Purchasing Group, Design and Construction, Public Relations, Human Resources, the HCA Foundation, and Risk and Insurance. It meets on a quarterly basis.

Sustainability Coordinators – Sustainability Coordinators have been appointed at all hospitals. They are responsible for the implementation of the Program at their hospital. A job description has been published and distributed to all hospitals. All Sustainability Coordinators have access to the Practice GreenHealth site.

Task Forces – Four task forces have been established to work on environmental issues with company-wide application. They are Energy and Water chaired by Brian Weldy, VP, Engineering and Facilities Management Support; Construction and Major Renovation chaired by Greg Stein, VP, Design & Construction; Environmentally Preferable Purchasing chaired by Michael Jones, Director, Clinical Education and Sustainability,HealthTrust Purchasing Group; and Waste Stream chaired by Jerry Cecelic, AVP, Corporate Integrity & Sustainability. These task forces identify and research ideas within their areas of responsibility.

Sponsorships and Memberships

Practice GreenHealth – HCA and all HCA facilities are members of Practice GreenHealth (PGH). PGH is the nation's leading membership and networking organization for healthcare institutions that are committed to implementing sustainable, eco-friendly practices. PGH provides webinars, checklists and other tools at no additional cost to its members.

Healthier Hospitals Initiative -- HCA is a founder of the Healthier Hospitals Initiative (HHI). HHI's goal is use a coordinated approach to achieve sustainability throughout the health care sector, which will prevent environment-related illness, create extraordinary environmental benefits, and save billions of dollars in health care expenses. The basic tenets of the HHI agenda are to improve environmental health and patient safety, reduce use of natural resources and generation of waste, and institutionalize sustainability and safety. As members of HHI, HCA receives access to various sustainability tools.

Greening the Operating Room – HCA is a founding sponsor of the Greening the OR initiative. Greening the OR seeks to identify key interventions that can reduce waste, energy, worker exposure to hazardous chemicals and save money. This initiative is an attempt to collect data on these interventions and share them as a means to encourage widespread adoption across the sector. HCA is the first health system to recommend that all of its hospitals commit to Greening the OR.

Climate Corps Intern – For the last two years, in conjunction with the Environmental Defense Fund, HCA sponsored a Climate Crops intern to work on energy-related matters. These MBA students work on projects which are designed to both save money and reduce resource usage. Lighting options have been the focus of this effort for the last two years. It is anticipated that another Climate Corps intern will work with HCA in the summer of 2012.

Communications and Leadership

Intranet Websites -- There are two intranet websites related to the Sustainability Program. ECHO, Environmentally Conscious Healthcare Operations, contains an overview of sustainability activities and results for the company. It also contains links to external resources. PharmWaste contains tools and education on implementing an appropriate pharmaceutical waste disposal program at hospitals and ambulatory surgery centers. Shortly, the PharmWaste website will contain information on implementing a pharmaceutical waste disposal program at physician practices.

Other Communications -- Emails are periodically sent to sustainability coordinators regarding certain programs or events. An article regarding the Sustainability program was published on Atlas in early 2011. A periodic newsletter, called "The ECHO," containing articles about aspects of the sustainability program is published for the Sustainability Coordinators. The last issue was published in the fall of 2011.

Leadership – HCA personnel frequently present at sustainability conferences. There were three HCA presenters at the 2011 CleanMed conference, and an additional presentation occurred at the 2011 Association for the Healthcare Environment conference. HCA also frequently provides documents for posting and sharing on the Practice GreenHealth website and as part of the Healthier Hospitals Initiative. HCA, through its group purchasing operation, HPG, was a leader in establishing uniform environmental attribute questions for contracts with healthcare entities. These standardized questions were published and disseminated industry wide in conjunction with other healthcare entities and PGH.

Data Collection Efforts

Carbon Reduction Commitment – The United Kingdom requires all companies of HCA International's size to calculate its energy usage, which is then translated into greenhouse gas equivalents. This effort has started for HCA UK facilities and Greenhouse Gas information for energy used at the facilities (scope 1) and energy purchased by the facilities (scope 2).

Greenhouse Gas Data – Under consideration is the means and need to establish a methodology to identify and collect Greenhouse Gas information company wide for scopes 1 & 2. If this data is collected, this data would be published with year to year comparisons.

Waste Stream Data – Data on the various dispositions of solid waste will be collected for U.S. hospitals and some ASCs as part of the Integrated Waste Management contracts. In addition, construction debris data is being collected for new construction projects.

Waste Stream

Pharmaceutical Waste Disposition – PharmEcology has been contracted to identify the proper disposition of pharmaceutical waste. Pharmaceuticals in the water is an area of increasing publicity and interest. There are specific rules on the disposal of some pharmaceuticals and best practices that discourage sewering for all others. This program was piloted at five hospitals in 2011; full implementation at hospitals is expected in 2012. The implementation program for non-hospital settings is being developed. Non-hospital implementation is expected in late 2012 to early 2013.

Integrated Waste Management -- Waste Management and Stericycle both had successful pilots to manage all waste streams at a guaranteed savings over current spending. Dual source contracts have been awarded to both vendors. The vendors will achieve savings by renegotiating disposal prices and increasing recycling rates. The expected savings in the first year of this contract are in excess of $6 million. This project also includes tracking of various waste streams' poundage. There will also be training provided to employees on the proper disposal and recycling practices. In 2011, there was 10,700,000 pounds recycled through this effort.

Rechargeable Battery Recycling -- This is a program that recycles, at no cost to the facility, rechargeable batteries that no longer can hold a charge. In 2011, 14,220 pounds of rechargeable batteries were recycled rather than being landfilled.

Cardboard Recycling -- This is the second most cost-effective (behind aluminum) recycling stream. A checklist was developed and sent to every hospital to explore the feasibility of recycling cardboard. Most facilities already recycle to some extent. The other facilities are encouraged to begin cardboard recycling (upfront costs are offset by later savings).

Polystyrene Reduction / Increased Composting -- In conjunction with the Environmentally Preferable Purchasing Task Force, alternatives to polystyrene for takeout food containers are being considered. These alternatives do not biodegrade under ordinary landfill conditions. Normal consumer level composting also does not break down these alternative products. Consumer level composting also does not work with meats, fats, oils and greases. Because of these limitations, any normal composting program would require the separation of food waste left on a plate into compostables and non-compostables. Commercial composting generates the higher heats necessary to break down the polystyrene alternatives and also allows all food waste to go into the same container for composting. Unfortunately, the haul distance for many commercial composters makes this alternative unworkable. The Task Force will work on identifying alternative products, commercial composting locations, commercial composting on site, and where it makes sense, to encourage local governments to get into the commercial composting business.

Mercury Reduction – Almost all facilities have significantly reduced the amount of mercury-containing devices within the facility. The feasibility of creating a policy to describe the virtual elimination of mercury in our facilities and eliminate bulb crushing will be considered.

Other Recycling Opportunities -- As solutions are developed in one area of recycling, the Task Force will move onto the next area that appears appropriate.

Duplex Printing – We will work on identifying opportunities to set default printer and copier settings to duplex (print on both sides). This will cut paper use by nearly 50%. This setting has already been implemented at HCA Corporate. This approach currently has limited utility when the paper is to be filed with a two-hole top punch as is common in most clinical settings.

Integrated Pest Management – HCA was the first health system to develop specifications designed to decrease the amount and toxicity of chemicals used to control pests. These specifications were developed in conjunction with both a vendor and environmental services consultant. These specifications have been made available to other health systems through the Practice GreenHealth website.

New Construction

Platinum Building -- The Platinum Building in the UK is the equivalent of a Medical Office Building combined with an Ambulatory Surgery Center. The inclusion of additional insulation and LED lighting in operating theaters (rooms) were both accomplished as a result of a sustainability review. .

Environmental Building Scorecards – The LEED process or other building scorecards may be used to determine which sustainability options to incorporate in new buildings. Currently, a medical office building in Reston, VA is planned as a LEED-certified building. In most instances, HCA will use the LEED scorecards as a guide, without making a specific effort to achieve LEED points. Rather, those items from the scorecard which make economic and environmental sense will be implemented. This will generally avoid the substantial administrative costs associated with pursuing certification.

Recycling or Reuse of Construction and Demolition Waste – In the first Quarter of 2011, a recycling program was instituted for new construction projects. In 2011, 9,524 tons of debris were recycled, constituting 79% of all debris disposed on these projects. Of this total, over half the weight was due to the recycling of asphalt.

Minimum Efficiency Standards -- There will be an exploration of the minimally-acceptable efficiency standards for equipment to be installed in new construction.

Alternative Energy Sources -- Solar, wind and combined heat and power energy systems can be incorporated into new construction. An evaluation of the feasibility of these systems will occur for all future projects. A new free-standing emergency room has recently been completed using geothermal conditioned water to reduce the energy cost for heating and cooling.

Energy & Water Usage

Recommissioning – This project reviews the operations of existing heating, ventilating and cooling (HVAC) systems and other energy use within hospitals with goal of identifying more optimal energy usage. To date, there have been over $12 million in savings as a result of this project.

Energy Operations Center – A center to monitor the energy performance of the HCA portfolio of buildings and adjust temperatures, airflows and time schedules is being established. Once fully implemented, additional energy savings is anticipated through these adjustments.

Minimum Efficiency Standards -- There will be an exploration of the minimally-accepted efficiency standards for systems installed in renovations and appliances purchased. Lighting is an area of particular emphasis.

Alternative Energy Sources – Five solar panel arrays have been installed at sites in Tennessee for the purpose of assessing their feasibility. At three locations,

assessments were conducted of the feasibility of using wind energy. Wind energy was not economically feasible for these locations.

Minimum Standards for Items used in Repairs -- An exploration of the minimum level of energy and water efficiency for certain repairs is underway.

Water Usage – Consultants assessed water usage at seven hospitals to identify opportunities for improvement. The results of this assessment are under consideration for implementation, as appropriate, throughout HCA.

Environmentally Preferable Purchasing

HPG Contracting -- The principles of Environmentally Preferable Purchasing (EPP) are built into the standardized Contracting Process used by HealthTrust (HPG), acting as the Group Purchasing Organization for HCA, and will be applied at the contract/category level. This process began in January 2009. While not all agreements cover goods or services with EPP relevance, the initial screening will be conducted on all agreements at the time of their regularly-scheduled expiration. Questionnaires have been developed and are being included in selected, scheduled HPG contracts to identify environmentally preferable attributes for the items covered in these agreements. This information is used in the source selection process.

Purchasing of Reprocessed Single-Use Devices -- There is an existing program to use FDA-approved reprocessing of single-use devices to avoid landfilling and to save costs. In 2010, over 296 tons of waste were diverted from landfills, and $17.6 million in cost savings were achieved. In 2011, 364 tons of waste were diverted, and $21.7 million in cost savings achieved.

Purchasing of Reusables -- Existing contracts provide the ability to purchase certain reusable items rather than disposable items. This applies to, among others, gowns, drapes, basins and instrument cases.

Identify Both a Standard and Greener Alternative – As contracts are renewed, an effort is being made to ensure that greener alternatives are made available for purchase.

Minimum Standards for Items to be Purchased – An exploration of the minimally-acceptable sustainability attributes for items to be purchased is being done for some items. For example, almost all computer-related purchases must be Electronic Product Environmental Assessment Tool (EPEAT) certified. Similarly, most consumer electronics offered for sale under contract must meet Energy Star criteria. .

Improved Availability of Information regarding Green Attributes -- Currently, information about chemical composition gathered when making the contracting decision is not available to the purchaser at the time of the purchasing decision. The incorporation of sustainability attributes and the ability to compare products based on their attributes has been requested to be included in the new purchasing system being designed and implemented.