

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY BY 9:03  
REGION 7

901 NORTH 5TH STREET  
KANSAS CITY, KANSAS 66101

ENVIRONMENTAL PROTECTION  
AGENCY-REGION VII  
REGIONAL HEARING CLERK

IN THE MATTER OF: )

Department of Veterans Affairs Eastern Kansas )  
Health Care System, including: )

Dwight D. Eisenhower Veterans Medical Center )  
4101 South 4<sup>th</sup> Street Trafficway )  
Leavenworth, Kansas )  
RCRA ID No. KS3360090002 )

and )

Colmery O'Neil Veterans Medical Center )  
2200 Gage Boulevard )  
Topeka, Kansas )  
RCRA ID No. KS0360010722 )

Respondent. )

Proceeding under Section 3008(a) and (g) of )  
the Resource Conservation and Recovery )  
Act as amended, 42 U.S.C. § 6928(a) and (g) )

**CONSENT AGREEMENT**  
**AND FINAL ORDER**

Docket No. RCRA-07-2008-0013

ENVIRONMENTAL PROTECTION  
AGENCY-REGION VII  
REGIONAL HEARING CLERK

09/10/09 AM 9:03

**I. PRELIMINARY STATEMENT**

This proceeding was initiated on January 19, 2009, when the United States Environmental Protection Agency, Region 7 (Complainant or EPA) issued a Complaint, Compliance Order and Notice of Opportunity for Hearing (Complaint) to the Department of Veterans Affairs Eastern Kansas Health Care System (VA or Respondent), a department of the federal government operating VA hospitals in Leavenworth, Kansas and Topeka, Kansas. Pursuant to Sections 3008(a) and (g) of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste

Amendments (HSWA) of 1984, Title 42 United States Code (U.S.C.), Section 6901 *et seq.*, the Complainant sought civil penalties for alleged violations of Section 3005 of RCRA, K.S.A.65-3437, and regulations comprising the authorized Kansas hazardous waste program. The Complainant and Respondent subsequently entered into negotiations in an attempt to settle the allegations contained in the Complaint. This Consent Agreement and Final Order (CAFO) is the result of such negotiations and resolves the liability of Respondent for matters alleged in the Complaint. This administrative action is being conducted pursuant to Section 3008(a) and (g) of the Solid Waste Disposal Act, as amended by the RCRA of 1976 and the HSWA of 1984, 42 U.S.C. § 6928(a) and (g), and in accordance with the EPA's Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, Title 40 Code of Federal Regulations (C.F.R.) Part 22 (Consolidated Rules of Practice).

## **II. CONSENT AGREEMENT**

1. Respondent and Complainant agree to the terms of the Consent Agreement portion of this CAFO and Respondent agrees to comply with the terms of the Final Order portion of this CAFO. The terms of this CAFO shall not be modified except by a subsequent written agreement between the parties.
2. Respondent admits the jurisdictional allegations of the Complaint and agrees not to contest EPA's jurisdiction in this proceeding or any subsequent proceeding to enforce the terms of the Final Order portion of this CAFO set forth below.
3. Respondent neither admits nor denies the factual allegations and legal conclusions set forth in the Complaint.

4. Respondent waives its right to a judicial or administrative hearing on any issue of fact or law set forth in the Complaint, and its right to appeal the Final Order.

5. Respondent and Complainant agree to conciliate the matters set forth in the Complaint without the necessity of a formal hearing and agree to bear their respective costs and attorney's fees.

6. This CAFO settles all civil administrative claims for the RCRA violations alleged in the Complaint. Complainant reserves the right to take any enforcement action with respect to any other violations of RCRA or any other provision of RCRA or other applicable law.

7. Nothing contained in the Final Order portion of this CAFO shall alter or otherwise affect Respondent's obligation to comply with all applicable federal, state and local environmental statutes and regulations and applicable permits.

8. The undersigned representative of Respondent certifies that he or she is fully authorized to enter the terms and conditions of this CAFO and to execute and legally bind Respondent to it.

9. Respondent agrees that, in settlement of the claims alleged in the Complaint, Respondent shall pay a mitigated civil penalty of \$51,501.00 as set forth in Section III.A of the Final Order. In addition, Respondent shall perform the Supplemental Environmental Project (SEP) as set forth in Paragraphs 10 through 17 below. The projected cost of the SEP is \$482,069.00.

**A. Supplemental Environmental Project**

10. Respondent shall perform a SEP as part of the settlement of this matter. Specifically, Respondent shall develop and implement a program to properly identify, segregate,

and manage pharmaceutical and chemical wastes in the VA Topeka and VA Leavenworth facilities. The SEP will have at least three phases, including but not limited to, analysis of the waste streams present at the facilities, developing current reference material including implementation of pharmaceutical waste software, and risk assessment to define processes and identify needs.

11. The SEP plan is Attachment 1 to this CAFO and is incorporated into the Consent Agreement portion of this CAFO by reference. Within thirty (30) days of the effective date of this CAFO, Respondent shall commence implementation of the SEP plan in accordance with the schedules contained therein.

12. The total expenditure for the SEP shall not be less than \$482,069.00. Respondent shall include documentation of the expenditures made in connection with the SEP as part of the SEP Completion Report required in Paragraph 17.

13. Respondent shall provide a SEP Completion Report within forty-five (45) days of the date of completion of the SEP project set forth in the SEP work plan. The SEP Completion Report shall be submitted to EPA's representative identified in Paragraph 18 below and shall include:

- a. a statement of the actual costs of performing the SEP as outlined in the SEP Work Plan;
- b. documentation demonstrating the SEP expenditures;
- c. a detailed discussion of how the SEP was implemented and the effectiveness of the SEP project; and

d. certification that the SEP has been fully implemented pursuant to the provisions of this CAFO.

14. Deadlines established herein for SEP deliverables may be extended by written agreement of the parties.

15. Respondent agrees that failure to submit the SEP Completion Report shall be deemed a violation of this CAFO and Respondent shall become liable for stipulated penalties pursuant to Paragraph 19 below.

16. After receipt of the SEP Completion Report described in Paragraph 13 above, EPA's representative will do one of the following:

- a. notify Respondent in writing of any deficiencies in the SEP Completion Report, in which case Respondent shall have an additional thirty (30) days to correct any deficiencies;
- b. inform Respondent that the project has been satisfactorily completed; or
- c. determine that the project has not been completed satisfactorily and seek stipulated penalties pursuant to Paragraph 19 below.

17. If Respondent receives notice that the SEP Completion Report is deficient pursuant to Paragraph 16, Respondent shall correct the deficiencies and re-submit the report within the thirty (30) day time period. If, upon resubmission, the deficiencies identified in the SEP Completion Report have not been corrected, EPA reserves the right to determine that the project has not been completed satisfactorily and to seek stipulated penalties pursuant to Paragraph 19 below.

18. All documents required to be submitted pursuant to this Consent Agreement shall be sent to:

Edwin Buckner  
Environmental Engineer  
AWMD/RESP  
U.S. EPA Region 7  
901 North 5<sup>th</sup> Street  
Kansas City, Kansas 66101.

19. Respondent shall pay stipulated penalties as follows:
- a. For failure to satisfactorily complete the SEP in accordance with the provisions of this Consent Agreement relating to the performance of the SEP, Respondent shall pay a stipulated penalty to the United States in the amount of \$161,033.00.
  - b. If the SEP is completed in accordance with the provisions of this Consent Agreement, but Respondent fails to expend at least 90 percent of the amount of money which was required to be spent on the SEP, Respondent shall pay a stipulated penalty to the United States in the amount of \$120,775.00.
  - c. If the SEP is completed in accordance with this Consent Agreement and Respondent spends at least 90 percent of the money required to be spent on the SEP, Respondent shall not be liable for any stipulated penalties.
  - d. For failure to timely submit the SEP Completion Report required by Paragraph 13 of this Consent Agreement, Respondent shall pay a stipulated penalty in the amount of \$300.00 per day for each day after the report is due, until the report is finally submitted.

- e. Failure to pay any portion of the stipulated penalties on the date upon which they are due will result in the accrual of interest on the unpaid portion of the stipulated penalties at the rate of two percent (2%) per annum.

20. Respondent agrees that in any public statement, oral or written, in print, film, or other media, made by Respondent making reference to the SEP, Respondent will include a statement that the SEP was undertaken in connection with the settlement of an enforcement action taken by the EPA for violations of RCRA.

#### **B. Reservation of Rights**

21. EPA reserves the right to take enforcement action against Respondent for any future violations of RCRA and its implementing regulations and to enforce the terms and conditions of this CAFO.

22. Except as expressly provided herein, nothing in this CAFO shall constitute or be construed as a release from any claim (civil or criminal), cause of action, or demand in law or equity by or against any person, firm, partnership, entity, or corporation for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous constituents, hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken from Respondent's facilities.

23. Notwithstanding any other provisions of the Consent Agreement and Final Order, an enforcement action may be brought pursuant to Section 7003 of RCRA, 42 U.S.C. § 6973, or other statutory authority, should EPA find that the future handling, storage, treatment,

transportation, or disposal of solid waste or hazardous waste at Respondent's facilities may present an imminent and substantial endangerment to human health and the environment.

### **III. FINAL ORDER**

Pursuant to the authority of Section 3008(a) of RCRA, 42 U.S.C. § 6928(a), and according to the terms of this CAFO, IT IS HEREBY ORDERED THAT:

#### **A. Payment of Civil Penalty**

1. Within thirty (30) days of the effective date of this CAFO, Respondent will pay a mitigated civil penalty of \$51,501.00. The effective date is the date when this CAFO is filed with the Regional Hearing Clerk.

2. Payment of the penalty shall be by electronic funds transfer and remitted to:

Federal Reserve Bank of New York  
ABA = 021030004  
Account = 68010727  
SWIFT address = FRNYUS33  
33 Liberty Street  
New York NY 10045  
Field Tag 4200 of the Fedwire message should read D 68010727  
Environmental Protection Agency

The Respondent shall send a copy of the transaction to EPA's representative identified in

Paragraph 18 in the Consent Agreement and to:

Regional Hearing Clerk  
U.S. EPA Region 7  
901 North 5<sup>th</sup> Street  
Kansas City, Kansas 66101



**B. Compliance Actions**

3. Within sixty (60) days of the effective date of this Final Order, Respondent shall submit documentation of all hazardous waste determinations performed at Respondent's Topeka and Leavenworth facilities since April 12, 2006.

**C. Parties Bound**

4. This Final Order portion of this CAFO shall apply to and be binding upon Respondent and Respondent's agents, successors and/or assigns. Respondent shall ensure that all contractors, employees, consultants, firms, or other persons or entities acting for Respondent with respect to matters included herein comply with the terms of this CAFO.

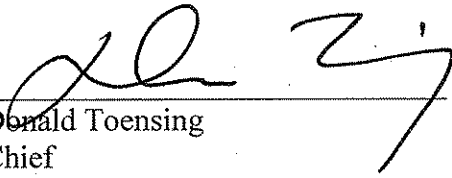
**D. Severability/Termination**

5. The headings in this CAFO are for convenience of reference only and shall not affect interpretation of this CAFO.

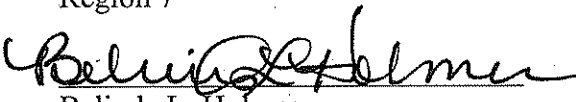
6. The provisions of this CAFO shall be deemed satisfied upon a written determination by EPA that Respondent has fully implemented the actions required in the Final Order.

COMPLAINANT:  
U.S. ENVIRONMENTAL PROTECTION AGENCY

8-18-09  
Date

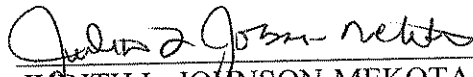
  
Donald Toensing  
Chief  
RCRA Enforcement and State Programs Branch  
Air and Waste Management Division  
U.S. Environmental Protection Agency  
Region 7

8/18/09  
Date

  
Belinda L. Holmes  
Senior Counsel  
U.S. Environmental Protection Agency  
Region 7

FOR THE RESPONDENT  
DEPARTMENT OF VETERANS AFFAIRS EASTERN KANSAS HEALTHCARE SYSTEM:

7 Aug 09  
Date

  
\_\_\_\_\_  
JUDITH L. JOHNSON-MEKOTA, FACHE  
Acting Director

IT IS SO ORDERED. This Final Order shall become effective immediately.

August 20, 2009  
Date

Robert Patrick  
Robert Patrick  
Regional Judicial Officer

**Supplemental Environmental Project**

**Department of Veterans Affairs  
VA Eastern Kansas Health Care System**

**June 2009**

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- 2: Deliverables and Performance Standards for Environmental Consultant Contract
- 3: Timeline of Third Party Expert
- 4: SEP Cost Summary
- 5: SEP Milestone Completion Date and Cost

## **PART I: Supplemental Environmental Project Overview**

### **A. Introduction**

The Department of Veterans Affairs (VA), VA Eastern Kansas Health Care System (VAEKHCS) agrees to undertake the following environmentally beneficial Supplemental Environmental Project (SEP). This is in accordance with the Consent Agreement and Final Order (CAFO) between VAEKHCS and the United States Environmental Protection Agency (EPA) Region VII. The purpose of this SEP is to obtain environmental and public health protection and improvements that would not have otherwise occurred without the settlement incentives provided by the EPA Supplemental Environmental Projects Policy dated April 10, 1998. The SEP will be implemented in three areas; (1) Enhanced Chemical Inventory Management System, (2) Enhanced Hazardous Materials and Hazardous Waste Training and (3) Risk Assessment and Risk Reduction. An overview of the SEP, need and role of the SEP and specifics of the SEP are further described herein.

### **B. Overview**

This SEP will be implemented at the VAEKHCS. The VAEKHCS uses several quantities of hazardous chemicals and materials in its facilities management and for the provision of medical care. It recognizes its responsibility to monitor and continuously improve its hazardous material management program. To meet this obligation, the VAEKHCS will establish a systematic program to assist in managing the purchase of chemical products and the tracking/management of products and waste, from "cradle to grave." VAEKHCS will also revise and improve its established practices concerning the purchase and management of hazardous materials, the waste minimization strategies and the generation and disposal of its hazardous waste. To implement these goals, VAEKHCS are creating new systems, protocols, and programs to manage hazardous materials from purchase to their ultimate disposal as hazardous waste.

In brief, VAEKHCS will develop these new systems, protocols and procedures to serve as the management system framework. These systems will outline the sequence of events associated with chemical purchases, use and disposal and the responsibilities associated with each role involved in the process. In recognition that each employee is the greatest asset in the success of implementation of this system, VAEKHCS will provide enhanced hazardous materials and waste training to all employees. Training will be designed that is specific to the types of materials and wastes encountered and the frequency of these encounters. Employees who encounter these materials more frequently will receive additional training. Lastly, VAEKHCS will implement risk assessment and management strategies to ensure success of the program.

### **C. The Need for and Role of the Proposed SEP**

VAEKHCS has implemented an Environmental Management System (EMS) at its facility. This EMS is known as the Green Environmental Management System (GEMS). This system establishes an overall environmental policy and a structure of roles and responsibilities for complying with environmental regulations. The components of GEMS are as follows.

- Appointment of a GEMS Coordinator and GEMS Committee.
- Training of the GEMS Committee.
- Conducting Initial GEMS Gap Analysis.
- Identifying Significant Environmental Aspects.

- Establishing Operational Controls.
- Setting Objectives and Targets.
- Training Staff on GEMS Policies and SOPs.
- Conducting Environmental Compliance Baseline and Periodic Follow-Up Audits.
- Annual Program Effectiveness Reviews and Reports.

Since the design and implementation of GEMS, the VAEKHCS has been evaluating the impact those systems have had on environmental compliance. While the GEMS program has significantly enhanced the ability to ensure compliance with environmental regulations, there are still opportunities for improved environmental compliance. A multi-component system such as this SEP will provide tools and strategies that will supplement and enhance the effectiveness of the existing GEMS system by more consistently and effectively raising the level of compliance, reducing waste and enhancing pollution prevention. The elements of this SEP effectively strengthen the level of performance within the continuous process of improvement essential to the GEMS program.

Currently, personnel track the information manually as they conduct the following activities:

1. Identifying opportunities to substitute less hazardous substances for some of the hazardous substances purchased;
2. Reducing the amount of hazardous substances purchased by the facility;
3. Maintaining a chemical inventory of hazardous substances that is current and well documented;
4. Tracking hazardous waste to ensure that each hazardous waste container is moved from a satellite accumulation area to a main accumulation area within the period of time required by regulations, and that each hazardous waste container is transported from the main accumulation area within the period of time required by regulations; and
5. Using a hardcopy Material Safety Data Sheet (MSDS) Library to ensure that each chemical product is not stored with any incompatible product and each hazardous waste is not stored with any incompatible waste.

These procedures are sometimes less precise or have limited coverage. VAEKHCS understands the importance of scrutinizing proposed purchases for (less toxic) product substitution, limiting purchases to just-in-time ordering and preventing redundant purchase of hazardous products by identifying unused product already available at the facility. The results of implementing this SEP will achieve improvements to environmental and public health protection through the implementation of improved environmental management systems. The SEP achieves this outcome by:

1. Evaluation, purchase and implementation, of appropriate software;
2. Establishing a chemical inventory and tracking system;
3. Applying source reduction and chemical recycling;
4. Implementing a hazardous waste tracking program for used chemicals and other wastes; and
5. Empowering all employees through awareness training to become active participants in environmental and sustainability initiatives.

The SEP described herein consists of a new electronic system that adds to, and enhances the existing pollution prevention, source reduction and hazardous materials management program by establishing new and integrated chemical and waste management as well as waste reduction



and pollution prevention through automated tracking tools and methods. This new electronic tool will allow facility environmental, safety and health managers to more effectively:

- Segregate waste streams to avoid cross-contamination of hazardous waste and non-hazardous waste streams.
- Provide real time access to the information needed for safer handling, better training, quicker emergency response, spill control and remediation.
- Facilitate reporting procedures under the Emergency Planning and Community Right to Know Act (EPCRA) regulations to enhance Tier I and Tier II reports.
- Train relevant personnel on pollution prevention practices, inventory control, waste management practices and proper segregation and storage procedures.

The SEP will provide VAEKHCS with new management tools for a comprehensive chemical environmental management system including:

- a chemical product inventory management system;
- a chemical purchasing strategy;
- source reduction and reuse strategies; and,
- an improved hazardous waste inventory management and tracking system.

#### **D. Specifics of the Proposed SEP**

The proposed SEP is designed to be a comprehensive hazardous chemical and hazardous waste inventory electronic management tool. As set out below, it is designed to assist staff to more consistently comply with and enhance awareness of environmental regulatory requirements and policies in the following areas:

##### **1. Enhanced Chemical Inventory Management System**

The VAEKHCS will establish a single point of entry for all products purchased through the logistics departments located on the Topeka and Leavenworth campuses. This action will establish accountability for all hazardous materials entering each campus and initiate tracking through the operational areas to the point of consumption or appropriate waste disposal. Implementation of the system will eliminate the majority of purchases made through credit cards.

Three Purchasing Agents will be hired to augment existing logistics staff in the implementation of the single point of entry system. The purchasing agents will aid in the development of the tracking mechanisms within the bar coding systems to easily identify hazardous materials as they enter VAEKHCS. As part of this effort, the purchasing agents will oversee data entry and updates for all materials in the SEP system. Environmental Health and Safety (EHS) staff will conduct chemical inventories. The EHS staff will also resolve questions of chemical compatibility after the SEP tracking system is implemented. The EHS staff will evaluate products' levels-of-hazard and work with the service lines and GEMS Committee to find less hazardous substitutes for existing hazardous materials. The inventory system will incorporate the following elements:

- Linkage of the Integrated Funds Control Point Activity, Accounting and Procurement (IFCAP) to MSDS tracking software, further ensuring the availability of accurate product information. If the product is not already in the MSDS system, the product doesn't clear the point of entry for use.
- Automated tracking of hazardous materials through a link to the existing Generic Inventory Package (GIP) from the point of entry to point of usage or when the material is determined to be a waste.
- Expand the types of information being tracked by the GIP system to include material types, storage locations, excess inventory for adoption, prohibited materials, and approved alternative materials.

**a. Chemical Inventory System**

The SEP will inventory each chemical product at the VAEKHCS. Information collected for each chemical product and waste will include, at a minimum: chemical name, CAS number if pertinent, person responsible for the chemical's use and storage, building, floor and room of storage as appropriate, container size, unit of measure, container type, vendor, as well as MSDS and chemical reference database information. A date field will also be used to track those materials that have a shelf life date, or a re-evaluation date for those chemicals that are aged or time sensitive and/or on the restricted chemical list. Such a date is necessary to ensure timely review of time sensitive material (e.g., peroxidizable materials). As re-evaluation dates and shelf life expiration dates approach, staff can manage these chemicals appropriately. Chemicals which are no longer needed will be recycled into the Chemical Adoption List. Annual chemical inventory audits will be conducted to assure that chemical containers are stored in approved storage locations. The dating will not be limited to "time sensitive materials" and will also include useable materials/products that are no longer needed by a user. Evaluation of long-term chemical inventory data will reduce the amounts of hazardous materials on-hand to the level deemed safe for routine facility operations.

**b. MSDS Tracking**

The VAEKHCS will finalize evaluation and purchase an MSDS tracking software system. The MSDS Library contains thousands of MSDS from manufacturers and distributors from all over the country. This library is a compilation of specific MSDS in use and stored at the VAEKHCS. The system allows all employees to have easy access to all MSDS documents with automatic updates. The system includes chemical approval tools that will prohibit unwanted products from entering the VAEKHCS facilities when linked to the purchasing system. The system includes an initial conversion of the existing MSDS documents to the new system. The system also includes a 24-hour, 365-day a year fax back service should an MSDS not be contained in the established MSDS database. The system is backed up by a team of specialists to provide exposure support, if necessary. The MSDS system will also be linked to the purchasing software, IFCAP, and inventory management software, GIP.

The MSDS Library has hyperlinks that automatically call up specific products and information linked to chemicals on the system. New chemical products that are added are incorporated by adding data sheets to the MSDS Library. The fields can be sorted or searched by MSDS #, Trade Name/Synonym, MFG Product Code Number, MFG Name and Current "As Of" Date.

The SEP tracking system will use the MSDS Library information to code each container of chemical product or chemical waste with key compatibility characteristics. Based on those characteristics, the SEP tracking system will evaluate if all of the containers of chemical products or chemical wastes that are being stored in the same containment area are compatible.

All employees that handle or have access to hazardous materials or hazardous waste will receive training on the MSDS system. Specifically, all EHS staff, all purchasing staff, all warehouse staff and all employees receiving hazardous materials handling training will receive detailed training on the system. All employees will receive training on accessing MSDS information through the automated system as part of the hazardous communication orientation training.

#### **c. Pharmaceutical Tracking**

The VAEKHCS will finalize evaluation and purchase a pharmaceutical tracking software package which will evaluate and identify pharmaceuticals in the hospital formulary by hazard classification. All pharmacy and nursing staff will receive training on the pharmaceutical tracking system.

The VAEKHCS will establish point of generation capture of all unused and expired pharmaceuticals from patient wards, satellite medication dispensaries, and the 11 Community Based Outpatient Clinics. Capture of unused/expired pharmaceuticals goes well beyond accounting for only those pharmaceuticals which are currently classified as hazardous upon waste status determination. This measure ensures compliance with existing regulation and establishes the culture for successful implementation of pharmaceuticals as universal waste. This regulation is expected to be promulgated in 2010.

#### **d. Product Substitution**

Product substitution is a key strategy for controlling hazardous materials, preventing pollution and minimizing the generation of hazardous wastes. Environmentally preferable product substitutes and safer alternatives will allow many highly toxic products materials to be replaced by less toxic materials. The VAEKHCS will systematically identify environmentally preferable substitutes when making purchasing decisions.

The inventory control software will include a list of restricted chemicals, identified by the medical center, which cannot be purchased without administrative approval by the GEMS committee, Environmental Health and Safety (EHS) Staff or approval by top management. Anyone, including researchers, requesting a chemical will be notified electronically if the requested chemicals have been flagged as "restricted" and that their order will require appropriate review before purchase. EHS staff will be notified simultaneously. The reviewing EHS staff will

first ensure that the service line area is equipped with proper storage equipment. Should the request be approved, the EHS Office will advise the service what steps must be taken before the material can be purchased, including engineering controls, personal protective equipment and training. EHS staff will also generate a list of chemicals that could be substituted for highly toxic materials presently in use. This list will be incorporated electronically into the system. All chemical orders will be submitted electronically to the system's central database. If an individual attempts to order a highly toxic or extremely hazardous material on the list, they will receive a message listing less hazardous substitutes for consideration. Further, all orders will be screened against the Chemical Adoption List (see Reuse/Recycle). The specific procedures and methods to implement this process will be developed by the EHS staff in coordination with service line managers and the GEMS committee, tested and confirmed during the implementation phase; and the final procedure will be described and communicated to EPA as part of the regular status reports required under this SEP.

The list of restricted chemicals will be developed by staff using guidance from sources such as the EPCRA Section 302 Extremely Hazardous Substances list and the OSHA list of Chemical Carcinogens. Special attention will be placed on the substitution of potentially explosive and reactive materials, as well as RCRA hazardous waste chemicals. Collecting this information electronically will help the VAEKHCS make better purchasing decisions on hazardous chemicals. This will also require staff ordering hazardous materials or hazardous products to first conduct a product substitution/clearance analysis to determine if a more environmentally suitable substitute exists.

#### **e. Hazardous Chemicals Purchased**

Reducing the amount of hazardous chemicals purchased is also a key strategy for controlling hazardous materials, preventing pollution and minimizing the generation of hazardous wastes. The VAEKHCS is committed to incorporating the principles of the American Chemical Society's "less is better" and "just in time ordering" strategies. The "less is better" strategy requires that purchasers order the smallest volume of chemicals required. The "just in time" strategy prevents ordering chemicals until they are actually needed. This ensures fresher product, reduces the breakage potential for containers, reduces the volume of chemicals disposed of as waste and ensures environmental compliance stock rotation. Implementation of the SEP will upgrade and enhance the existing systems and procedures in place by incorporating the American Chemical Society's principles.

To enhance pollution prevention/waste minimization efforts, a surplus chemical inventory listing will be established as a "Chemical Adoption List". Chemical products that are identified as no longer needed by a department, service line or laboratory will be listed in the adoption inventory. This will allow staff to identify surplus quantities of each chemical product at the facility. Before purchasing new quantities, staff will be able to assess if sufficient quantities are already present, avoiding the purchase of excess chemical products.

**f. Reuse/Recycle Program**

(1) Chemical Adoption List

The first step in product reuse will be the establishment of a Chemical Adoption List. A review of chemicals being stored and used should become a routine part of service line protocols. This SEP will implement an added level of systematic review to assure adherence to proper procedures. If a chemical is no longer required in a laboratory or work area, personnel must notify EHS. EHS will then transfer the chemical's status to the Chemical Adoption List. The Chemical Adoption List will be posted internally and updated as new chemicals become available for adoption. Upon receipt of a purchase request, purchasing agents must examine the Chemical Adoption List as the first source of supply. Only after reviewing the list can a purchasing agent go to an outside vendor. At least once a year, the EHS office will review chemical product supplies by reviewing each laboratory or work area with the manager of that area. Based on that review, staff for that area will update the Chemical Adoption List with any chemical products that have been determined to be no longer needed or identify any outdated products to be properly disposed.

This Chemical Adoption List process will enable services to use materials that would otherwise remain stored at the facility and eventually be disposed of because of the product's expiration date, purity, excess, lack of usefulness due to a change of process, or other reason.

The chemical products posted on the Chemical Adoption List will include the date the chemical is added to the list, its chemical name, volume, grade or purity, unit of measure, expiration/re-evaluation date and the current departmental owner. The chemical's location will not be listed to safeguard against misappropriation of the material. Chemicals on the Chemical Adoption List will remain at their location for no longer than 2 years. Interested users will contact EHS staff to facilitate transfer. All adoption requests will be reviewed by EHS. Should the adoption request be approved, the EHS Office will advise the lab, department or service what steps must be taken before transfer, including engineering controls, personal protective equipment and/or training. The EHS Office staff will review the chemical products in the central storage area at least once a year and any product that has been on the Chemical Adoption List for at least 2 years will be considered to be waste, and the EHS Office will make a waste determination and arrange to dispose of the waste material appropriately.

(2) Recycle

The VAEKHCS will further strengthen the commitment to recycling by improving white paper, corrugated cardboard, plastics, and aluminum recycling programs at both campuses. The VAEKHCS will purchase a corrugated cardboard baler to increase recycling capacity and will implement a new white paper sorting process to allow VAEKHCS to

greatly surpass the requirements of current Executive Orders on recycling. The training programs will emphasize the importance of recycling in attaining the overall sustainability goals of the VAEKHCS. Employee suggestions for recycling process improvement will be solicited during the training and through suggestions to the EHS staff.

**g. Checks and Reviews**

The VAEKHCS will employ one Industrial Hygienist (IH) to oversee the implementation of the enhanced tracking system portion of the SEP at both the Leavenworth and Topeka Campuses. This individual will coordinate with the Purchasing Agents and IT staff in the linkage of the MSDS software to the IFCAP and GIP software systems. The IH will be one of two individuals conducting the internal tracking system audits and will oversee the safety staff while they embed themselves in operational areas of VAEKHCS as described below.

The VAEKHCS will develop and implement an internal tracking system audit for safety staff to review all operational areas of both campuses of the VAEKHCS. The audits will identify and verify classification of all materials upon entry to the VAEKHCS and follow through consumption or appropriate disposal. The tracking system audits will be conducted quarterly in the first year of the SEP and once in the subsequent six months of the SEP. The internal audit will consist of two auditors conducting a 5-day audit of the combined campuses, reporting their findings to senior management and to the GEMS Committee and working with the areas with deficiencies to complete corrective actions. VISN 15, as part of the Veterans Health Administration GEMS Program, will be retaining a third-party contractor to conduct an independent multi-media environmental compliance audit at the VAEKHCS. The hazardous materials and hazardous waste findings of this audit will be reviewed to identify potential gaps in the VAEKHCS internal audits. The VAEKHCS will retain an independent contractor to develop the tracking system internal audit schedule and monitor it monthly for the first year of implementation (see Attachment 2).

The VAEKHCS will embed Safety staff each week in operational areas at each campus to increase operations process knowledge. Fifteen service lines and operational areas within the service lines have been identified as having increased potential to encounter hazardous materials. One safety staff member will spend two hours in each of these operational areas at each campus. The staff will embed in that area three times during the year to identify process changes and evaluate materials usage with the goal of ensuring appropriate materials tracking and handling while looking for hazard minimization opportunities. The VAEKHCS will retain an independent contractor to set-up the schedule and monitor the observations of the safety staff.

The VAEKHCS currently performs multi-disciplinary Environment of Care audits to evaluate the overall care systems within their organization. VAEKHCS will incorporate additional environmental compliance initiatives into the Environment of Care audits to look for new waste streams and share findings with the GEMS Committee.

Although not included in the cost element of the SEP, VAEKHCS will conduct routine (at least annual) GEMS Committee internal audits of all areas of the Topeka and Leavenworth campuses. These audits will identify areas of concern to the safety staff and will aid the GEMS Committee in the data gap analysis. The VAEKHCS will use the existing GEMS Committee Gap Analysis for assistance in identifying new resource needs. The safety staff member of the GEMS Committee will serve as a liaison in this effort.

## **2. Enhanced Hazardous Materials and Hazardous Waste Training**

EMS programs typically require personnel whose work functions and tasks have the potential to have a significant impact on the environment participate in appropriate training. The VAEKHCS has expanded this definition to include all employees in recognition of the potential all employees have to impact the environment and therefore increase the success of the sustainability goals of the VAEKHCS. The VAEKHCS will develop and implement a tiered training program for hazardous material and waste handling, management and disposal which will be specific to service lines and job functions. This training is supplemental to the hazardous material communication orientation given to all employees upon hire. The training, as described below, will provide approximately 1,700 employees with a least one hour of focused training. Additionally the VAEKHCS will provide a pharmaceutical waste disposal brochure to all patients.

- Tier I As a baseline, all employees currently complete a one-hour annual in-house training on GEMS awareness with enhanced training on recognition of hazardous materials. This training is not considered part of the SEP program. It is basic training.
- Tier II All employees will complete enhanced hazardous materials and hazardous waste service line training. This training will be an hour of training specific to the line of service and types of hazardous materials and situations likely to be encountered. This training goes above and beyond the requirements of 40 CFR 262.34 (a)(4) and 265.16(a) through 265.16(c) in that it is not designed for hazardous waste handlers but the entire VA community. The training will also incorporate pollution prevention, product substitution, recycling opportunity awareness and sustainability concepts. VAEKHCS will retain an independent contractor to develop and perform this training specific to the 21 Service Lines at VAEKHCS. The contractor will work with the heads of the 21 service lines to identify areas of highest impact within each of the service lines. The contractor will also identify and train on the areas identified as service line and facility-wide goals for sustainability. Having these goals clearly communicated will empower the employee to do the right thing. Employees not able to participate at the actual time of on-site training will be able to make up the training through an on-line training module.
- Tier III Employees who routinely handle hazardous materials currently receive hazardous waste handling and emergency response training in accordance with the facilities' Hazardous Waste Management Plan. These employees will receive an expanded training (2 hours) specific to those job functions handling or likely to handle hazardous materials and/or respond to situations involving hazardous materials and/or wastes. This tier of training will provide the basic

framework of regulatory compliance and policy, review emergency response actions, introduce remediation strategies, review hazardous materials handling and health and safety. It will also include a brief overview of the science and technology critical to understanding these areas. The employees identified to receive this training include all engineering staff, all safety staff, all pharmacy staff, all police staff and a representative from each nursing unit. VAEKHCS will retain an independent contractor to perform the on-site training.

Tier IV A comprehensive, 3-day on-site training course designed to improve the understanding of all aspects of hazardous materials management will be provided for key individuals from safety staff, pharmacy, laboratory and nuclear medicine staff. This intensive training is designed to combine scientific approaches to identify, evaluate and eliminate or reduce risks associated with conditions and practices related to hazardous materials from the cradle to the grave within a regulatory framework. VAEKHCS will retain an independent contractor to perform the on-site training. As an added Kansas community service, VAEKHCS will invite the GEMS coordinators or safety managers from the other hospitals within VISN 15.

Tier V VAEKHCS will send the safety manager and safety officer to an off-site ISO 14001 Certified Lead Auditor RABQSA Certified course designed for environmental program managers. The training will incorporate Environmental Management Systems (EMS) as part of the curriculum.

#### Community Outreach Training

VAEKHCS will provide training to all patients on appropriate disposal of pharmaceutical waste. A brochure will be mailed to all patients describing appropriate disposal of waste pharmaceutical products according to the current EPA guidance. This training brochure will potentially eliminate waste pharmaceuticals from being disposed of inappropriately.

### **3. Risk Assessment and Risk Reduction**

The VAEKHCS has committed to incorporating competency measures into the performance evaluations of key individuals who are responsible for the handling and management of hazardous materials and the disposal of hazardous and universal waste. These key individuals include all nursing, pharmacy, engineering, diagnostics, logistics, and environmental and safety staff. Supervisors will devise standards and evaluate through observation, and when feasible, develop meaningful and measurable results for evaluating practices of the aforementioned employees in the handling, management and disposal of hazardous material and hazardous and universal waste.

The VAEKHCS will develop and implement a tiered training program for hazardous material and waste handling, management and disposal which is in addition to the hazardous material orientation given to all employees upon hire. The training as described above will provide all 1,700+ employees with at least one additional hour of hazardous material and hazardous waste training specific to job functions.

Although not included in the cost elements of the SEP, the GEMS program will play a key role in assessing and reducing environmental risks at VAEKHCS. VAEKHCS will



use the existing GEMS awareness program to reach all employees and GEMS Committee to focus on specific issue evaluations.

VAEKHCS currently performs multi-disciplinary Environment of Care audits to evaluate the overall care systems within their organization. VAEKHCS will incorporate additional environmental compliance initiatives and verification of tracking system performance into the Environment of Care audits to ensure effectiveness of the implementation. The Environment of Care team will share findings with the GEMS Committee.

The VAEKHCS will employ three (3) additional purchasing agents to ensure compliance with the procurement process and identify and flag hazardous materials at the point of entry. The safety staff will work with the purchasing agents and logistics staff to track hazardous materials from the point of usage to disposal. The implementation of the SEP tracking system which only allows materials to enter through a single point will virtually eliminate credit card purchases. Purchases made under the credit card system often circumvent established hazardous material policies and increase the risk of inappropriate disposal. The SEP will significantly diminish this risk. Inventory control strategies minimizing stock levels of required hazardous materials will further reduce the risk of spills, releases, and inappropriate disposal.

VAEKHCS will use the existing GEMS Committee in the evaluation of current products and practices with a goal of identifying and evaluating replacement products and processes with less environmental impact. The purchasing agents will work with the GEMS Committee and the procurement system to identify current products and substitute greener products, when practicable.

## **E. Other Regulatory Compliance Enhancements by Implementing the SEP**

### **1. Sharing Information as part of EPCRA**

As part of Community-Right-to-Know requirements, VAEKHCS will provide relevant information to local fire departments, Local Emergency Planning Committees (LEPC) and State Emergency Response Commissions (SERC). This information can be transferred in various ways, including electronically. The SEP tracking system will assist staff in completing the Tier II by providing more accurate information about the quantities of chemicals at this facility.

### **2. Sharing Information as part of RCRA Emergency Preparedness**

As part of RCRA Emergency Preparedness requirements, VAEKHCS will make arrangements with local emergency responders. In the event of an emergency, information from the SEP tracking system will be shared with local emergency responders about the location within a facility of chemical products and hazardous materials and hazardous wastes, which will assist in determining the appropriate response by emergency responders to conditions they may encounter.

## **F. Justification for Designation as Outstanding SEP**

VAEKHCS has the ability to conduct all parts of the proposed SEP and it meets the requirements of the SEP policy. The proposed project is an environmentally beneficial project that VAEKHCS agrees is in accordance with the CAFO. The project is not inconsistent with any underlying statutes. The project augments the requirements of the Resource Conservation and Recovery Act and will reduce the likelihood of releases to the environment. Additionally, this project will enable better management of the chemicals and empower employees to do the right thing through knowledge.

This project meets the requirements of Pollution Prevention and/or Pollution Reduction categories. Accurate and up-to-date chemical product and hazardous waste inventories will enhance existing and create new Pollution Prevention and Pollution Reduction strategies by improving VAEKHCS's ability to track chemical purchase and use; thereby allowing VAEKHCS to identify opportunities to reduce the volume of chemicals purchased and reduce the storage, management and disposal requirements of these products. The SEP will enable VAEKHCS to identify opportunities for the substitution of less hazardous products, improve housekeeping in the purchase, storage and use of chemical products, facilitate management of the storage and disposal of hazardous waste through electronic inventory control and allow for the efficient modifications of hazardous material purchasing and handling procedures.

The dollar amount of the proposed SEP is substantially greater than the penalty amount proposed by EPA, and qualifies as a SEP of "outstanding quality" as outlined in the SEP policy, Section E Step 4 (see paragraph below).

VAEKHCS is responsible and legally liable for ensuring that the SEP is completed satisfactorily. Specific actions are identified that can be verified to determine successful project completion, the benefits are quantifiable, and any publication of the benefits of the SEP will state that it is as a result of the CAFO with EPA Region VII. VAEKHCS has sought input from management regarding the objectives of and process improvements to the tracking system, enhanced training objectives, and risk assessment and mitigation strategies. The SEP includes processes for ongoing input from the service lines, GEMS committee and management during the checking and reviewing stages of the program.

VAEKHCS is proposing that dollar-for-dollar credit be given to the VAEKHCS for implementation of this SEP. The SEP Policy provides two exceptions which allow for dollar-for-dollar mitigation credit:

1. for small business, government agencies or entities, and non-profit organizations who can demonstrate that the project is of outstanding quality; and
2. for any defendant/respondent if the SEP implements pollution prevention and the defendant/respondent can demonstrate that the project is of outstanding quality.

The SEP, as proposed, meets both of the criteria identified above for dollar-for-dollar credit. As a governmental agency or entity, VAEKHCS is qualified for dollar-for-dollar mitigation credit. This SEP also meets the criteria for implementing a pollution prevention initiative and is of "outstanding quality". This SEP will implement a systematic program and results in measurable improvements and public and environmental benefits. Credit for a SEP is determined by evaluating the environmental and/or public health benefits anticipated by the project. VAEKHCS is proposing a SEP that is a project of outstanding quality that meets all of the six factors listed in Section E, Step 4a of the SEP Policy, pages 15-16.

More specifically, the six factors are addressed as follows:

1. **Benefits to the Public or Environment at Large:** The SEP has the potential to significantly reduce discharges of pollutants to the environment. The results of this program go beyond simple compliance and are expected to achieve broader waste minimization and pollution prevention objectives, as described herein. SEP management of chemical inventories will decrease the amounts of chemical products purchased and reduce the hazardous nature of chemicals purchased. If fewer and less toxic chemicals are purchased and used, fewer materials are on-site and less hazardous waste is generated. Proper pharmaceutical disposal information provided through outreach to the community receiving prescriptions through the VAEKHCS will reduce exposures to the greater community. Collection of all unused pharmaceuticals within the VAEKHCS will eliminate potential exposures to the community through pass-through at Publicly Owned Treatment Works (POTWs) and at solid waste disposal facilities. The SEP inventory system also tracks product expiration dates. Thus, its implementation will enable timely management of potentially unstable materials, reducing the risk to staff, patients, the public and environment. The implementation of this project will have a positive potential impact.
2. **Innovativeness:** The SEP will be an innovative system which uses computerized technologies to identify and conduct management tasks and maintain inventories of hazardous materials and wastes. This program goes far beyond the elements and capabilities of the existing GEMS program in place at VAEKHCS. The completion of this project is innovative in its application of software having new capabilities to integrate with and expand existing systems to improve environmental management systems, waste reduction and pollution prevention.
3. **Environmental Justice:** This project will reduce the risk of exposure from chemicals and other wastes to the minority and low income populations that make up a proportionally large part of the veteran population.
4. **Community Input:** VAEKHCS will accept input on this SEP during its testing and implementation phases from the affected VA community including, but not limited to, engineers, researchers, facility managers, medical center management, laboratory workers, industrial hygienists, environmental managers, safety managers, GEMS committee, and its environmental consultants and contractors. Comments will be collected via a combination of methods, including surveys, interviews, meetings and presentations, as well as the specific testing and implementation tasks described herein. Comments will be reviewed and addressed and where applicable will be incorporated to the SEP implementation phase.
5. **Multimedia Impacts:** This SEP will potentially reduce emissions to many media including air, water, and land. Specifically, the project will minimize the risk of emissions and potential contamination from hazardous chemicals and materials stored and used at a facility to interior and exterior building surfaces, equipment, drains, vents, the land and nearby surface waters by enhancing the capabilities of facilities to inventory, store, track, recycle, and dispose of hazardous chemicals and materials. The SEP will significantly reduce disposal of pharmaceuticals to the POTW and solid waste disposal facilities.

6. **Pollution Prevention:** This SEP will enhance pollution prevention and waste minimization techniques and practices that will be implemented by VAEKHCS.

For purposes of the CAFO, the VAEKHCS is committing to a total expenditure of not less than \$482,069. This commitment by the VAEKHCS is in accordance with the EPA's SEP Policy to include additional SEP elements that will further enhance the environmental benefit of the program. The SEP will begin with a goal to build onto the capabilities of this system over time.

VAEKHCS agrees to implement the SEP as specified herein within approximately 18 months divided into two concurrent phases and an evaluation phase: The first phase would span approximately 18 months for hiring, software procurement, installation and implementation. The second phase, running concurrent to the first phase, would span 12 months for developing and training all employees in enhanced hazardous materials and hazardous waste management. This would be followed by approximately 3 months to evaluate the effectiveness of the SEP and prepare a final report within 45 days of the evaluation completion. The SEP Specific Milestone and Cost Breakdowns are shown in **Attachment 5**.

The VAEKHCS is committed to implementing this SEP to achieve the chemical tracking and hazardous waste reduction improvements specified herein. The cost of these measures is substantially greater than the penalty amount imposed by EPA.

## **PART II: Supplemental Environmental Project Implementation**

### **A. Scope of the SEP**

It is the intent to implement the SEP in two concurrent phases: The first phase covering 18 months, allowing for employing new staff, procuring independent contractors, procuring and installing new MSDS and pharmaceutical tracking software, inputting all current data, linking to existing inventory tracking software, testing, formalizing tracking protocols, training employees on system usage, verification of systems, auditing the systems and reporting of results of the verification and audit processes. Phase two will occur over 12 months, allowing for procuring independent contractors, establishing training goals with service line managers, developing training modules, performing multiple tiers of training at both campuses, sending staff for off-site training and developing and distributing the community outreach brochure. The evaluation phase for the tracking portion of the SEP is expected to take 4 months, including preparation of a final report 45 days after conclusion of the evaluation period. The report will describe the performance of the tracking system portion of the SEP and will make recommendations to address issues encountered during implementation. VAEKHCS will evaluate the SEP's performance based upon criteria established herein. This sequence of SEP procurement, implementation, evaluation and reporting will be carried out over a period of 18 months resulting in improved and enhanced environmental management and waste reduction systems. The following sections present the scope of the SEP.

### **B. Implementation of Tasks and Schedule**

#### **Task 1 – Inventory Control System**

Task 1 is organized as follows:

**Task 1A. Hire Industrial Hygienist and Purchasing Agents; Review Software Purchase Assessment:** An Industrial Hygienist (IH) will be assigned and additional Purchasing Agents will be hired or contracted during Task 1. The IH will be responsible for the oversight of systems development, protocols and procedures that will serve as the SEP program framework to be supported by the selected software systems. These measures will outline the sequence of events associated with chemical purchases, use and disposal, and the responsibilities associated with each role involved in the process.

At a minimum, the existing software products (IFCAP and GIP) with linkage to the MSDS and pharmaceutical software will provide the basic SEP core functions and applications listed as follows:

- Maintain a location-based chemical inventory tracking system, using unique chemical identifiers or bar-coding. Track and screen chemical purchases and facilitate a purchasing strategy for restricted chemicals.
- Maintain a hazardous waste tracking and management system, using unique hazardous waste identifiers or bar-coding.
- Facilitate hazardous materials source reduction, substitution for environmentally preferable substitutes and reuse of surplus chemicals.
- Facilitate the appropriate storage and segregation of incompatible materials and safe handling.

- Provide access to Material Safety Data Sheets from newly purchased software and newly purchased pharmaceutical tracking software.

The IH and Purchasing Agents will review and establish protocols for:

- Who coordinates all chemical purchases?
- How do chemicals get delivered to the appropriate parties (i.e., is there a central staging area for chemicals)?
- How is chemical usage tracked and maintained?
- How are "just in time" purchasing strategies integrated into the program?
- How are purchases made outside of these protocols identified and eliminated?
- What is the process by which chemicals can be added to or used from the chemical adoption list?
- What is the process by which "greener" chemical substitutes are identified and utilized?
- What is the process by which chemicals are identified as waste, stored at the satellite accumulation points, transitioned to appropriate storage/holding facilities and finally disposed?
- What is the process by which incompatible chemicals are prevented from being co-located?

As part of the initial data population effort, the EHS staff will develop lists of regulated materials, restricted materials and segregation guidelines to be incorporated into the program and software system. Items for incorporation include: a product tracking component, ability to list product substitutes, flagging of products in stock, waste characterizations for each waste stream, characteristics/components of chemical hazard data, restricted chemical lists, waste tracking, chemical adoption listings and a management system for those materials in Satellite Accumulation Areas and storage areas. The existing inventory software is expected to ensure accurate chemical inventories by product, manufacturer, date of purchase, expiration date, container information, lists of incompatible materials, waste codes, RCRA lists, the list of lists, CAS #'s, amounts, NFPA Hazard Codes, container size and location. Bar codes or some other form of unique identification will be used to track individual containers both as the products enter the system and as they are transitioned to waste streams.

**Task 1B. Procure MSDS and Pharmaceutical Tracking Software, Evaluate Systems and Provide Training on Systems:** Once the program framework is established and the software product is selected, the IH will work closely with the software vendor to implement the selected product. The following subtasks describe suggested implementation procedures that may be refined based on the approach and schedule negotiated with the software vendor.

The IH will work with the selected software vendors to develop an approach and schedule for MSDS and pharmaceutical software implementation. It is expected that the implementation will be completed in a phased approach under a controlled environment, utilizing a pilot test and limited audience before a full system roll out. This step is necessary to assure that system "bugs" are identified and resolved and that any system modifications can be made early in the process.

The IH will develop a committee of key stakeholders that will work with the software vendor to complete preliminary data population of the software system. The initial data population will involve completing a baseline inventory of the chemicals currently present on site and within accumulation areas, system users and administrators, and links to the MSDS Library. Purchasing Agents will update the chemical inventory and work with the IH to populate the database and have the links to the MSDS library. This task would include inventory, labeling, conversion of existing data, acquisition of appropriate Material Safety Data Sheets and data entry. Once the chemical inventory is established it will be up to the EHS staff working with the test audience to maintain and expand the inventory.

The IH, in coordination with the purchasing agents, will identify a test audience, to serve as the initial users of the software system. The software vendor will complete a preliminary software installation, making the software available only to the test audience. The test audience will be trained on the software and corresponding equipment, software features and use and will begin to use the system to track chemicals coming into the facility, and facilitate chemical purchases, use and disposal. During the pilot test, the test audience will provide feedback to the software vendor and IH. To ensure successful software implementation, the software vendor will make system modifications, address potential performance issues and bug fixes in response to feedback from the test audience. At the end of the test period, the software will be fully implemented for all system users.

Once the software installation is complete, comprehensive training will be provided on both the program operations and protocols and the software product. This task includes the development and implementation of user training materials including the drafting of all required training manuals and materials. A comprehensive training manual covering all aspects of the total program developed under the SEP will be developed during this task. A copy of all documentation will also be provided in a paper hardcopy form and back-up electronic formats. The IH will develop a comprehensive training program that will be implemented to continually provide refresher training and training to new employees. The IH will also develop and communicate internal resources and protocols that will be available to help the users during daily operations.

**Task 1C. Purchase of Hardware and Goods to Support SEP Systems:** Servers of adequate size via the VAEKHCS network are assumed to be sufficient to handle the additional software. Existing inventory management software is assumed to be compatible with new tracking software. Additional computers, printers, bar code scanners and bar code label printers will be purchased, installed and tested for operation and accessibility prior to full-scale system implementation.

To further reduce the environmental impacts of the VAEKHCS, a program to collect all unused pharmaceutical products at the point of generation will be implemented. Pharmaceuticals are dispensed in patient rooms from a central location in each ward. These secure satellite dispensaries are stocked with pharmaceutical products by the pharmacy staff. The SEP will establish collection bins for the collection of all unused pharmaceutical products. These unused products will be returned to the pharmacy for determination of usability and, if unusable, waste classification. As part of the determination process, pharmacy staff may choose to utilize a reverse distribution system. All EHS, pharmacy, nursing and medical staff will be trained on the use of

these collection systems. This system will ensure appropriate disposal of all hazardous pharmaceutical waste and establish the culture of collecting all unused pharmaceutical products which are currently disposed of to the POTW, medical waste treatment facilities or solid waste landfills.

Recycling efforts will be augmented by review of the existing recycling programs. The EHS staff will review these programs and work with the GEMS committee and greater VAEKHCS to identify ways to improve and expand the current collection systems. Input will be actively sought for ways to improve utilization and participation in these programs from the service lines and VAEKHCS community. Additionally, a commercial corrugated cardboard bailer has been identified for purchase to increase the recycling capacity. EHS staff will coordinate the purchase, implementation and community awareness for this new system.

**Task 1D.** The IH will work with the consultant, GEMS committee or in-house expert to develop protocols to monitor the progress and evaluate the performance of the SEP. It is expected that the monitoring will involve the solicitation of feedback from the entire user community at regular intervals and adjustments made to the program based on feedback received. If necessary, the IH will require the software vendor to make further modifications based on user feedback. In addition, the IH will also revisit the overall program framework at regular intervals and make any modifications necessary to ensure the successful implementation of the SEP. Evaluation of the effectiveness of the SEP is described in following section.

The IH and EHS staff will perform an evaluation of the results of the SEP implementation, including possible enhancements to the chemical inventory software and an assessment of the implementation.

Evaluation tools will be established and performance measures defined during Task 1A. In this phase, the VAEKHCS will measure the effectiveness of the SEP and the enhancements brought by the program to the facility pollution prevention, waste minimization, recycling and reuse programs. Matrixes will be developed to measure expected reductions of chemical inventories, quantities of materials reused and disposed and compliance status. These results will be discussed by the EHS, IH and purchasing agents and any recommendations incorporated into the enhancements of the software.

The VAEKHCS has contracted with a third party expert to assist in this SEP work plan development. Further contracting will be required to assist with the implementation, verification and auditing for the tracking system.

Task 1D is expected to take three months after the completion of Task 1C (see **Attachments 1 and 5**).

## **Task 2 – Enhanced Employee and Community Outreach Training**

VAEKHCS has conducted initial discussions with an environmental consulting firm to conduct training for all employees. The VAEKHCS has contacted the following third party to work with service line managers to establish training goals for each service line, develop the training and training materials for Tiers II, III and IV levels of training. The contractor has staff experience in performing similar training for the Academy of Certified Hazardous Material Managers and Certified Hazardous Material Manager groups



throughout the country. The consultant will perform the training over a period of 12 months to accommodate the different levels of sequential training: Tier II at each campus, followed by Tier III and finally Tier IV. A training video will be provided as an alternative for those employees unable to attend the Tier II or Tier III live training session.

Project Title: Enhanced Hazardous Materials and Hazardous Waste Training  
Contractor Name: MEC<sup>x</sup>, LP  
Effective Date: TBD  
Completion date: 12 months  
Contract Award: estimated \$87,037.00  
Contract No.: TBD  
Purchase Order No.: TBD

ISO 14001 Certified Lead Auditor Training with an emphasis in EMS for the VAEKHCS safety manager and safety officer will be procured from a vendor with Registrar Accreditation Board Quality Society Australasia (RABQSA) certification.

Task 2 is expected to take 12 months after notice to proceed to the environmental training contractor (see **Attachments 1 and 5**).

### **Task 3 – Risk Assessment**

The VAEKHCS has committed to incorporating competency measures into the performance evaluations of key individuals who are responsible for handling and management of hazardous materials and the disposal of hazardous and universal waste. These key individuals include all nursing, pharmacy, engineering, diagnostics, logistics, and environmental and safety staff. Supervisors will devise standards, evaluate through observation, and when feasible, develop meaningful and measurable criteria for evaluating practices of aforementioned employees in the handling, management and disposal of hazardous material and hazardous and universal waste. The evaluation will take place annually for the aforementioned individuals.

The GEMS committee and multi-disciplinary Environment of Care team will incorporate evaluation criteria into existing audits to ensure effectiveness of the implementation of the SEP. These teams will provide valuable feedback in the plan, review, check, improvement cycle of the SEP program.

### **Task 4 – Final Report**

The VAEKHCS will hire an independent contractor to assess the performance of the SEP and produce a final report. The final report will summarize the tasks within the SEP, discuss the implementation and on-going operational modifications, and describe the overall evaluation of the system and performance with associated data collected during the evaluation process. The report will summarize the benefits realized from the SEP implementation. The final report will be submitted to EPA Region VII within three months after completion of the evaluation phase.

The costs associated with the above tasks are presented on the following page. The SEP Work Plan outline in the form of a draft Table of Contents is provided following the costs to summarize the approach for the work plan.

### **C. Measures and Methods for Reporting Progress**

As part of the implementation of the SEP, VAEKHCS will conduct an evaluation of its processes and practices. This will establish a baseline that will be used to develop metrics and quantitative targets to measure the progress and success of the SEP implementation. The VAEKHCS shall report results on each component. The report will include an evaluation of how the SEP enhanced source reduction, pollution prevention and compliance promotion awareness, and activities as identified in the approved SEP Work Plan.

The VAEKHCS is committed to maximizing the targets that will be presented to EPA for each of the categories of the SEP. A SEP completion and evaluation report will also be provided to the EPA upon completion of the SEP (see Task 4 above).

Regularly scheduled internal conference calls supplemented with face-to-face meetings with the EHS staff, the IH and the purchasing agents will be conducted as needed to accomplish the various tasks as outlined above. Initially, VAEKHCS is planning to have face-to-face meetings, regular monthly conference calls, and meetings as necessary for effective project management and communication among critical project management members. Various sub-teams will be developed to work on specific aspects of the program in between the meetings.

Project Management Software will be used to track project progress through completion. Performance measuring and monitoring matrixes developed as part of Task 1D will be utilized throughout the project duration to collect the data needed to analyze project results and present these results as part of the final project evaluation.

Financial expenditures will be collected quarterly and will be tracked by the IH. Payments to outside vendors will be certified online by the Contacting Officer Technical Representative (COTR). Financial expenditures will be documented in the final report.

### **D. Project Evaluation**

An evaluation team consisting of members of the EHS staff, the consultant or in-house GEMS experts will be assembled to conduct a thorough evaluation of the SEP performance. The team will consist of management and technical staff involved with the project, staff members and key stakeholders. The team will specifically evaluate the program framework, systems and protocols, performance of the SEP and the interface to the MSDS Library. This evaluation will also identify and recommend enhancements to the software, as necessary. The development of evaluation tools, distribution of a survey, collection of data, measuring and monitoring matrixes and survey analysis will all be used in the project evaluation.

The EHS team will develop performance measures to monitor the environmental consequences of the SEP. These criteria could include measuring the amounts of hazardous wastes generated over the life of the SEP, the amounts of hazardous materials that would have been handled as a hazardous waste but were recycled or reused, the amount of hazardous chemicals substituted with less hazardous materials, the amount of restricted materials found in the facilities over time, and the residence time of hazardous wastes in satellite accumulation areas and storage areas. Performance criteria for each of these will be established, a baseline determined, and these criteria tracked and trended during the life of the project to assist in the effectiveness review.

A survey that evaluates the functionality of the software will be provided to Environmental Health and Safety staff, GEMS Committee, front line workers, and Medical Center managers as part of the evaluation. The evaluation is expected to take three months. An evaluation report will be provided 45 days after completion of the SEP evaluation phase.

### **PART III: Supplemental Environmental Project Benefits**

Implementing this SEP will achieve improvements to environmental and public health protection. It will enhance existing and new operations and materials management, chemical reuse and recycling, and hazardous waste tracking. This will in turn result in waste minimization and pollution prevention benefits. In addition, Environment Compliance Promotion will be achieved through community outreach training on pharmaceutical waste disposal and technical support to other members of the regulated community.

#### **A. Waste Minimization and Pollution Prevention Strategies**

To compliment this SEP, VAEKHCS has been undergoing proactive efforts in Pollution Prevention, and Waste Minimization using guidance from EPA Websites, the Pollution Prevention Institute, and Practice Greenhealth. These efforts will be supported and enhanced by the functionalities of the SEP and employee empowerment through sustainability portions of the enhanced hazardous materials and hazardous waste training. The following strategies provide a summary of these efforts:

1. A Mercury Reduction Plan for VAEKHCS is in place. An inventory of the sources of mercury in the facility was performed. At the time they were identified, the thermometers and manometers had to be removed. New mercury-free equipment was purchased and VAEKHCS continues to recycle new sources of mercury-containing equipment for which there are no mercury-free alternatives. The VAEKHCS has a mercury prevention and awareness program and provides training to VAEKHCS staff about the serious health threat associated with exposures to mercury and the need to keep mercury out of our environment.
2. VAEKHCS is working on improving the maintenance of equipment. This reduces injuries, protects employees, reduces asset losses, and minimizes equipment downtime while extending the life of the equipment, and subsequently minimizing waste.
3. The VA has an EMS (a.k.a., GEMS). The main objective of GEMS is to ensure the facility is in full compliance with environmental regulations managing environmental issues, integrating environment-oriented thinking into every aspect of business management, ensuring environmental considerations are a priority along with other concerns such as costs, product quality, strategic planning leading into environmental improvements.
4. GEMS has integrated pollution prevention, waste minimization, resource conservations and environmental compliance into the VAEKHCS operations, purchasing, planning and decision-making wherever practical. Source reduction is the pollution prevention method of choice followed by reuse and recycling, and finally, proper disposal of wastes.
5. GEMS has provided training to create awareness among management and employees, re-orienting thinking about the environment to better understand the responsibilities and thus creating a safer and healthier workplace.
6. Green chemistry is a proven pollution prevention approach to environmentally sustainable manufacturing, an important strategy for protecting human health and the environment. More specifically, green chemistry is the design of chemical products and processes that reduce or eliminate the use and generation of hazardous substances.

Green chemistry is a highly effective approach to pollution prevention because it applies innovative scientific solutions to real-world environmental situations. As part of the VAEKHCS Waste Minimization Strategies and pollution prevention efforts, VAEKHCS is making a Radiology process change. This project will replace the current radiology film system. The new system does not utilize hazardous material such as silver, fixers and developer solution currently used by the existing radiology film system.

7. Another waste minimization and pollution prevention effort being undertaken to reduce the impacts of motor vehicle maintenance is to outsource maintenance of fleet vehicles.

Development and implementation of the SEP will enhance the facilities' capability to prevent pollution and reduce the generation of waste. The selection of specific chemicals used in various aspects of VAEKHCS operations, the purchase of these chemicals, management/use of the chemicals, control of inventory, and decisions relating to the management of waste chemicals all provide opportunities to both reduce or eliminate hazardous chemicals used, and reduce hazardous waste generated. The SEP will be a tool to affect the goals outlined above to reduce pollution from hazardous chemicals.

- 1. Source Reduction:** The SEP will allow the VAEKHCS to generate a list of chemicals that will not be allowed to be purchased without the specific review and approval of the GEMS Committee. The list of restricted substances will be developed from the EPCRA Section 302 Extremely Hazardous Substance list, the OSHA Chemical Carcinogen list or those specifically targeted by GEMS, environmental or safety and health staff.

Source reduction will also include an evaluation to determine whether less hazardous / toxic chemicals are available as substitutes for the restricted chemical. Additionally, this review will eliminate the likelihood of having significant volumes of unused chemical available at the culmination of project(s) for which the restricted chemical is needed.

The deliberate review of whether or not these restricted chemicals are, in fact, required and restricting the purchase of these chemicals to only the amount needed to accomplish planned projects, will reduce the amount of extremely hazardous substances acquired and the generation of hazardous waste.

- 2. Process or Procedure Modifications:** Substitution or elimination of hazardous materials is the best option for controlling hazardous materials, preventing pollution and minimizing the generation of hazardous wastes. The consideration of purchasing environmentally preferable substitutes will be much easier when making purchasing decisions by using this software.

- 3. Improvements in Housekeeping:** The SEP will allow for improved management of hazardous wastes placed into Satellite Accumulation Areas and Main Accumulation Areas. The SEP will facilitate the recording of the dates the materials are placed in these locations, the amounts received, and the types of disposed materials. This will enable the facility to better coordinate hazardous waste pickups and manage the limit on hazardous wastes storage. The increased attention focused on the satellite and main accumulation areas will result in storage areas that are better organized and meet the requirements for storage of compatible and incompatible chemicals.

**4. Inventory Control/Management:** Inventory control/management is critical to waste minimization and pollution prevention efforts. It is recognized as a pollution prevention source reduction method. Currently the VA has many different means to track inventory of hazardous materials and wastes, but no consistent, systematic approach. The consistent, systematic approach to controlling chemical inventories achievable under the program and supported by the SEP, will provide the opportunity to better control the amount and types of hazardous chemicals purchased by limiting the purchases to that which is needed in the short term.

**5. Reuse:** With no accurate inventory system, users do not have the ability to share unwanted or unused chemicals with other users. An automated chemical inventory and management system will allow for better communication among users concerning unwanted, unused, or orphan chemicals that will be able to be shared across the VAEKHCS. The SEP will facilitate reallocation of these materials for actual use before they become wastes. This process reduces overall usage of hazardous material since the receiving uses does not need to order hazardous material which would increase the overall amount present at the VAEKHCS.

**6. Control of shelf life:** A field that monitors receipt of chemicals on site may be used to control expiration dates on materials. Reports generated from the SEP software by EHS staff will indicate which materials are coming close to the expiration date and will enable the facility to use the materials in some other application or process. Chemicals no longer needed will either be recycled or designated for disposal.

**7. Out of process recycling:** The owner of a chemical or hazardous material is in the best position to determine if the material is to be continually used or whether it should be turned in for reuse, recycling, or disposal. A material will be posted to the SEP tracking system Chemical Adoption List database as available to other users for sharing between users by the EHS staff. Periodic internal audits and training will be completed to ensure that end users are providing data regarding the availability of materials. If the chemical is no longer required it will go into the system as an orphan material. This will be posted to the database for others to see. The posting will include information about the material, its quantity, etc., so others using that material may decide if it will meet their needs. This process will enable use of materials that may otherwise be disposed of prematurely because of expiration date, purity, excess, change of process, or other reasons.

## **B. Environmental Compliance Promotion Strategies**

This SEP program provides training to additional VAEKHCS personnel not required to have such training to increase active participation in process development beyond compliance by reducing the generation, release, or disposal of pollutants beyond legal requirements. The GEMS Committee will be tasked with developing and implementing a rewards program as additional incentive for individuals who provide meaningful and innovative improvements to items described in the SEP. As part of the rewards program, the committee will establish a mechanism for submitting and evaluating suggested improvements.

## **C. SEP Budget Breakdown**

See **Attachments 4 and 5.**

#### **D. SEP Budget Justification**

The following sections describing the SEP budget elements correspond to the line items presented in **Attachment 4**. The information set out below describes the costs that VAEKHCS will incur if it spends the full amount.

**Task 1A. IH, Purchasing Agents, Preparation of Verification and Internal Audit Protocols:** The IH will provide overall direction for the implementation and evaluation of the linkage of the existing tracking system to the new MSDS and pharmaceutical tracking software systems. The purchasing agents will implement, evaluate, and test the systems. The IH and the purchasing agents will be responsible for the development of formal protocols and training of users. The IH with the outside consultant will develop the verification (embedding EHS staff into operational areas) and internal audit protocols. These functions play a critical role in the success of this project. The approximate costs devoted to the Environmental Consulting Service Contract are **\$14,574**.

**Task 1B. Procurement of Commercial Off-the-Shelf (COTS) Software and Training to users:** The VAEKHCS has conducted an evaluation of commercially available, off-the-shelf software. VAEKHCS staff will complete training on the overall chemical inventory, purchasing and disposal program. VAEKHCS staff will arrange for the vendor of the MSDS and pharmaceutical software to develop documentation and training materials needed to implement the SEP. Based upon preliminary discussions with several vendors, an estimate of **\$89,549** for purchase, installation, implementation and training on the SEP inventory tracking, MSDS and pharmaceutical software systems is projected.

**Task 1C. Hardware:** Some combination of additional computers, bar code readers, bar code labelers, scanners, label makers, printers, PDA's and other hardware will be required to make this program successful. Materials to implement the point of generation collection of unused pharmaceutical products and recycling machinery will be procured. Computer and other associated hardware is budgeted for **\$36,150**.

**Task 1D. Verification and Internal Audit Evaluations:** The IH and EHS staff will conduct verification of tracking system effectiveness and perform internal audits. Budget for this task is set at **\$21,121**.

**Task 2A. Tier II Training:** Development of service line specific goals and conduct training for approximately 1700 employees of the VAEKHCS. The budget for this training is set at **\$124,947**.

**Task 2B. Tier III Training:** Development and performance of Tier III training for all employees who routinely handle hazardous materials. The budget for this training is set at **\$27,974**.

**Task 2C: Tier IV Training:** Development and performance of 3-day training for key safety, pharmacy, nursing, laboratory, and nuclear medicine staff within VAEKHCS. **\$49,111** has been budgeted for this training.

**Task 2D: Tier V Training:** Off-site accredited training course for VAEKHCS safety manager and safety officer. Budget is set at **\$8,378** for this effort.

**Task 2E. Community Outreach Training:** Preparation and mailing of brochures to approximately 30,000 patients of the VAEKHCS including labor and postage. The budget is estimated at **\$35,000** for this effort.

**Task 3A. Risk Assessment and Risk Reduction:** A team of supervisors within each service line where job functions have significant potential to impact the environment will devise measurable standards of performance. The supervisors will conduct an evaluation of the training effectiveness of SEP by observation and evaluation of employee performance. The development of evaluation tools, collection of observation data, and/or testing materials is budgeted at **\$60,264**. An evaluation of all nursing, pharmacy, engineering, diagnostics, logistics, environmental and safety staff will be conducted as part of the evaluation.

**Task 4A. Final Report:** A final report will be prepared following the evaluation phase. The report is budgeted at **\$15,000**.

**Total Budgeted Cost:** As outlined in the spreadsheet in Attachment 4, the total anticipated cost of this SEP is **\$482,069**.

In **Attachment 5** the cost and timeline are presented as specific milestones for accomplishing the tasks identified above.



**Attachment 1**  
**Supplemental Environmental Project Timeline**

Item	Metrics	Target Completion Date	Timeframe
1	Hiring, software purchase, software installation, tracking systems implementation, systems verifications, systems audits.	October 2010	July 2009 to October 2010
2	Enhanced training for all employees at appropriate levels.	July 2010	August 2009 to July 2010
3	Perform competency testing of key staff.	Each annual review cycle.	Annually
4	Evaluation of the success and effectiveness of the overall SEP	October 2010	July 2010 to October 2010
5	Final Report	December 2010	Final report 45 days from completion of SEP evaluation.

**Attachment 2**  
**Deliverables and Performance Standards of Third Party Consultant**

<b>Performance Objective</b>	<b>Required Service (task or deliverable)</b>	<b>Performance Standard</b>	<b>Metrics</b>
1. Establish verification and audit protocols for tracking system	Collect data to perform regulatory gap analysis, waste stream inventory and hazardous waste determination	90 calendar days after Notice to Proceed (NTP)	Submitted within specified time
2. Develop training modules for Tier II, II and IV training	Meet with service line managers, establish training goals, and develop training modules	90 calendar days after NTP.	Submitted within specified time.
3. Perform Tier II, III and IV training of VAEKHCS staff	Provide in-house training with hand-outs, graphic presentations and video component.	9 months after review of training modules; 12 months after NTP	Training performed within specified time.
4. Final Report	Establish a clear and delineated written Corrective Action Plan with corresponding compliance schedule. Internal audit recommendation shall include sample checklists with regulatory cross-reference.	Draft report within 30 days to VAEKHCS final report 45 calendar days after SEP evaluation.	Submitted within specified time.

**Attachment 3**  
**Timeline of Third Party Expert**

Item	Metrics	Target Completion Date	Timeframe
1	Verification and audit protocols to support comprehensive inventory management system	90 Days from NTP	August 2009 to November 2009
2	Establish service line training goals, develop training modules, conduct Tier II, III and IV levels of training	July 2010	August 2009 to July - 2010
3	Final Report	December 2010	Draft 30 days from evaluation. Final report 45 days from completion of SEP evaluation.

**Attachment 4  
Cost Breakdown Summary**

Cost Elements	Task 1 Inventory Control System	Task 2 Training					Task 3 Risk Assessment Risk Reduction	Task 4 Final Report	Totals
		Tier II	Tier III	Tier IV	Tier V	Community Outreach			
Contractor Support	\$14,574	\$54,904	\$11,396	\$20,737			\$15,000	\$116,611	
MSDS Software and Training	\$46,901							\$46,901	
Pharmacy Software and Training	\$42,022							\$42,022	
Link IFCAP and GIP	\$626							\$626	
Computers	\$10,000							\$10,000	
Printers	\$2,000							\$2,000	
Bar Code Readers	\$1,800							\$1,800	
Bar Code Printers	\$1,350							\$1,350	
Pharmaceutical Collection Materials	\$6,000							\$6,000	
Cardboard Baler	\$15,000							\$15,000	
Internal Audit	\$14,870							\$14,870	
Process Verification	\$6,251							\$6,251	
Labor		\$70,043	\$16,578	\$28,374	\$2,778			\$117,773	
Travel					\$2,500			\$2,500	
Training Course					\$3,100			\$3,100	
Pharmaceutical Disposal Mailer						\$35,000		\$35,000	
Competency Evaluations							\$60,264	\$60,264	
<b>Totals</b>	<b>\$161,395</b>	<b>\$124,947</b>	<b>\$27,974</b>	<b>\$49,111</b>	<b>\$8,378</b>	<b>\$35,000</b>	<b>\$60,264</b>	<b>\$482,069</b>	

**Attachment 5  
SEP Milestone Completion Date and Cost**

<b>Action Number</b>	<b>Milestone</b>	<b>Completion Date</b>	<b>Cost</b>
1	Establish a single point of entry for all products purchased	60 days from order	\$0.00
2	Hire three purchasing agents	240 days from order	\$0.00
3a	Link IFCAP to MSDS tracking software	120 days from order	\$626.00
3b	Establish automated tracking of haz mat through a link to the GIP	120 days from order	\$3,000.00
3c	Expand info tracked by GIP to include material types, storage locations, excess inventory, prohibited materials and approved alternates	180 days from order	\$15,150.00
3d	Inventory each chemical product	180 days from order	\$2,500.00
4a	Purchase MSDS tracking software	90 days from order	\$30,000.00
4b	Train all employees that handle Haz Mat on MSDS Software	180 days from order	\$16,901.00
5a	Purchase pharm tracking software	90 days from order	\$35,000.00
5b	Train all pharmaceutical staff on pharm tracking software	120 days from order	\$7,022.00
5c	Establish point of generation capture of all unused and expired pharm	240 days from order	\$6,000.00
6a	Systematically identify environmentally preferable substitutes	270 days from order	\$2,500.00
6b	Develop list of restricted chemicals	270 days from order	\$3,000.00
7a	Incorporate the ACS principles of "less is better" and "just in time ordering" strategies	270 days from order	\$1,500.00
7b	Establish the surplus cheical inventory listing "Chemical Adoption List"	270 days from order	\$1,500.00
8a	Purchase a corrugated cardboard baler	90 days from order	\$15,000.00
8b	Implement a new white paper sorting process	270 days from order	\$575.00
9	Assign an Industrial Hygenists to SEP implementation	at signing of order	\$0.00
10	Develop and implement an internal tracking system audit	270 days from order	\$14,870.00
11	Embed Safety staff in operational areas	270 days from order	\$3,125.00
12	Incorporate additional environmental compliance initiatives into the Environment of Care audits	120 days from order	\$3,126.00
13	All employees will complete enhanced haz mat service line training (Tier II)	1 year from order	\$124,947.00
14	Expand training specific to job function handling haz mat (Tier III)	1 year from order	\$27,974.00
15	Conduct comprehensive, 3-day training (Tier IV)	1 year from order	\$49,111.00
16	Send SHEM to ISO14001 Lead Auditor Training	1 year from order	\$8,378.00
17	Train all patients on pharm waste disposal	180 days from order	\$35,000.00
18	Incorporate competency measures into the performance evaluations for haz mat employees	1 year from order	\$60,264.00
19	Final Report	18 months from order	\$15,000.00
			\$482,069.00

IN THE MATTER OF Department of Veteran Affairs Eastern Kansas Health Care System,  
Respondents  
Docket No. RCRA-07-2008-0013

CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing Consent Agreement and Final Order was sent this day in the following manner to the addressees:

Copy hand delivered to  
Attorney for Complainant:

Belinda Holmes  
Senior Counsel  
Region VII  
U.S. Environmental Protection Agency  
901 N. 5<sup>th</sup> Street  
Kansas City, Kansas 66101

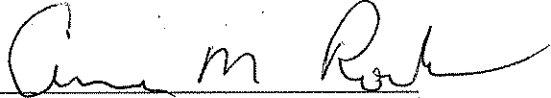
Copy by Certified Mail Return Receipt to:

Michael E. Anfang  
Staff Attorney  
Department of Veteran Affairs  
Office of Regional Counsel  
1201 Walnut Street, Ste 800  
Kansas City, Missouri 64106

Copy by Facsimile and  
First Class Pouch Mail to:

The Honorable Susan L. Biro  
Chief Administrative Law Judge  
U. S. Environmental Protection Agency  
Office of Administrative Law Judges  
1200 Pennsylvania Avenue, NW  
Mail Code 1900L  
Washington, D. C. 20005

Dated: 8/20/09

  
Kathy Robinson  
Hearing Clerk, Region 7