



April 10, 2025

TO: Legal Counsel

News Media

Salinas Californian

El Sol

Monterey County Herald

Monterey County Weekly

KION-TV

KSBW-TV/ABC Central Coast

KSMS/Entravision-TV

The next regular meeting of the **QUALITY AND EFFICIENT PRACTICES COMMITTEE - COMMITTEE OF THE WHOLE** of **SALINAS VALLEY HEALTH**<sup>1</sup> will be held **MONDAY, APRIL 14, 2025, AT 8:30 A.M., DOWNING RESOURCE CENTER, CEO CONFERENCE ROOM 117, SALINAS VALLEY HEALTH MEDICAL CENTER, 450 E. ROMIE LANE, SALINAS, CALIFORNIA.**

(Visit [https://www.salinasvalleyhealth.com/~about-us/healthcare-district-information-reports/board-of-directors/board-committee-meetings-virtual-link/](https://www.salinasvalleyhealth.com/~/about-us/healthcare-district-information-reports/board-of-directors/board-committee-meetings-virtual-link/) for Public Access Information).

A handwritten signature in black ink, appearing to read "Allen Radner", is positioned above the printed name.

Allen Radner, MD  
President/Chief Executive Officer

Committee Voting Members: **Catherine Carson**, Chair, **Rolando Cabrera, MD**, Vice-Chair, **Clement Miller**, Chief Operating Officer, **Carla Spencer, RN**, Chief Nursing Officer; **Alison Wilson, DO**, Medical Staff Member.

Advisory Non-Voting Members: Administrative Executive Team.

**QUALITY AND EFFICIENT PRACTICES COMMITTEE  
COMMITTEE OF THE WHOLE  
SALINAS VALLEY HEALTH<sup>1</sup>**

**MONDAY, APRIL 14, 2025, 8:30 A.M.  
DOWNING RESOURCE CENTER, CEO CONFERENCE ROOM 117**

**Salinas Valley Health Medical Center  
450 E. Romie Lane, Salinas, California**

**(Visit [SalinasValleyHealth.com/virtualboardmeeting](https://SalinasValleyHealth.com/virtualboardmeeting) for Public Access Information)**

**AGENDA**

1. Call to Order / Roll Call

2. Public Comment

This opportunity is provided for members of the public to make a brief statement, not to exceed three (3) minutes, on issues or concerns within the jurisdiction of this District Board which are not otherwise covered under an item on this agenda.

3. Approve the Minutes of the Quality and Efficient Practices Committee Meeting of March 17, 2025. (CARSON)

- Motion/Second
- Public Comment
- Action by Committee/Roll Call Vote

4. Patient Care Services Update (SPENCER)

- Clinical Inquiry Council Report

5. Environment of Care Program (Hively)

6. Environment of Care Plans (Review Only)

- A. Fire Safety Management Plan
- B. Hazardous Materials & Waste Management Plan
- C. Medical Equipment Management Plan
- D. Safety Management Plan
- E. Security Management Plan
- F. Utility Management Plan

7. Safety and Reliability Update (Kukla)

8. Closed Session

9. Reconvene Open Session/Report on Closed Session

10. Adjournment

The next Quality and Efficient Practices Committee Meeting is scheduled for **Monday, May 12, 2024 at 8:30 a.m.**

<sup>1</sup>Salinas Valley Memorial Healthcare System operating as Salinas Valley Health

This Committee meeting may be attended by Board Members who do not sit on this Committee. In the event that a quorum of the entire Board is present, this Committee shall act as a Committee of the Whole. In either case, any item acted upon by the Committee or the Committee of the Whole will require consideration and action by the full Board of Directors as a prerequisite to its legal enactment.

The Salinas Valley Health (SVH) Board packet is available at the Board Meeting, electronically at <https://www.salinasvalleyhealth.com/~/-/about-us/healthcare-district-information-reports/board-of-directors/meeting-agendas-packets/2025/>, and in the SVH Human Resources Department located at 611 Abbott Street, Suite 201, Salinas, California, 93901. All items appearing on the agenda are subject to action by the SVH Board.

Requests for a disability related modification or accommodation, including auxiliary aids or Spanish translation services, in order to attend or participate in-person at a meeting, need to be made to the Board Clerk during regular business hours at 831-759-3050 at least forty-eight (48) hours prior to the posted time for the meeting in order to enable the District to make reasonable accommodations.

**QUALITY & EFFICIENT PRACTICES COMMITTEE  
COMMITTEE OF THE WHOLE  
SALINAS VALLEY HEALTH**

**AGENDA FOR CLOSED SESSION**

*Pursuant to California Government Code Section 54954.2 and 54954.5, the board agenda may describe closed session agenda items as provided below. No legislative body or elected official shall be in violation of Section 54954.2 or 54956 if the closed session items are described in substantial compliance with Section 54954.5 of the Government Code.*

**CLOSED SESSION AGENDA ITEMS**

**HEARINGS/REPORTS**

(Government Code §37624.3 & Health and Safety Code §§1461, 32155)

**Subject matter:** (Specify whether testimony/deliberation will concern staff privileges, report of medical audit committee, hospital internal audit report, or report of quality assurance committee):

1. Report of the Medical Staff Quality and Safety Committee
  - Accreditation and Regulatory Report
2. Quality and Safety Board Dashboard Review (KUKLA)
3. Consent Agenda:
  - Environment of Care Committee Full report
  - Pharmacy and Therapeutics Committee Full report
  - Safety and Reliability Committee Full report

**ADJOURN TO OPEN SESSION**

*CALL TO ORDER*  
*ROLL CALL*

*(Chair to call the meeting to order)*

*PUBLIC COMMENT*

**DRAFT SALINAS VALLEY HEALTH<sup>1</sup>**  
**QUALITY AND EFFICIENT PRACTICES COMMITTEE MEETING**  
**COMMITTEE OF THE WHOLE**  
**MEETING MINUTES MARCH 17, 2025**

Committee Member Attendance:

Voting Members Present: **Catherine Carson**, Chair, **Clement Miller**, COO, **Carla Spencer**, CNO and **Alison Wilson, M.D.**

Voting Members Absent: Vice-Chair, **Rolando Cabrera, M.D.**

Advisory Non-Voting Members Present:

In Person: Timothy Albert, M.D., CCO and Allen Radner, M.D., President/CEO, Alysha Hyland/CAO.

Other Board Members Present, Constituting Committee of the Whole:

Via teleconference: Rolando Cabrera, M.D. (attending as a non-voting member) and Victor Rey, Jr.

*Victor Rey, Jr., joined the meeting at 8:41 a.m.*

**1. CALL TO ORDER/ROLL CALL**

A quorum was present and Chair Carson called the meeting to order at 8:32 a.m. in the Downing Resource Center CEO Conference Room 117.

**2. PUBLIC COMMENT**

None.

**3. APPROVAL OF MINUTES FROM THE QUALITY AND EFFICIENT PRACTICES COMMITTEE MEETING OF FEBRUARY 18, 2025.**

Approve the minutes of the February 18, 2025 Quality and Efficient Practices Committee meeting. The information was included in the Committee packet.

**PUBLIC COMMENT:**

None

**MOTION:**

Upon motion by Committee Member Miller, second by Committee Member Spencer, the minutes of the February 18, 2025 Quality and Efficient Practices Committee Meeting were approved as presented.

**ROLL CALL VOTE:**

Ayes: Chair Carson, Miller, Spencer, Dr. Wilson.

Nays: None;

Abstentions: None;

Absent: Dr. Cabrera.

**Motion Carried**

<sup>1</sup>Salinas Valley Memorial Healthcare System operating as Salinas Valley Health

#### 4. PATIENT CARE SERVICES UPDATE: MAGNET® DEPARTMENT

Carla Spencer, CNO, introduced Kirsten Wisner, Director Magnet Program, who reported on the following:

- **Magnet Recognition Program:** Oversight of the program is through the credentialing arm of American Nurses Association (ANA), American Nurses Credentialing Center (ANCC). The program is an evidence-based framework for clinical excellence grounded in the nursing profession; eligible for renewal every 4 years. SVH's first designation was in 2021 and the next document for certification will be submitted in June 2025. Magnet resets organizational structures to support nurses' autonomy and responsibility.
- **Tenets of the Nursing Profession:** Oversight of Practice, Quality, Competence and Knowledge. Ownership and accountability cannot be delegated.
- **Framework for Data:** Nurse sensitive data (frontline/unit-level data), accountability for outcomes, professional expectation to oversee quality and patient outcomes. The Magnet Councils and their responsibilities were reviewed.
- **Professional Governance:** Strategic design for professional oversight of practice, quality, competence and knowledge, data driven processes including data review and evaluation. Advisors report to CNO and Nursing Leadership Council and connect work to SVH strategic plan. The Professional Governance Model organization chart was reviewed.
- **Structured Improvement:** SVH uses the Johns Hopkins EBP (Evidence Base Practice) Model, education is provided on systematic inquiry education, evidence determinants of quality improvement, performance improvement and Unit Practice Councils.
- **Annual Poster Expo Growth:** Presentations have grown from five (5) in 2016 to twenty-one (21) in 2025.
- **Nursing Research:** There are three (3) studies each designation cycle, nurses employed by SVH are investigators, findings are disseminated to clinical nurses. Mentoring is provided for the publication process.

**COMMITTEE DISCUSSION:** How long after document submission does it take to be surveyed? The timeline can vary. Scoring the application is up to 4 months. Requests for additional documents can be up to 120 days.

The BSN or higher degree rates are rising; new grads are hired with the requirement they receive a BSN within 3 years. SVH also offers tuition reimbursement. Posters are presented both externally at conferences and internally during Hospital week. Suggestion: Create awards for the poster presentations.

#### 5. CLOSED SESSION

Chair Carson announced that the items to be discussed in Closed Session are *Hearings/Reports* are listed on the closed session agenda. The meeting recessed into Closed Session under the Closed Session protocol at 8:56 a.m.

#### 6. RECONVENE OPEN SESSION/REPORT ON CLOSED SESSION

The Committee reconvened for Open Session at 10:01 a.m. Chair Carson reported that in Closed Session, the *Hearings/Reports* were accepted as follows:

## Hearings and Reports

1. Report of the Medical Staff Quality and Safety Committee
  - Transfusion Committee
  - Transitions of Care Services
2. Quality and Safety Board Dashboard Review and Proposed New Board Dashboard Measures
3. Consent Agenda:
  - Perinatal Services
  - Materials Management
  - Transitions of Care Services
  - Nursing Admin, Transporters, Interpreter Services, Nursing Education
  - Cath Lab
  - HIM
  - Diagnostic Imaging

## **7. ADJOURNMENT**

There being no other business, the meeting adjourned at 10:02 a.m. The next Quality and Efficient Practices Committee Meeting is scheduled for **Monday, April 14, 2025** at 8:30 a.m.

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Catherine Carson, Chair  
Quality and Efficient Practices Committee



# Patient Care Services Update



**Presented by:**  
Carla Spencer, MSN, RN, NEA-BC  
Chief Nursing Officer

**Featuring:** Critical Inquiry Council (CIC)

**Date:** April 14, 2025

## CLINICAL INQUIRY COUNCIL

### Members:

Kristen Green-Meadows BSN, RN, CCRN, CSC (ICU) - Chair  
 Suzette Eliopoulos BSN, RN (L&D)- Associate Co-Chair  
 Emily Merrifield, RN (NICU)  
 Celina Medina RN, MSN, ASLS (ICU)  
 Kathryn E. Franklin BSN, RN (Transitional Care)  
 Stephanie Frizzell MSN, RN, NPD-BC, CMSRN (Education Department)  
 Kirsten Wisner PhD, RNC-OB, CNS, C-EFM, NE-BC (Magnet Coordinator)  
 Julie Vasher DNP, RNC-OB, APRN-CNS, C-EFM, C-ONQS (Director)- Advisor

## Council Purpose:

To promote and build capacity for nursing research and the use of evidence-based practice to advance clinical excellence. The council assists in the research and EBP process, and fosters and supports investigative role development and dissemination of findings.

Research

Evidence-Based  
Practice

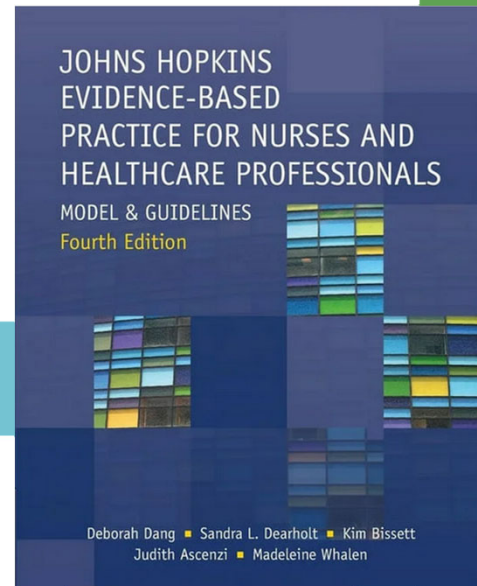
Quality Improvement.



In 2024, Research and Evidenced- Based Practice (EBP) Council was rebranded as Clinical Inquiry Council to encourage more participation from staff nurses.

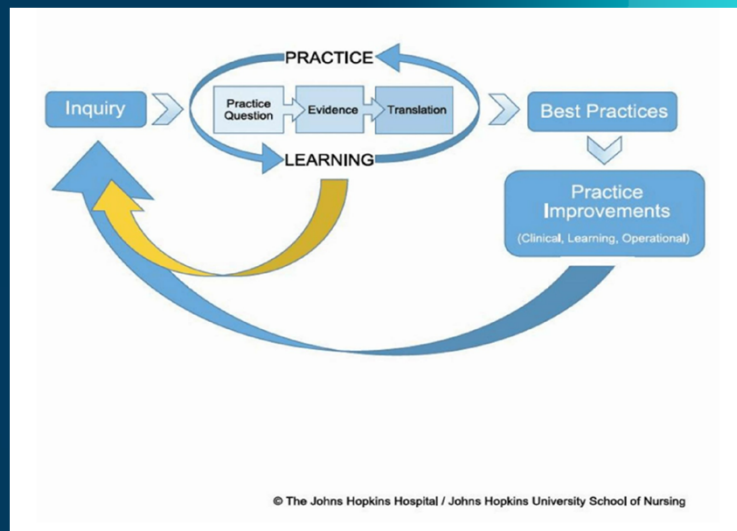


- SVH Organizational EBP Model
- Designed for all healthcare professionals
- Includes tools that provide the framework for organized and successful projects or initiatives



John Hopkins EBP Model

### The Johns Hopkins Nursing Evidence-based Practice Model



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## 2025 EBP Cohort

Presented by:  
Alyssa Erikson, *PhD, MSN, RN, CNE*  
Professor and Chair, Department of Nursing  
CSU Monterey Bay



## 2025 Evidence-Based Practice Cohort

### Objectives

- Define evidence-based practice (EBP)
- Use the Johns Hopkins EBP (JHEBP) model to develop an initiative from idea to implementation (Attendance at all 4 workshops required)
- Construct an EBP question using the PICO format
- Learn strategies for successful translation and implementation
- Appraise quality of evidence using the JHEBP tools
- Explore available library and other resources



### Presented and Facilitated by:

Alyssa E. Erikson, PhD, MSN, RN, CNE  
Professor and Chair, Department of Nursing  
CSU Monterey Bay

Schedule	Time	Location	Course Code	CEs
March 20, 2025	0830-1630	CP-4	EBP Cohort Day 1	7
April 10, 2025	0830-1630	CP-4	EBP Cohort Day 2	7
April 30, 2025	0830-1630	CP-4	EBP Cohort Day 3	7
June 3, 2025	0900-1600	CP-4	EBP Cohort Day 4	6

Please register in API using above codes  
Must register for all 4 courses  
Clock-in code: **85** Department code: **8723**

**Target Audience:** Educators, Professional Governance Leaders\* and Members, PI Specialists, Managers, Directors

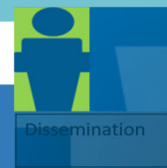
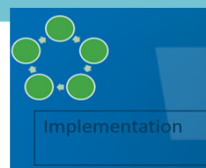
\*Per Professional Governance Bylaws, this class is to be completed within first year of serving as council co-chair / associate co-chair / advisor

The California Board of Registered Nursing has approved the first three courses for 7.0 contact hours and the fourth course for 6.0 contact hours. BRN Provider #00027.

**Note:** Pre-authorization from your department director/designee is required if you wish to be paid for this class.

## EBP Cohort

- Cohort workshop includes 4 sessions
- Define evidence-based practice (EBP) (is a problem-solving approach that integrates best available evidence, clinical expertise, and patient values)
- PICO question (an acronym used to formulate a well defined searchable question)
- Johns Hopkins tools
- Literature review





## Poster Expo 2024



The 2024 Poster Expo featured a QR code to view the list of posters and authors. *CE credits were offered for poster review.*



### 2024 Hospital Week Poster Expo

- Twelve professional posters
- Learn about Salinas Valley Health:
  - Education
  - Evidence-Based Practice
  - Leadership
  - Performance Improvement
  - Quality Improvement
  - Research

**Poster Expo Author Meet & Greet**  
 May 14 at 1300 - 1430  
 May 17 at 0730 - 0900  
*Stop by during these times to earn a raffle ticket to win a gift basket!*

**Posters Displayed**  
 May 11 – May 19  
 Salad Bowl Café

**Snacks**



**Raffle**

**Scan the QR code to view the list of posters & author(s)**




**How to scan QR code?**

- 1) Open the camera on your mobile device
- 2) Point the camera at the QR code
- 3) Tap the link that appears on your mobile device







The 2025 Poster Expo will be featuring 21 professional posters! The REBP cohort has inspired engagement by Salinas Valley Health Staff Nurses producing this incredible result.



2025 Poster Expo



## Call for Poster Presentations

### Salinas Valley Health Poster Expo 2025

**Have you...**

- Completed a quality / performance improvement project? (Educational, leadership, and in progress initiatives included!)
- Conducted an evidence-based practice initiative?
- Completed a research study?

**Share your team's success!**

All professional governance councils are encouraged to submit at least one poster abstract each year.



**Need help with your abstract?**

- Resources on Clinical Inquiry Council's STARnet page
  - [Poster Expo 2025](#)
  - [Abstract Template](#)
  - [Abstract Grading Rubric](#)
  - [Abstract Examples](#)
  - [List of Mentors](#)
- Next Steps
  - Download the [abstract template](#)
  - Fill in each section (~500-900 words in total)
  - Include visual elements (e.g., graph, data table, etc.) and references
- Questions? [SVHabstracts@salinasvalleyhealth.com](mailto:SVHabstracts@salinasvalleyhealth.com)

**Submit Your Abstracts to:**  
[SVHabstracts@SalinasValleyHealth.com](mailto:SVHabstracts@SalinasValleyHealth.com)

**Abstracts Due:**  
**September 17, 2024**

**Poster Expo Display:**  
**May 12-16, 2025**

## NURSING INNOVATION

**About Salinas Valley Health Foundation**

Our mission is to support Salinas Valley Health by funding healthcare services, programs, and facilities for our diverse community.

We empower the community to advance state-of-the-art healthcare by supporting our staff and doctors with what's truly needed to care for people and create a healthier future for all. The community's philanthropic support for over 40 years has enabled this single hospital to grow into an integrated network of healthcare programs, services, and facilities to deliver the highest level of medical care to everyone we serve.

When you give to Salinas Valley Health Foundation, you have a direct, visible impact on the health and wellbeing of our community.





**Let's Connect!**

For questions about the Employee Giving Program or to learn more about the Salinas Valley Health Foundation, please contact us. We'd love to hear from you!

Foundation@SalinasValleyHealth.com  
 60 West Market St., Suite 250  
 Salinas, CA 93901  
 T 831.759.1880 F 831.759.1833




[SalinasValleyHealthFoundation.org](http://SalinasValleyHealthFoundation.org)



## EMPLOYEE GIVING



The 2024 Poster Expo featured a QR code to view the list of posters and authors. CE credits were offered for poster review.

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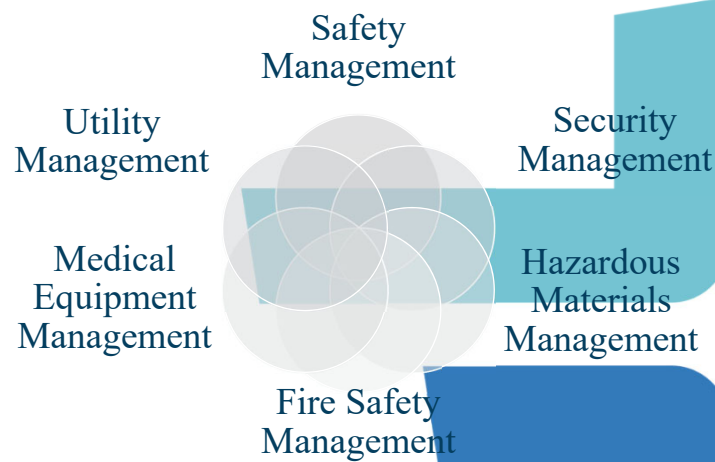
# Quality and Efficient Practices Committee

April 14, 2025  
Environment of Care Program

Jim Hively, Environmental Health and Safety Manager



## Environment of Care Management Plans



## Environment of Care Management Plan Program Managers

- Fire Safety Management Plan – Jim Hively, Environmental Health and Safety Manager
- Hazardous Materials Management Plan – Jim Hively, Environmental Health and Safety Manager
- Medical Equipment Management Plan – Simplicio Tualla, Chief Biomedical Engineer
- Safety Management Plan – Jim Hively, Environmental Health and Safety Manager
- Security Management Plan – Elias Gutierrez, Security Program Manager
- Utility Management Plan – Donald Tyacke, Chief Engineer

SECTION TITLE

## Annual Evaluation of Effectiveness and Establishing Program Objectives and Performance Measures for Each Environment of Care Management Plan

Every year in January, the Program Manager for each of the six Environment of Care Management Plans evaluates the effectiveness of their program for the previous year and establishes at least one Program Objective and/or Performance Measure for the upcoming year.

These Program Objectives and Performance Measures focus on areas within each Management Plan where a need for performance improvement has been identified and are approved by the Environment of Care Committee.

SECTION TITLE



# Fire Safety Management Plan

## Management Plan Scope Statement

The Fire Safety Management Plan describes the methods for preventing the potential for a fire at the Salinas Valley Health Medical Center (SVHMC) and its licensed off site locations.

## Review of Program Objectives in the Management Plan

Objective: During routine safety rounding, review the relocation points and egress routes with staff.

Result: Goal was met.

Comment: Continues to educate staff regarding their exit routes and relocation points during safety rounding and fire drills.

## Review of Performance Measures

1. During routine safety rounding and environmental tours, assess the storage of flammable liquids to ensure these materials are stored safely and as required by applicable regulations and codes. Goal for compliance for this performance measure is set at **90%**.

Result: A compliance rate of **100%** was observed which met the established goal of **90%**.

2. During routine safety rounding, fire drills, and environmental tours ask staff if they can correctly articulate who is authorized to shut off medical gas in an emergency (Administrative Supervisor, Respiratory Therapy). Goal for compliance for this performance measure is set at **90%**.

Result: A compliance rate of **93%** was observed which met the established goal of **90%**.

SECTION TITLE

## Fire Safety Management Plan Program Objectives and Performance Measures for 2025

The following Fire Safety Management Plan Program Objective and Performance Measure have been approved for 2025:

### Planning Objective for 2025

Re-educate staff on the provisions of Salinas Valley Health's Decoration Policy.

### Performance Measure for 2025:

During environmental rounds and routine safety rounds ask staff to articulate the Salinas Valley Health policy for staff bringing their personally owned electrical devices into the hospital.

The goal for this performance measure is achieving a **90%** correct response rate.

SECTION TITLE

# Hazardous Materials Management Plan

## **Management Plan Scope Statement:**

The Hazardous Material and Waste (HazMat) Management Plan describes the methods for handling hazardous materials and waste through risk assessment and management for the Salinas Valley Health Medical Center (SVHMC) and its licensed off site locations. The plan addresses the risks associated with these materials that can pose a threat to the environment, staff, patients, and visitors from the variety of hazardous substances, such as radiological, chemical, or hazardous energy sources, and to minimize the risk of harm at SVHMC.

## **2024 Planning Objective**

Conduct hazardous materials spill procedure staff refresher training throughout the year.

**Results:** A total of 21 departmental hazardous materials spill training sessions were conducted.

## **2024 Performance Measure**

During routine safety rounding and environmental tours identify unlabeled containers.

Goal for compliance for this performance measure is set at **95%**.

**Results:** **97%** (Performance measure met.)

SECTION TITLE

## **Hazardous Materials Management Plan Program Objectives and Performance Measures for 2025**

The following Hazardous Materials Plan Program Objective and Performance Measure have been approved for 2025:

### **Planning Objective for 2025**

Successfully negotiate an acceptable renewal of our contract with our hazardous waste hauler.

### **Performance Measure for 2025:**

Assess containers of hazardous waste to ensure that they are properly labeled and consistently include the accumulation date.

The goal for this performance measure is achieving a **90%** compliance rate.

SECTION TITLE

# Medical Equipment Management Plan

## Management Plan Scope Statement:

The Medical Equipment Management Program is designed to assure proper selection, of the appropriate medical equipment to support a safe patient care and treatment environment.

## 2024 Planning Objectives

1. Manage the maintenance of all Centrak hardware used for Centani Asset/ Temperature applications and Hill Rom Nurse Call systems.  
Result: Hill Rom Technician unable to complete all of facility. Unable to enter all patient rooms and locations. Current listing still shows only 19% of batteries replaced. Goal not met and will carry over to 2025.
2. Computerized Maintenance Management System:  
Upgrade software for improved TMS performance for Biomedical and Engineering services.  
Result: Upgrade successful with requested edits completed. All firmware and patching now managed by Accruent with no issues noted.

## Performance Measure for 2024:

1. Percentage of staff compliant with validating equipment PM before use and notification process.  
Performance measure set at 95 %  
Performance measure achieved: 96.2%  
Result: Performance measure met.
2. Percentage completion of corrective maintenance work orders.  
Performance measure set at: 95%  
Performance measure achieved: 95%  
Result: Performance measure met.

SECTION TITLE

## Medical Equipment Management Plan Program Objectives and Performance Measures for 2025

The following Medical Equipment Management Plan Program Objective and Performance Measure have been approved for 2025:

### Planning Objective for 2025

Centrak hardware management services. Equipment exclusively used for Cetani temperature/ humidity monitoring, asset tracking, and Hill Rom Nurse Call system. This was a planning objective in 2024 that was not met and is being carried over to 2025.

### Performance Measure for 2025

Percentage completion of corrective maintenance work orders  
Goal: 98%.

SECTION TITLE

# Safety Management Plan

## Management Plan Scope Statement:

The Safety Management Plan describes the programs used to manage a safety program to reduce the risk of injury for patients, staff and visitors for Salinas Valley Health Medical Center.

## 2024 Planning Objectives:

1. Provide ongoing injury prevention training for all staff throughout 2024, with special emphasis on the prevention of the most commonly reported employee injuries at SVHMC. Topics covered: Workplace Violence Prevention, Preventing Slips, Trips and Falls, Blood and Body Fluid Exposure Prevention, Preventing Strains and Sprains, Injury and Illness Prevention Program, Heat Illness Prevention, Organizational Housekeeping, and Personal Protective Equipment. **This objective was met.**
2. Work with leaders and staff to reduce the use of adhesive tape throughout the organization. This is an ongoing safety initiative. Most departments surveyed have been successful in eliminating adhesive tape in their department by using alternative methods to post signs and notices. **This objective was met.**

## 2024 Performance Measures:

1. During routine safety rounding and environmental tours, inspect all power strips to ensure they are medical grade. Goal for this performance measure was set at **95%**. Results: **100% Performance measure met.**
2. During routine safety rounding and environmental tours, check all publically accessible electrical panels to ensure they are locked. Goal for this performance measure was set at **95%**. Results: **97% Performance measure met.**

SECTION TITLE

## Safety Management Plan Program Objectives and Performance Measures for 2025

The following Safety Management Plan Program Objective and Performance Measure have been approved for 2025:

### Planning Objective for 2025:

1. Conduct Situational Awareness training for all staff to provide them with the tools they need to help them become more aware of their work surroundings for unsafe conditions or unsafe acts that may impact the environment of care.

### Performance Measure for 2025:

During environmental tours and routine safety rounding ask employees to articulate the steps they would take should they observe a potentially unsafe condition. The goal for this performance measure is achieving a **95%** correct response rate.

SECTION TITLE

# Security Management Plan

## **Management Plan Scope Statement:**

The Security Management Plan describes the methods of providing security for people, equipment and other material through risk assessment and management for Salinas Valley Health Medical Center (SVHMC). Security protects individuals and property against harm or loss, including workplace violence, theft, infant abduction, and unrestricted access to medications.

## **2024 Planning Objective**

Provide Active Shooter training to include at least 6 class training and 6 practical exercises.

Results: This planning objective was met. Twelve training classes were conducted on September 11 and 12, 2024, and 14 practical exercises were conducted on September 13 and 14, 2024. **Planning objective met.**

## **2024 Performance Measure for 2024**

Achieve a **95%** compliance rate of first security officer arriving to the scene within 3 minutes or less of Code Gray announcement.

Results: **98% Performance Measure met.**

SECTION TITLE

## Security Management Plan Program Objectives and Performance Measures for 2025

The following Security Management Plan Program Objective and Performance Measure have been approved for 2025:

### **Performance Objective**

Install a walkthrough metal detector in the main lobby to screen all patients and visitors entering the facility. This will enhance security by detecting any prohibited items and ensuring the safety of everyone within the premises.

### **Performance Measure**

Achieve a 30% return rate of lost belongings to their rightful owners.

SECTION TITLE

# Utility Management Plan

## Management Plan Scope Statement:

The Utility Management Plan provides a process for the proper design, installation, and maintenance of appropriate utility systems and equipment to support a safe patient care and treatment environment at Salinas Valley Health Medical Center (SVHMC).

## 2024 Planning Objectives

Reintroduce Traptex devices in all toilets in the hospital to prevent body wipes from being flushed down the toilet which can result in a major clog in our sanitary sewer system.

### This objective will be met by:

- Reinstalling Traptex devices in all toilets where they have been removed.  
Result: A total of 82 Traptex devices have been reinstalled in toilets where they were removed. **Planning Objective met.**
- Retraining staff regarding the purpose of the device with an emphasis to not remove the device and to call Engineering when assistance is needed.

Result: Staff training is ongoing during environmental tours and routine safety rounding.

## 2024 Performance Measure

Assess the level of customer satisfaction in Engineering response to Work Orders.

Follow the completion of all Engineering Work Orders the staff member who submitted a Work Order will be asked if they are satisfied with the Engineering staff response. Goal for positive feedback from staff is set at 70%.

Result: 97% **Performance Measure met.**

SECTION TITLE

## “Flushable” Wipes Clogging a Sewer Line at a Hospital in Michigan



SECTION TITLE

## Traptex Device



SECTION TITLE

## Utility Management Plan Program Objectives and Performance Measures for 2025

The following Utility Management Plan Program Objective and Performance Measure have been approved for 2025:

### **Planning Objective for 2025**

Purchase and install a new heater/boiler for the hospital to replace the current heater/boiler that has reached the end of its operational life.

### **Performance Measure for 2025**

Conduct two safety training sessions per quarter for all Engineering staff. The subject of these safety training sessions will be tailored to address the specific tasks each Engineering employee performs in carrying out their job duties.

Goal for this Performance Measure is set at 90%.

SECTION TITLE

Questions?

SECTION TITLE





Last ApprovedN/ANext Review1 year after approval

OwnerJames Hively: Manager Environmental Health & SafetyAreaPlans and Program

# Fire Safety Management Plan

## I. SCOPE

- A. The Fire Safety Management Plan describes the methods for preventing the potential for a fire through the use of equipment and training for Salinas Valley Health Medical Center (SVHMC) The hospital and its licensed offsite locations are covered by this management plan. The Fire Safety Management Program is designed to assure appropriate, effective response to fire emergency situations that could affect the safety of patients, staff, and visitors, or the environment, and protect building occupants from fire and the products of combustion for Salinas Valley Health Medical Center. The Program is also designed to assure compliance with applicable codes and regulations, as applied to the buildings and services provided at Salinas Valley Health Medical Center.

## II. OBJECTIVES/GOALS

A. Objectives

The objective of the Fire Safety Management Program is to use information gathered from environmental tours, risk assessments is to minimize the potential for harm from fire, smoke, and other products of combustion.

B. Goals

The goals for the Fire Safety Management Program are developed from information gathered during routine and special risk assessment activities, annual evaluation of the previous year's program activities, performance measures, reports and environmental tours.

## III. DEFINITIONS

- A. Salinas Valley Health Medical Center (SVHMC) and its licensed off site locations.
- B. Interim Life Safety Measures (ILSM)

- C. Statement of Conditions (SOC)
- D. Environment of Care (EOC)
- E. Chief Executive Officer (CEO)
- F. Environmental Health and Safety – EH&S
- G. The Department of Health Care Access and Information (HCAI). Formally the California Office of Statewide Health Planning and Development (OSHPD)

## IV. PLAN MANAGEMENT

### A. Plan Elements

1. The hospital buildings are designed and maintained in compliance with law, regulation, and accreditation requirements, including compliance with the *Life Safety Code*<sup>®</sup>, 2012 Edition.
2. The fire alarm, detection, and suppression systems are designed, installed, and maintained to ensure reliable performance.
3. Staff Training is an essential part of the fire safety program.

### B. Plan Management

1. Management Plan
  - a. The organization develops, maintains and on an annual basis, evaluates the effectiveness of the Fire Safety Management Plan to effectively manage the fire safety risk to staff, visitors, and patients at SVHMC.
2. Minimize Potential for Harm
  - a. The EH&S Manager or designee is responsible for managing the program for minimizing potential harm from fire, smoke, and other products of combustion. The fire protection program includes three phases.
  - b. The first phase is the design of buildings and spaces to assure compliance with current local, state, and national building and fire codes. SVHMC employs qualified architects and engineers to develop building and fire protection system designs. All designs are reviewed by HCAI (as a part of the construction and permitting process. A construction monitoring and building commissioning program round out the design phase.
  - c. The second phase is testing, inspection, and maintenance of the fire prevention aspects of the facility. The EH&S Manager or designee is responsible for setting testing, inspection and maintenance standards and frequency based on applicable codes, equipment history, and other parameters. The work is done by SVHMC staff and contractors. The EH&S Manager or designee ensures the end product of all work maintains or improves the level of life safety in each affected area.
  - d. The third phase is an active training program of fire prevention, fire safety, and fire response. The EH&S Manager or designee manages this phase of the program.

### 3. Surgical Safety

- a. Periodic evaluations are made of potential fire hazards that could be encountered during surgical procedures. Written fire prevention and response procedures, including safety precautions related to the use of flammable germicides or antiseptics, are established. See [FIRE SAFETY FOR SURGERY, L&D, AND PROCEDURE AREAS.](#)

### 4. Unobstructed Exits in Business Occupancy

- a. For those areas designated as Business Occupancy by NFPA 101<sup>®</sup> – Life Safety Code<sup>®</sup> 2012, all exits must be maintained free and unobstructed. The status of these areas will be determined routinely by the staff and during environmental tours. Storage will not be allowed in any exit lobby or exterior anteroom.

### 5. Fire Response Plan

- a. The [FIRE RESPONSE PLAN EC#618](#) provides clear, specific instructions for staff responding to a fire emergency in the hospital. The FIRE RESPONSE PLAN FOR OFF-SITE locations outlines the procedures for staff to follow in the event of a fire emergency in business occupancies. Each department leader is responsible for maintaining copies of emergency procedures in a continuously accessible location.
- b. The EH&S Manager or designee and department leadership is responsible for developing and training staff on department specific emergency fire response procedures. Department leadership is responsible for providing departmental and area personnel with an orientation to emergency procedures related to their job. Additional departmental training is provided on an annual basis as part of the continuing education program or on an as-needed basis. The roles of all staff and licensed independent practitioners (LIPs) are detailed specifically in the Fire Response Plan. The roles of all staff and LIPs at and near the point of fire origin are defined. The basic plan in the organization is based on the acronym "RACER":
  - i. Rescue anyone in immediate danger from the fire if safe to do so
  - ii. Activate the fire alarm by a pulling fire alarm pull station and dialing 2-2-2-2 on the phone and announcing the alarm to staff. Off site location staff must call 9-911.
  - iii. Contain smoke and fire by closing doors and windows
  - iv. Extinguish if safe to do so
  - v. Relocate and evacuate as directed.
- c. The role of all staff and LIPs away from the point of fire origin is to close doors and evaluate the situation. If the fire is in horizontally adjacent areas or in areas where relocation is planned, move patients to an adjacent smoke department if it is safe to do so.
- d. The Administrative Supervisor or Respiratory Therapy staff are responsible

for shutting off the oxygen in the area when deemed appropriate.

## 6. Fire Drills

- a. Fire drills are a critical tool for maintaining the readiness of staff to respond to a fire emergency and to minimize the likelihood of injury to patients, visitors and staff. Staff participation is necessary to maintain an acceptable level of readiness and to ensure staff knowledge of the equipment and procedures necessary to protect the staff and patients. To evaluate staff knowledge, drill activities are observed, and staff is questioned about their role and responsibilities during a fire emergency nearby and elsewhere in the building.
- b. Fire drills are conducted in the hospital once per shift per quarter and scheduled at varying times of day. Fire drills are conducted every 12 months in all licensed freestanding buildings classified as business occupancies. These drills are witnessed, documented, and evaluated to identify improvements that may be made. Additional drills are held as deemed appropriate.
- c. All drills will be unannounced, with the exception of those done as corrective training activities.
- d. All SVHMC staff will participate in drills, according to the fire response plan. This includes all hospital staff and all SVHMC staff in buildings where space is shared with others.
- e. Fire drills are observed and critiqued to evaluate fire safety equipment, fire safety building features and staff response. In addition, fire response knowledge is evaluated during fire drills and environmental tours.
- f. The results of the critique and evaluation of drills and evaluation of staff knowledge are used to identify improvements needed in training programs, fire protection equipment, and administrative compliance issues. Such improvements are evaluated during monitoring activities and the results are used to identify the effectiveness of the activities.

## 7. Maintaining Fire Safety Equipment and Building Features

- a. The Director of Facilities Management Services or designee is responsible for maintenance of the fire alarm and related systems. Troubleshooting fire alarm system and performing corrective and preventive testing, inspection and maintenance is performed by staff and/or an approved vendor. All testing, maintenance, inspection, and repairs are documented and reviewed by the Director of Facilities Management Services, or designee. Any fire protection feature that is not operating properly will be evaluated for the (ILSM).
- b. When appropriate, competent contractors are used to test, inspect, maintain, and repair the fire protection features. Documentation is maintained as part of the SVHMC database to assure activities are conducted as required.

## 8. Life Safety

- a. The EH&S Manager or designee is responsible for assessing compliance of the organization with the Life Safety Code and managing the Statement of Conditions (SOC) when addressing survey-related deficiencies. In time frames defined by the hospital, the EH&S Manager performs a building assessment to determine compliance with the Life Safety Code. A quarterly report of any deficiencies identified is provided to the EOC Committee.. The organization maintains documentation of any inspections and approvals made by state or local fire agencies.
- b. Current and accurate drawings denoting features of fire safety and related square footage are maintained.
- c. The hospital does not remove or minimize an existing life safety feature when such feature is a requirement for new construction. Existing life safety features, if not required by the Life Safety Code, are either maintained or removed.

## 9. Managing Fire Life Safety Risks

- a. The organization has a written Interim Life Safety Measure (ILSM) policy that addresses situations when Life Safety Code deficiencies exist and cannot be immediately corrected or during periods of construction. The policy includes criteria for evaluating when and to what extent SVHMC compensates for increased life safety risk. The criteria include the assessment process to determine when interim life safety measures are implemented.
- b. The Interim Life Safety Program consists of a screening tool used to assess the severity of the potential impact of a degraded level of life safety. When risk factors indicate a need to implement one or more of the ILSM, a project specific plan is designed. The implementation may include training, installation of engineering controls, posting of temporary advisory signs, etc. Affected staff are oriented and drilled, as appropriate.
- c. The EH&S Manager or designee is responsible for monitoring the effectiveness of the implementation of the appropriate ILSM. When deficiencies are identified, appropriate actions are taken to resolve the deficiencies. All monitoring and actions to resolve deficiencies are documented. All Interim Life Safety evaluations, plans, and monitoring documentation are maintained for at least three years.

### C. Plan Responsibility

1. The Director of Facilities and Construction and the EH&S Manager or designee, in collaboration with the EOC Committee, is responsible for monitoring all aspects of the Fire Safety Management Program. The EH&S Manager advises the EOC Committee regarding fire safety issues, which may necessitate changes to policies and procedures, orientation or education, or expenditure of funds.

### D. Performance Measurement

- 1. On an annual basis, the EOC Committee evaluates the scope, objectives, performance, and effectiveness of the Fire Safety Management Plan to manage the fire safety risks to the staff, visitors, and patients at SVHMC

E. **Orientation and Education**

- 1. Education and/or training is provided as needed.

**V. REFERENCES**

- A. The Joint Commission Standards, Environment of Care and Life Safety chapters
- B. National Fire Protection Association Life Safety Code 101, 2012 edition.

**Approval Signatures**

Step Description	Approver	Date
Environment of Care Committee	James Hively: Manager Environmental Health & Safety	Pending
Emergency Management	James Hively: Manager Environmental Health & Safety	04/2025
Policy Committees	Rebecca Alaga: Regulatory/ Accreditation Coordinator	04/2025
Policy Owner	James Hively: Manager Environmental Health & Safety	04/2025

**Standards**

No standards are associated with this document



Last ApprovedN/ANext Review1 year after approval

OwnerJames Hively: Manager Environmental Health & SafetyAreaPlans and Program

# Hazardous Materials & Waste Management Plan

## I. SCOPE

- A. Hazardous Material and Waste (HazMat) Management Plan describes the methods for handling hazardous materials and waste through risk assessment and management for the Salinas Valley Health Medical Center (SVHMC) The plan addresses the risks associated with these materials that can pose a threat to the environment, staff, patients, and visitors from the variety of hazardous substances, such as radiological, chemical, or hazardous energy sources, and to minimize the risk of harm at SVHMC. The program is designed to assure compliance with applicable codes and regulations as applied to the buildings and services at SVHMC The processes include education, procedures for safe use, storage and disposal, and management of spills or exposures.

## II. OBJECTIVES/GOALS

- A. Objectives
1. The objective of the HazMat Program are to ensure that all hazardous materials are managed safely and in accordance with all applicable regulations and codes from the point of entry to any Salinas Valley Health facility through to its final use and/or disposal.
- B. Goals
1. The goals for the Hazmat Program are developed from information gathered during routine and special risk assessment activities, annual evaluation of the previous year's program activities, performance measures, occurrence reports and environmental tours.

## III. DEFINITIONS

- A. Hazardous Material and Waste (HazMat)

- B. Environment of Care Committee (EOC)
- C. Safety Data Sheets (SDS)
- D. Personal Protective Equipment (PPE)
- E. EHS: Environmental Health & Safety

## IV. PLAN MANAGEMENT

### A. Plan Elements

1. The Scope of the hazardous materials and waste management program is determined by the materials in use and the waste generated by the hospital.
2. The hazardous materials and waste are identified in the organization's inventory and the associated hazards defined as required by law or regulation in Safety Data Sheets (SDS), guidelines, good-practice recommendations, or similar available documents.
3. Safe use of hazardous materials and handling of waste requires participation by leadership, at an organizational level and a departmental level, and other appropriate staff in the design and implementation of all parts of the plan.
4. Protection from hazards requires all staff that use or are exposed to hazardous materials and waste to be educated as to the nature of the hazards and to use equipment provided for safe use and handling when working with or around hazardous materials and waste.
5. Rapid, effective response is required in the event of a spill, release, or exposure to a hazardous materials or waste. See [HAZARDOUS MATERIALS SPILL RESPONSE PROCEDURE](#)
6. Special monitoring processes or systems may be required to manage certain hazardous gases, vapors, or radiation undetectable by humans.

### B. Plan Management

1. **PROCESSING FOR MANAGING THE RISK OF HAZARDOUS MATERIAL AND WASTE**
  - a. **Management Plan**
    - i. The organization develops and maintains the Hazardous Material and Waste Management Plan to effectively manage the risks of hazardous material and waste to the staff, visitors, and patients at SVHMC.
  - b. **Hazardous Materials and Waste Inventory**
    - i. The organization develops and maintains an inventory of hazardous materials and waste, including biological, radiological, chemotherapeutic, and chemicals. Each manager provides information on the hazardous materials and waste used, stored, or generated in that department. Inventories are received from each department and evaluated for completeness with assistance from the appropriate staff, including the



Radiation Safety Officer.

- ii. Information identifying the hazards and emergency responses associated with these materials and wastes are available to staff, patients, and visitor at all times from such resources as Safety Data Sheets (SDS) sheets, Centers for Disease Control (CDC) Guidelines, and Nuclear Regulatory Commission (NRC) regulations. Various methods for retrieving the information are available from the internet, fax, and/or on-line servers.

**c. Spills and Exposures**

- i. The EHS Manager, or designee, develops and maintains emergency procedures for the Hazardous Materials and Waste program.
- ii. SVHMC has a procedure that evaluates spills to determine if outside assistance is necessary. A minor (incidental) spill is one that can be safely cleaned up by the staff involved, with their training and personal protective equipment. If a spill kit is used, the kit contents are replaced.
- iii. A spill that exceeds the capability of the immediate staff to neutralize and clean up requires a response from outside the facility. In these cases, the area may be evacuated, ventilation controlled, and the Salinas Fire Department HAZMAT Team is called. The Salinas Fire Department takes control of the site and cleanup, or arrange for it to be cleaned up. Once determined safe, hospital staff finish the cleanup and recovery. Staff, including Environmental Services (EVS) staff, is trained to recognize the potential for a spill that is not safe to handle, and to contact their manager, and/or the Plant Operations/ Engineering Department. During off-shifts, the Administrator on Duty and the Nursing Administrative Supervisor will make the determination. Staff is cautioned to err on the side of safety, and not proceed with cleanup that exceed their training knowledge, or the PPE they have available.
- iv. Incidents involving spill kits, or a response from any outside agency are documented on Incident Report Forms.

**d. Hazardous Chemical Risks**

- i. SVHMC has established and maintains processes for identifying, selecting, handling, storing, transporting, using, and disposing of hazardous chemical materials and waste from receipt or generation through use and/or final disposal. The department leadership assures their safe selection, storage, handling, use, and disposal. The department is responsible for evaluating Safety Data Sheets for hazards before purchase of departmental supplies to assure they are appropriate, and the least hazardous alternative practical. The department managers

work with the EHS Manager and appropriate individuals to develop procedures for handling of hazardous materials. The following materials and wastes are managed:

- a. Chemical materials are identified and ordered by department leadership. Appropriate storage space is maintained by each department, and reviewed as part of environmental tours in that area. Chemical materials are maintained in labeled containers, and staff is trained in understanding SDS, and in the appropriate and safe handling of the chemicals they use.
- b. Chemical waste is held in the hazardous waste collection yard or generating department, until arrival of the licensed hazardous waste contractor. The contractor lab packs the chemicals, completes the manifest and removes the packaged waste. The Uniform Hazardous Waste Manifest records are maintained by Safety Office. Only authorized employees of SVHMC are permitted to sign a Uniform Hazardous Waste Manifest.

**e. Radioactive Risks**

- i. SVHMC has established and maintains processes for identifying, selecting, handling, storing, transporting, using, and disposing of hazardous radioactive materials and waste from receipt or generation through use and/or final disposal. The department leadership assures their safe selection, storage, handling, use, and disposal. The department managers work with the Radiation Safety Officer or Infection Prevention Manager, to develop procedures for handling of radioactive materials:
  - a. Radioactive material is handled subject to the SVHMC NRC License, and their safety is managed by the Radiation Safety Officer. Materials are handled in accordance with the requirements of the facility license.
  - b. Radioactive waste is held in a 'hot room' until decayed to background, then handled as the underlying hazard of the materials for disposal. The Radiation Safety Officer manages the waste and determines when it is no longer considered a radioactive hazard.
  - c. Radioactive deliveries are escorted to the Nuclear Med Lab by security.

**f. Hazardous Energy Sources**

- i. Hazardous energy sources include, but not limited to, ionizing

and non-ionizing systems, and lasers will be selected and used in accordance to manufacturer's recommendation and regulatory requirements. Specific policies pertaining to operational safety and use of each hazardous energy sources are found in each department that utilizes such sources . The Department Director or a designated representative will conduct identification and evaluation of hazardous energy sources.

- ii. The primary source of hazard information will be from the manufacturer and/or supplier. Engineering controls and/or work practices should be developed to reduce exposures and potential injury. All employees involved in the operation and use of hazardous energy sources will be provided with appropriate training as part of their initial orientation. Staff will follow the procedures established in the departmental policies and procedures to identify and mitigate exposure to potential risks associated with hazardous energy sources. Department leaders will maintain required documentation including applicable regulations, required permits and licenses for each hazardous energy source.

**g. Hazardous Drugs**

- i. SVHMC has established and maintains processes for identifying, selecting, handling, storing, transporting, using, and disposing of hazardous drugs and waste from receipt or generation through use and/or final disposal
  - a. Hazardous drugs and the materials used to prepare, administer, and control these materials are controlled and the waste materials collected for appropriate disposal. Staff using these materials are trained in the handling, and emergency response to spills or leaks.
  - b. Chemotherapeutic residual waste is handled as part of the Regulated Medical Waste stream, with additional labeling to assure appropriate incineration as final destruction. Larger than residual volumes of chemotherapeutic waste (liquids) are handled as chemical waste.
  - c. Pharmaceutical Waste is disposed of as follows:
    - i. Pharmaceutical Waste placed in Blue and White Containers is sealed in the container and removed to a designated location and removed by a certified hauler.
    - ii. Pharmaceuticals: R.C.R.A waste is dated and labeled and sealed in a black container, dated for removal and placed in a designated location and removed by a

certified hauler.

**h. Hazardous Gas & Vapor Risks**

- i. The EHS Manager is responsible for managing the program for monitoring hazardous gases and vapors.
- ii. If a test result was above the Cal/OSHA Permissible Exposure Limit (PEL), corrective action and additional testing will be done to ensure a safe working environment.

**i. Permits, Licenses, Manifests and SDS**

- i. SVHMC has obtained and maintains permits and licenses for handling and disposal of hazardous wastes, including chemical wastes and radioactive materials from the appropriate federal, state, and municipal agencies and safety data sheets for the chemical waste and hazardous medications waste.
- ii. Each shipment of hazardous waste removed from the facility is documented on a Uniform Hazardous Waste Manifest

**j. Reviewing CT, PET, and MRI staff dosimetry data**

- i. The results of staff dosimetry monitoring for CT, PET and NM services are reviewed at least quarterly by the Radiation Safety Officer, Diagnostic Medical Physicist, or Health Physicist to assess whether staff radiation exposure levels are "As Low As Reasonably Achievable" (ALARA) and below regulatory limits

**k. Managing radiation exposures**

- i. The organization monitors the radiation exposures to the appropriate staff periodically. Exposure meters or radiation monitoring badges are used to monitor the radiation dose. The Radiation Safety Officer reviews the results of the monitoring process and reports any concerns to the Radiation Safety Committee and the Environment of Care Committee when appropriate.

**l. Managing general waste**

- i. SVHMC has procedures for the proper management of general waste or "trash" generated throughout the facility. This includes the proper collection in the appropriate container, transportation of the waste to the storage or disposal site, and the prompt disposal of the waste. The Director of Environmental Services is responsible for this process and reports and discrepancies to the Environment of Care Committee as needed.

**m. Managing regulated medical waste, including sharps**

- i. The management of the disposal of regulated medical wastes is the responsibility of the Infection Prevention Manager with assistance from the Director of Environmental Services. The EVS

staff distributes and collects appropriate containers for collection of regulated medical wastes and for medical sharps. The containers are leak proof and puncture resistant. The EVS staff collects the containers and transports them to the holding room. The appropriate staff will clean up all spills of blood or body fluids. The areas affected will be cleaned following appropriate procedures for the material involved.

n. **Evaluating the Management Plan**

- i. On an annual basis, the EOC Committee evaluates the scope, objectives, performance, and effectiveness of the plan to manage the risks of hazardous materials and waste to the staff, visitors, and patients at SVHMC.**Process for Labeling Hazardous Material & Waste**

2. All hazardous materials and wastes are properly labeled. Hazardous waste container labels will include the accumulation start date.

- a. **Chemotherapeutic Waste:** Chemotherapeutic waste is placed into labeled containers (labeled with the OSHA and international symbol for carcinogenic wastes). These wastes are handled along with the red bag wastes. Bulk quantities of chemotherapeutic waste are handled as hazardous chemical waste.
- b. **Chemical Materials and Waste:** Chemical materials are labeled throughout their use, handling, and disposal. The label is on the container prior to receipt or is placed on containers when filled or mixed within the hospital. Labeling is evaluated during environmental tours, to assure the labels are maintained and legible. In many cases the waste is labeled by the original chemical name, in other cases, where collection containers are used, the container is labeled. These labels are required by law and the vendors of chemical disposal services to maintain the identity of the materials, and if the identity is lost, the materials are tested and analyzed to identify them for proper handling and disposal.
- c. **Radioactive Materials & Waste:** Radioactive materials are labeled according to NRC, OSHA, or International agencies. Wastes are held to decay to background, when the labels are removed or covered, and wastes handled as the other hazards they may reflect. Labeling is evaluated during environmental tours, to assure the labels are maintained and legible.

C. **Plan Responsibility**

1. The EHS Manager, in collaboration with the EOC, is responsible for monitoring all aspects of the HazMat Program.
  - a. CT: computerized tomography
  - b. PET: Positive Electron Tomography
  - c. MRI: Magnetic Resonance Imaging
  - d. NM: Nuclear Medicine

**D. Performance Measurement**

- 1. The performance measurement process is one part of the evaluation of the effectiveness of the Hazardous Materials Management Program. Performance measures are established to measure at least one important aspect of the Hazardous Materials Management Program and are meant to focus on areas that need improvement or affect the overall safety of patient, staff, or visitors.

**E. Orientation and Education**

- 1. Orientation, education and/or training is provided on an as needed basis.

**V. REFERENCES**

- A. The Joint Commission Standards, Environment of Care Chapter

**Approval Signatures**

Step Description	Approver	Date
QSC	Aniko Kukla: Director Quality & Patient Safety	Pending
Environment of Care Committee	James Hively: Manager Environmental Health & Safety	04/2025
Policy Committees	Rebecca Alaga: Regulatory/ Accreditation Coordinator	03/2025
Policy Owner	James Hively: Manager Environmental Health & Safety	03/2025

**Standards**

No standards are associated with this document



Last03/2025  
Approved  
Next Review03/2026

OwnerLaura Zerbe:  
Manager  
Facilities  
Construction and  
Plant Operatio  
  
AreaPlans and  
Program

# Medical Equipment Management Plan

## I. SCOPE

- A. The Medical Equipment Management Program is designed to assure proper selection, of the appropriate medical equipment to support a safe patient care and treatment environment. The Program will assure effective preparation of staff responsible for the use, maintenance, and repair of the equipment, and manage risks associated with the use of medical equipment technology Finally, the Program is designed to assure continual availability of safe, effective equipment through a program of planned maintenance, timely repair, ongoing education and training, and evaluation of all events that could have an adverse impact on the safety of patients or staff as applied to the building and services provided at Salinas Valley Health Medical Center (SVHMC).

## II. OBJECTIVES/GOALS

- A. The annual goals for the Medical Equipment Program are developed from information gathered during routine and risk assessment activities, annual evaluation of the previous year's program, performance measures, and environmental tours.

## III. DEFINITIONS

- A. Environment of Care Committee (EOC)
- B. "High-risk" medical equipment: medical equipment on the inventory for which there is an identified risk of serious harm or death to a patient or staff member should the equipment fail. The high-risk medical equipment includes life-support equipment.

## IV. PLAN MANAGEMENT

- A. Plan Elements

1. The sophistication and complexity of medical equipment continues to expand. Selecting new medical equipment technology requires research and a team approach.
2. Patient care providers need information to develop an understanding of medical equipment limitations, safe operating conditions, safe work practices, and emergency clinical interventions during failures.
3. Medical equipment may injure patients or adversely affect care decisions if not properly maintained.

## **B. Plan Management**

### **1. Management Plan**

- a. The organization develops and maintains the Medical Equipment Management Plan to effectively manage the medical equipment risks to the staff, visitors, and patients at SVHMC. The Chief Biomed Engineer works collaboratively with the Environmental Health and Safety Manager, Plant Operations and Hospital Construction maintain an effective plan.

### **2. Selection & Acquisition**

- a. The Chief Biomed Engineer helps in coordinating the medical equipment selection and acquisition process. Department heads and others, as appropriate, collaborate to select and acquire medical equipment. Department heads develop recommendations related to equipment to purchase. The Chief Biomed Engineer ensures medical equipment considered for purchase meets appropriate standards of performance and safety.
- b. The Chief Biomed Engineer works with design professionals and medical staff to identify needs for space and support of new equipment. They also manage the commissioning of new equipment. The commissioning process includes assembly, installation, and testing of new equipment prior to initial use.
- c. The managers of clinical departments where new equipment is installed collaborate with Materials Management, Information & Technology, Biomedical Equipment, Plant Operations and equipment suppliers to assure appropriate education and training are provided to all initial users of the equipment and a program for training additional future users is developed.
- d. Capital equipment requests for medical equipment are included as part of the annual budget process. The CEO has final approval over all new medical equipment purchases. The Biomedical Department maintains documentation related to the Medical Equipment.

### **3. Criteria & Inventory**

- a. The SVHMC maintains an inventory of selected medical equipment categorized by physical risk associated with use and equipment incident history. This includes all life support equipment. The Biomedical



Department evaluates new types of equipment before initial use to determine whether to include this equipment in the inventory.

- b. Written criteria are used to identify risks associated with medical equipment. The risks include, equipment function, physical risks associated with use, and equipment incident history as it relates to patient safety. The risks identified are used to assist in determining the strategies for maintenance, testing, and inspection of medical equipment. In addition, the identified risks are used to guide the development of training and education programs for staff that use or maintain equipment.
- c. Equipment requiring a program of planned maintenance is listed as part of a maintenance inventory. The list includes equipment maintained by in-house staff as well as equipment maintained by vendors.

#### **4. Identifying activities and frequencies**

- a. The organization identifies the activities and associated frequencies, in writing, for inspecting, testing, and maintaining all medical equipment on the inventory. These activities and associated frequencies are in accordance with manufacturers' recommendations, or with strategies of an Alternative Equipment Maintenance (AEM) program. The strategies of an AEM program will not reduce the safety of equipment and must be based on accepted standards of practice.
- b. A computerized maintenance management system is used to schedule and track timely completion of scheduled maintenance and service activities. The Director is responsible for assuring that the rate of timely completion of scheduled maintenance and other service activities meets regulatory and accreditation requirements, including medical equipment maintained by vendors.
- c. The frequency of maintenance is determined at the time of initial evaluation of the utility system based on the following:
  - i. Interval testing
  - ii. Run-time based inspections
  - iii. Corrective maintenance
  - iv. Metered maintenance based on hours of use, or other time of use processes (This strategy uses on-board clocks or event recorders to trigger specific tests, inspections or service)

#### **5. Maintaining specific medical equipment**

- a. The organization's activities and frequencies for inspecting, testing, and maintaining the following items are conducted in accordance with manufacturers' recommendations or accreditation standards if frequency is increased:
  - i. Medical equipment subject to federal or state law or Medicare Conditions of Participation in which inspecting, testing, and maintaining be in accordance with the manufacturers'

- recommendations, or otherwise establishes more stringent maintenance requirements
  - ii. Medical laser devices
  - iii. Imaging and radiologic equipment (whether used for diagnostic or therapeutic purposes )
  - iv. New medical equipment with insufficient maintenance history to support the use of alternative maintenance strategies
- b. The maintenance history used to determine the activities and frequencies may include, records provided by the organization's contractors used to service the equipment, and information made public by nationally recognized sources, such as ECRI. The organization's experience of testing, maintaining, and inspecting medical equipment will also be used as history to determine the activities and frequencies required.

#### **6. Assessing the equipment for maintenance with written criteria**

- a. The organization identifies a qualified individual, or individuals if necessary, that will use written criteria to support the determination whether it is safe to permit medical equipment to be maintained in an AEM (alternate equipment maintenance) program. The written criteria will include:
  - i. How the equipment is used, including the seriousness and prevalence of harm during normal use
  - ii. Likely consequences of equipment failure or malfunction, including seriousness of and prevalence of harm
  - iii. A availability of alternative or back-up equipment in the event the equipment fails or malfunctions
  - iv. Incident history of identical or similar equipment
  - v. Maintenance requirements of the equipment
- b. Once the appropriate program is determined, the information is entered into the record for the medical equipment in the inventory.

#### **7. Identifying medical equipment that is using the AEM program**

- a. The medical equipment that will be included in the AEM program will be clearly identified in the medical equipment inventory. The inventory is updated at the time of this determination.

#### **8. Safe Medical Devices Act**

- a. Risk Management is responsible for monitoring and reporting all incidents in which medical equipment is suspected in or attributed to the death, serious injury, or serious illness of any individual, as required by the Safe Medical Devices Act of 1990. Risk Management collects information about potentially reportable events through the incident reporting and investigation process. The appropriate clinical staff conduct investigations

of medical equipment incidents to determine if the incident is reportable under criteria established by the Food and Drug Administration.

- b. Risk Management uses the Sentinel Event Process to investigate and document reportable incidents and prepares quarterly reports for the Safety Committee on those incidents determined to be reportable. Risk Management is also responsible for completing all reports and handling other communications with medical equipment manufacturers and the FDA required by the Safe Medical Devices Act.
- c. Appropriate changes in processes and training are made through the performance improvement process. The changes are communicated to all appropriate staff.

## **9. Emergency Procedures**

- a. The Chief of Biomed assists in the development of written procedures that are followed when medical equipment fails. These procedures include emergency clinical interventions and the location and use of backup medical equipment. The head of each department that uses life support or other life-critical medical equipment develops and trains staff about the specific emergency procedures to be used in the event of failure or malfunction of equipment whose failure could cause death or irreversible harm to the patient dependent on such equipment.
- b. These emergency response procedures provide clear, specific instructions for staff responding to an emergency and provide information about notifying appropriate administrative staff of the emergency, actions required to protect patients from harm, contacts for spare equipment or repair services, and contacts to obtain additional staff to manage the emergency.
- c. Each department head maintains copies of applicable emergency procedures in accessible locations in their departments. Departmental staff receives orientation and ongoing education and training about the emergency procedures.
- d. Each department head reviews the department specific medical equipment emergency procedures annually.

## **10. Testing of Medical Equipment Prior to Initial Use**

- a. The Biomedical Department will test all medical equipment on the inventory before initial usage. SVHMC performs safety, operational, and functional checks. The inventory includes, equipment owned by the SVHMC, leased, and rented from vendors. These inspection, testing and maintenance documents are maintained in the Biomedical Department for review. The Chief of Biomed manages the program of planned inspection and maintenance.

## **11. Testing of High Risk and Non High Risk Equipment**

- a. The Chief of Biomed assures that scheduled testing of all medical

equipment is performed in a timely manner. Reports of the completion rate of scheduled inspection and maintenance are presented to the EOC Committee each quarter. If the quarterly rate of completion falls below 100%, the Chief of Biomed will present an analysis to determine the cause of the problem and make recommendations for addressing it. These inspection, testing, and maintenance documents are maintained in the Biomedical Department for review.

#### **12. Testing of Sterilizers**

- a. The Plant Operations Department is responsible for testing and maintaining of all types of sterilizers used in SVHMC. Records of load testing and regular maintenance are maintained by Plant Operations/Engineering Department. Any improper results are documented as patient safety incidents and reported to the EOC Committee for evaluation and action. Documentation of the testing and maintenance activities are maintaining in the Plant Operations/Engineering Department for review.

#### **13. Testing of Dialysis Equipment**

- a. The Salinas Valley Dialysis Services is responsible for performing equipment maintenance and chemical and biological testing of water used in hemodialysis at SVHMC. The program of maintenance includes, regular cleaning and disinfection of all dialysis equipment, and testing for compliance with biological and chemical standards for the dialysis water supply. Documentation of the testing and maintenance activities is maintained in the Biomedical Department for review.

#### **14. Equipment Used in Oxygen-Enriched Atmospheres**

- a. Equipment listed for use in oxygen-enriched atmospheres are clearly and permanently labeled (withstands cleaning/disinfecting) as follows:
  - i. Oxygen-metering equipment, pressure-reducing regulators, humidifiers, and nebulizers are labeled with name of manufacturer or supplier.
  - ii. Oxygen-metering equipment and pressure reducing regulators are labeled "OXYGEN–USE NO OIL."
  - iii. Labels on flowmeters, pressure-reducing regulators, and oxygen-dispensing apparatuses designate the gases for which they are intended.
  - iv. Cylinders and containers are labeled in accordance with Compressed Gas Association (CGA) C-7.

#### **15. Maintenance of Anesthesia Apparatus**

- a. The hospital performs equipment maintenance on anesthesia apparatus. The apparatus are tested at the final path to patient after any adjustment, modification or repair. Before the apparatus is returned to service, each connection is checked to verify proper gas flow and an oxygen analyzer is used to verify oxygen concentration. Areas designated for servicing of

oxygen equipment are clean and free of oil, grease, or other flammables.

**16. Establishing Quality Control & Maintenance of Diagnostic Imaging Equipment**

- a. The Director of Radiology in collaboration with the Medical Physicist and the Chief of Biomed Engineering establish effective quality control measures and defined maintenance intervals that are consistent with manufacturer's recommendations and/or accreditation requirements to assure equipment functionality and quality of the following imaging equipment:
  - i. CT (computed tomography)
  - ii. NM (nuclear medicine)
  - iii. Mammography
  - iv. Special Procedures
  - v. General X-ray
  - vi. Alliance Imaging maintains PET (positron emission tomography) and MRI (magnetic resonance imaging) equipment – Service records and Physicist reports are provided to Bio-med and the Director of Imaging Services by Alliance Imaging.
  - vii. All ultrasound equipment is maintained and serviced by a qualified service engineer per manufacturer's guidelines and/or accreditation requirements. An annual medical physicist equipment check is not required.

**C. Plan Responsibility**

1. The Chief Biomed Engineer, in collaboration with the Environment of Care Committee, assures that the Medical Equipment Program is implemented in all key clinical areas.
2. The Chief Biomed Engineer, implements the in-house medical equipment maintenance program and tracks maintenance provided by original equipment manufacturers, and other contractors who provide maintenance and repair services for specific items of equipment.

**D. Performance Measurement**

1. The performance measurement process is one part of the evaluation of the effectiveness of the Medical Equipment Program. Performance measures are established to measure at least one important aspect of the Medical Equipment Program and are meant to focus on areas that need improvement or affect the overall safety of patient, staff, or visitors.
2. **Monitoring Diagnostic Imaging Equipment Quality Performance**
  - a. The organization assures that the quality of the diagnostic imaging modalities equipment performance is maintained. The Medical Physicist is responsible for these activities. The results of the quality program are reported to the Chief of the Biomedical Engineering department periodically and is reported up to the Environment of Care Committee

(EOC) when appropriate.

- b. At least annually, the Diagnostic Medical Physicist or MRI scientist evaluates performance for computed tomography (CT), positron emission tomography (PET), nuclear medicine (NM), magnetic resonance imaging (MRI), and x-ray equipment. They may be assisted with the testing and evaluation of equipment performance by individuals who have the required training and skills, as determined by the physicist or MRI scientist
- c. This includes testing of image acquisition display monitors for maximum and minimum luminance, luminance uniformity, resolution, and spatial accuracy.

### **3. Monitoring Radiation Dose from CT Equipment**

- a. At least annually, a qualified Medical physicist evaluates the radiation doses from diagnostic computed tomography (CT) services. This includes:
- b. Measures the radiation dose (in the form of volume computed tomography dose index (CTDIvol) produced by each diagnostic CT imaging system. The radiation dose for following four CT protocols will be monitored:
  - i. adult brain
  - ii. adult abdomen
  - iii. pediatric brain
  - iv. pediatric abdomen
- c. If one or more of these protocols is not used by the (critical access) hospital, other commonly used CT protocols may be substituted.
- d. Verifies that the radiation dose (in the form of CTDIvol) produced and measured for each protocol tested is within 20 percent of the CTDIvol displayed on the CT console. This applies only for systems capable of calculating and displaying radiation doses. The dates, results, and verifications of these measurements are documented.
- e. Even though the Medical physicist is accountable for these activities, they may be assisted with the testing and evaluation of equipment performance by individuals who have the required training and skills, as determined by the physicist. Physicist annual reports are located in Bio-med and Diagnostic Imaging.

### **4. Evaluating performance of CT equipment**

- a. At least annually, the Medical physicist evaluates the performance for all diagnostic computed tomography (CT) services. The evaluation results, along with recommendations for correcting any problems identified are documented and reported to the Director of Diagnostic Imaging.
- b. The evaluation includes the use of phantoms to assess the following imaging metrics:
  - i. image uniformity

- ii. scout precision accuracy
  - iii. alignment light accuracy
  - iv. table travel accuracy
  - v. radiation beam width
  - vi. high-contrast resolution
  - vii. low-contrast resolution
  - viii. geometric or distance accuracy
  - ix. CT number accuracy and uniformity
  - x. artifact evaluation
- c. This element of performance does not apply to dental cone beam CT radiographic imaging studies performed for diagnosis of conditions affecting the maxillofacial region or to obtain guidance for the treatment of such conditions.
  - d. Even though the Medical Physicist is accountable for these activities, they may be assisted with the testing and evaluation of equipment performance by individuals who have the required training and skills, as determined by the physicist.

#### **5. Evaluating performance of MRI imaging equipment**

- a. At least annually, the Medical Physicist or Magnetic Resonance Imaging (MRI) Scientist conducts a performance evaluation of all MRI imaging equipment. The evaluation results, along with recommendations for correcting any problems identified are documented and reported to the Chief, Biomedical Engineering Department.
- b. The evaluation includes the use of phantoms to assess the following imaging metrics:
  - i. imaging uniformity
  - ii. signal to noise (SNR) for all coils used clinically
  - iii. slice thickness accuracy
  - iv. slice position accuracy
  - v. alignment light accuracy
  - vi. high contrast resolution
  - vii. low contrast resolution (or contrast to noise ratio)
  - viii. geometric or distance accuracy
  - ix. geometric or distance accuracy
  - x. magnetic field homogeneity
  - xi. artifact evaluation

#### **6. Evaluating performance of Nuclear Medicine imaging equipment**

- a. At least annually, the Medical Physicist or Nuclear Medicine Physicist conducts a performance evaluation of all nuclear medicine imaging equipment. The evaluation results, along with recommendations for correcting any problems identified are documented and reported to the Chief of the Biomedical Department.
- b. The evaluations are conducted for the entire image types produced clinically by each NM scanner (for example, planar and/or tomographic). This includes the use of phantoms to assess the following imaging metrics:
  - i. imaging uniformity/system uniformity
  - ii. high contrast resolution/system spatial resolution
  - iii. sensitivity
  - iv. energy resolution
  - v. count rate performance
  - vi. artifact evaluation
- c. The tests for low contrast resolution or detectability for non-planar acquisitions may also be conducted, even though it is not required.

#### **7. Evaluating the performance of PET imaging equipment**

- a. At least annually, the Diagnostic Medical Physicist evaluates the performance for all positron emission tomography (PET) imaging equipment. The evaluation results, along with recommendations for correcting any problems identified are documented and reported to the Chief, Biomedical Department.
- b. The evaluations are conducted for all of the image types produced clinically by each PET scanner (for example, planar and/or tomographic). A phantom is used to assess the following imaging metrics:
  - i. imaging uniformity/system uniformity
  - ii. high contrast resolution/system spatial resolution
  - iii. low contrast resolution or detectability (not applicable on planar acquisitions)
  - iv. artifact evaluation
- c. The scanner tests for sensitivity, energy resolution, and count rate performance may also be conducted, even though it is not required. Even though the Diagnostic Medical Physicist is accountable for these activities, they may be assisted with the testing and evaluation of equipment performance by individuals who have the required training and skills, as determined by the Diagnostic Medical Physicist

#### **8. Evaluating the performance of Fluoroscopy equipment**

- a. At least annually, a diagnostic medical physicist conducts a performance evaluation of fluoroscopic imaging equipment. The evaluation results,



along with recommendations for correcting any problems identified, are documented. The evaluation includes an assessment of the following:

- i. Beam alignment and collimation
  - ii. Tube potential/kilovolt peak (kV/kVp) accuracy
  - iii. Beam filtrations (half-layer value)
  - iv. high-contrast resolution
  - v. low-contrast detectability
  - vi. maximum exposure rate in all imaging modes
  - vii. displayed air-kerma rate and cumulative-air kerma accuracy (when applicable)
- b. Medical physicists conducting performance evaluations may be assisted with the testing and evaluation of equipment performance by individuals who have the required training and skills, as determined by the physicist. This does not apply to fluoroscopy equipment used for therapeutic treatment planning or delivery.

#### 9. Evaluating the Management Plan

- a. On an annual basis, the Biomedical Department and EOC Committee evaluates the scope, objectives, performance, and effectiveness of the Plan to manage the medical equipment risks to the staff, visitors, and patients at SVHMC.

#### E. Orientation and Education

- 1. Orientation, education and/or training is provided on an as needed basis.

## V. REFERENCES

- A. N/A

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## Attachments

 [A: Medical Equipment Risk-Based Analysis](#)

## Approval Signatures

Step Description	Approver	Date
Board	Rebecca Alaga: Regulatory/ Accreditation Coordinator	03/2025

Board	Kathryn Haines: Administrative Assistant - PD	03/2025
COO	Clement Miller: Chief Operating Officer	02/2025
Bio Med	Simplicio Tualla Jr.: Chief Biomed Engineer	02/2025
Policy Committees	Rebecca Alaga: Regulatory/ Accreditation Coordinator	01/2025
Policy Owner	Laura Zerbe: Manager Facilities Construction and Plant Operatio	01/2025

## Standards

No standards are associated with this document



Last Approved	N/A
Next Review	1 year after approval

Owner	James Hively: Manager Environmental Health & Safety
Area	Plans and Program

# Safety Management Plan

## I. SCOPE

- A. The Safety Management Plan describes the programs used to manage a safety program to reduce the risk of injury for patients, staff and visitors for Salinas Valley Health Medical Center (SVHMC). Safety risks may arise from the structure of the physical environment, from the performance of everyday tasks, or they are related to situations beyond the organization's control, such as the weather.

## II. OBJECTIVES/GOALS

- A. The Objectives for the Safety Management Program are developed from information gathered during routine and special risk assessment activities, annual evaluation of the previous year's program activities, performance measures, Incident Reports and environmental tours.

## III. DEFINITIONS

- A. EOC – Environment of Care
- B. CEO – Chief Executive Officer
- C. SVHMC – Salinas Valley Health Medical Centerand its licensed off site locations

## IV. PLAN MANAGEMENT

- A. Plan Elements
  - 1. The Safety Office will provide department leadership with information and training to assist them in the development of safe working conditions and safe work practices within their area of responsibility.
  - 2. Safe working conditions and practices are established by using knowledge of safety principles to educate staff, design appropriate work environments, purchase

appropriate equipment and supplies, and monitor the implementation of the processes and policies.

3. Safety is dynamic. Regular evaluation of the environment for work practices and hazards is required to maintain a current relevant safety program. The program will change as needed to respond to identified risks, hazards and regulatory compliance issues.

## **B. Plan Management**

### **1. Safety Risk Management**

- a. The Environment of Care (EOC) Committee is designated to manage risk, coordinate risk reduction activities in the physical environment, collect deficiency information, and disseminate summaries of actions and results. The EOC Committee ensures that compliance with applicable codes and regulations, as applied to the buildings and services are provided at SVHMC.

### **2. Safety Management Plan**

- a. The organization develops, maintains and on an annual basis, evaluates the effectiveness of the Safety Management Plan to effectively manage the safety risk of the staff, visitors, and patients at SVHMC.

### **3. Safety Risk Assessment**

- a. The EOC Committee manages the Safety risk assessment process for SVHMC. The Committee is designated to manage risk, coordinate risk reduction activities in the physical environment, collect deficiency information, and disseminate summaries of actions and results. The Committee ensures that compliance with applicable codes and regulations.
- b. SVHMC identifies safety risks associated with the environment of care. Risks are identified from internal sources such as ongoing monitoring of the environment, results of root cause analyses, results of annual proactive risk assessment of high-risk processes, and from credible external sources such as Sentinel Event Alerts.
- c. The risk assessment is used to evaluate the impact of the environment of care on the ability of the organization to perform clinical and business activities. The impact may include disruption of normal functions or injury to individuals. The assessment will evaluate the risk from a variety of functions, including structure of the environment, from the performance of everyday tasks, falls, exposures, MRI, Lasers, etc.

### **4. Use of Risk Assessment Results**

- a. A risk assessment is used to evaluate the impact of the environment of care on the ability of the hospital to perform clinical and business activities. Where risks are identified, the current programs and processes to manage those risks are compared to the risks that have been identified. Where the identified risks are not appropriately handled, action will be

taken to eliminate or minimize the risk. The actions may be creating new programs, processes, procedures, or training programs. Monitoring programs may be developed to ensure the risks have been controlled to achieve the lowest potential for adverse impact on the safety and security of patients, staff, and visitors.

#### **5. Maintaining Grounds & Equipment**

- a. The Facilities Management Department is responsible for maintaining the lawns, plantings, drives, walks, parking areas, building exterior and roofs, etc., of all properties covered by this management plan. An inspection of the grounds is conducted on an annual basis as part of the environmental tours program
- b. The Facilities Management Department is responsible for maintaining the equipment used for grounds, such as lawnmowers/tractors, chainsaws, etc. An inspection of this equipment will be conducted at least annually and a report forwarded to the Chief Engineer.
- c. The Environmental Health and Safety Manager provides assistance and recommendations to maintain the grounds and improve the safety of patients, staff and visitors.

#### **6. Product Notices and Recalls**

- a. SVHMC ensures responses to product recalls and/or notices for various types of products including, consumer products, medical and non-medical equipment, other equipment used to operate and maintain the facility by appropriate hospital representatives. The Materials Management Department manages the process by reviewing information from the Consumer Product Safety Commission (CPSC), ECRI, FDA.. They also receive reports from manufacturers and vendors. This information is distributed to those departments identified as using or managing the products. They document the follow-up, and report the results to the EOC on a periodic basis. Critical recalls or alerts are brought to the attention of the Environmental Health and Safety Manager and Risk Manager upon receipt. The Environmental Health and Safety and Risk Manager will assist when needed to ensure effective response. For more information, see [HOSPITAL RECALL PROCEDURE](#)

#### **7. Managing risk in the MRI environment**

- a. The Radiation Safety Officer manages safety risks in the MRI environment associated with the following:
  - i. Patients who may experience claustrophobia, anxiety, or emotional distress
  - ii. Patients who may require urgent or emergent medical care
  - iii. Patients with metallic implants and devices, such as shrapnel
  - iv. Ferrous objects entering the MRI environment
  - v. Acoustic noise

## 8. Taking actions to minimize risk for MRI services

- a. The Radiation Safety Officer manages safety risks by doing the following:
  - i. Restricting access of everyone not trained or screened by MRI-trained staff scanner room and the area that immediately precedes the entrance to the MRI scanner room
  - ii. Making sure that this area is controlled by and under the direct supervision of MRI-trained staff
  - iii. Posting signage at the entrance to the MRI scanner room that conveys that potentially dangerous magnetic fields are present in the room. Signage should also indicate that the magnet is always on except in cases where the MRI unit, by design, can have its magnetic field routinely turned on and off by the operator.

## 9. Prohibit Smoking

- a. SVHMC has developed and enforces a facility wide [SMOKING POLICY](#)

## 10. No Smoking Enforcement

- a. The hospital security team makes routine rounds of the building and grounds. They have standing orders to ensure the hospital remains a smoke-free environment.

## 11. Safe Interior Spaces

- a. The EOC Committee manages the safety risk assessment process for SVHMC and manages risk, coordinates risk reduction activities in the physical environment, collects deficiency information, and disseminates summaries of actions and results. The assessments of the facility safety inspections include, but limited to, lighting, furnishings and indoor air quality (including odors). The Committee ensures compliance with applicable codes and regulations.
- b. The organization designs, constructs, and maintains features of the environment to promote patient safety and will provide diagnosis, treatment and care for the appropriate needs of the patients. To provide the appropriate environment, the organization conducts planning activities and inspections of the following items:
  - i. Interior spaces shall meet the needs of the patient population and are safe and suitable to the care, treatment, and services provided.
  - ii. Lighting is suitable for care, treatment, and services.
  - iii. Areas used by patients are clean and free of offensive odors.
  - iv. Furnishing and equipment are maintained to be safe and in good repair.
- c. The Environmental Health and Safety Manager manages a process of

environmental rounds designed insure a safe environment is provided. The tours evaluate staff knowledge and skills, observe current environmental and patient safety practices, and to evaluate environmental conditions. Findings of the environmental rounds are used as a resource for improving environmental and patient safety procedures and controls, updating orientation and education programs, and improving staff performance.

- d. The Environmental Health and Safety Manager analyzes the results of the environmental tours to determine if deficiencies are corrected in a timely manner and to determine if there are patterns or trends that require action to improve practices or environmental conditions.

## **12. Following Design and Construction Criteria**

- a. When planning for new, altered, or renovated space, the organization uses one of the following design criteria: State rules and regulations, or guidelines for Design and Construction of Health Care Facilities, administered by the Facility Guidelines Institute and published by the American Society for Healthcare Engineering (ASHE)

## **13. Conducting a Preconstruction Risk Assessment (PRA)**

- a. When planning for demolition, construction, renovation, or general maintenance, the hospital conducts a Preconstruction Risk Assessment (PCRA) of risks that may affect care, treatment, and services. The risk elements include:
  - i. Air quality requirements
  - ii. Infection control
  - iii. Utility requirements
  - iv. Noise and vibration
  - v. Other hazards
  - vi. Life safety
- b. The appropriate individuals will conduct the risk assessment activities. SVHMC takes action based on its assessment to minimize risks during demolition, construction, or renovation. SVHMC takes action based on its assessment to minimize risks during demolition, construction, renovation, or general maintenance. The status of the measures are inspected or monitored at the appropriate frequency to provide the adequate patient safety protection. Periodically, the project is re-evaluated and the measures implemented adjusted to meet the current conditions. Monitoring data is maintained.

## **14. Conducting a Risk Assessment for Radiation Sources Before Installation**

- a. Prior to installation of computed tomography (CT), positron emission tomography (PET), or nuclear medicine (NM) services, a medical physicist or health physicist conducts a structural shielding design assessment to specify required radiation shielding. This includes installing new imaging

equipment, replacing existing imaging equipment, or modifying rooms where ionizing radiation will be emitted or radioactive materials will be stored (such as scan rooms or hot labs). This requirement does not apply to dental cone beam CT radiographic imaging studies performed for diagnosis of conditions affecting the maxillofacial region or to obtain guidance for the treatment of such conditions. See the National Council on Radiation Protection and Measurements Report No. 147 (NCRP-147). Guidance on shielding designs and radiation protection surveys. The date of the survey and results are documented

**15. Conducting a Risk Assessment for Radiation Sources After Installation**

- a. After installation of computed tomography (CT), positron emission tomography (PET), or nuclear medicine (NM) services imaging equipment, or construction in rooms where ionizing radiation will be emitted or radioactive materials will be stored, a medical physicist or health physicist conducts a radiation protection survey to verify the adequacy of installed shielding. This survey is conducted prior to clinical use of the room. The date of the survey and results are documented
- b. This element of performance does not apply to dental cone beam CT radiographic imaging studies performed for diagnosis of conditions affecting the maxillofacial region or to obtain guidance for the treatment of such conditions.

**16. Orientation and Education**

- a. All new staff will attend New Employee Orientation. New Employee Orientation addresses key issues and objectives of various areas in the Environment of Care. In addition, all staff participates in periodic safety training. Staff members, licensed independent practitioners, students, and volunteers are instructed on the everyday precautions to minimize environmental safety risks via New Employee Safety Orientation, in-services, training, or other activities. During environmental tours, unsafe practices are identified and the employee is advised of the proper procedures.
- b. Staff responsible for the maintenance, inspection, testing, and use of medical equipment, utility systems and equipment, fire safety systems and equipment, and safe handling of hazardous materials and waste are competent and receive continuing education and training as needed.

**17. Incident Reporting and Investigation**

- a. Injuries to patients or others within the hospital's facilities are reported to the Patient Safety Officer, the appropriate manager(s) and Risk Management Department when applicable. An incident reporting system is used. The supervisor will complete an Investigation Report. The Environmental Health and Safety Manager and Employee Health will participate in the investigation whenever appropriate. Corrective actions identified through the investigation will be communicated to appropriate departments and personnel.



- b. Occupational illness and injuries are reported to Employee Health Department. Department leadership will complete an Incident Investigation Report with the employee and report findings back to Employee Health Department. Appropriate departments and personnel are contacted for corrective actions needed.
- c. Incidents of damage to the hospital property or the property of others are reported to the hospital security team and the Risk Management Department who will investigate the issue, complete a report and assess prevention options.

**18. Evaluating the Management Plan**

- a. On an annual basis, the EOC Committee evaluate the scope, objectives, performance, and effectiveness of this Plan to manage the safety risks to the staff, visitors, and patients at SVHMCs.

**19. Identifying Opportunities to Resolve Environmental Issues**

- a. The EOC Committee evaluates activities related to the environmental and patient safety programs based on a quarterly reporting schedule. The Committee evaluates reports and data analysis to determine if there are needs for improvement or environmental issues to resolve. When a need for improvement is identified; the Committee summarizes the issues as opportunities for improvement and communicates them to the leadership of the hospital, the performance improvement program, and the patient safety program.

**20. Taking action on Opportunities to Resolve Environmental Issues**

- a. The EOC Committee uses the results of data analysis and other information, including risk assessments, environmental rounds, incident analysis, regulatory changes, and other information, to identify opportunities to resolve safety issues. The organization, through the EOC Committee or other resources, takes actions on the identified opportunities to resolve environmental safety issues.
- b. The Committee evaluates changes to determine if they resolved environmental safety issues and reports performance improvement results to those responsible for analyzing environment of care issues. The Committee provides reports when appropriate to senior leadership. Leaders collaborate to assure budget and staffing resources are available to support the environmental safety program. The Committee works with the team to identify the goals for improvement, the timeline for the project, the steps in the project, and to establish objectives for improvement.

**C. Plan Responsibility**

- 1. The EOC Committee is responsible for monitoring all aspects of the Safety Program. The Environmental Health and Safety Manager advises the EOC Committee regarding safety issues.

**D. Performance Measurement**

1. Performance Monitoring and Improvement
- a. The performance measurement process is one part of the evaluation of the effectiveness of the EOC program. Performance measures are established to measure at least one important aspect of the Safety Management Plan and are meant to focus on areas that need improvement or affect the overall safety of patient, staff, or visitors.

V. REFERENCES

- A. The Joint Commission standards; Environment of Care chapter

Approval Signatures

Step Description	Approver	Date
QSC	Aniko Kukla: Director Quality & Patient Safety	Pending
Environment of Care Committee	James Hively: Manager Environmental Health & Safety	02/2025
Policy Committees	Rebecca Alaga: Regulatory/ Accreditation Coordinator	02/2025
Policy Owner	James Hively: Manager Environmental Health & Safety	02/2025

Standards

No standards are associated with this document



Last Approved  
Next Review

N/A  
1 year after approval

Owner  
Area

Elias Gutierrez:  
Manager Security Program  
Plans and Program

# Security Management Plan

## SCOPE

1. The Security Management Plan describes the methods of providing security for people, equipment and other material through risk assessment and management for Salinas Valley Health Medical Center (SVHMC). Security incidents are often intentional. Security protects individuals and property against harm or loss, including workplace violence, theft, infant abduction, and unrestricted access to medications. Security incidents are caused by individuals from either outside or inside the organization.

## OBJECTIVES/GOALS

1. Objectives
  1. N/A
2. Goals
  1. The goals for the Security Management Plan are developed from information gathered during routine and special risk assessment activities, annual evaluation of the previous year's program activities, performance measures, Incident reports and environmental tours.

## DEFINITIONS

1. Environment of Care Committee (EOC)
2. Chief Executive Officer (CEO)

## PLAN MANAGEMENT

1. Plan Elements

## 1. FUNDAMENTALS

- a. A visible security presence in the hospital helps reduce crime and increase feelings of security by patients, visitors, and staff.
- b. The assessment of risks to identify potential problems is central to reducing crime, injury, and other incidents.
- c. Analysis of security incidents provides information to predict and prevent crime, injury, and other incidents.
- d. Training hospital staff is critical to ensuring their performance. Staff is trained to recognize and report either potential or actual incidents to ensure a timely response.
- e. Staff in sensitive areas are trained about the protective measures designed for those areas and their responsibilities to assist in protection of patients, visitors, staff and property.
- f. Violence in the workplace is a growing problem in healthcare. It is necessary to develop a system wide program to address workplace violence.
- g. Regularly conduct a security and safety assessment and, using the assessment, develop, and update based on the assessment, a security plan with measures to protect personnel, patients and visitors from aggressive or violent behavior. The security and safety assessment shall examine trends of aggressive or violent behavior at the facility. SVHMC tracks incidents of aggressive or violent behavior as part of the quality assessment and improvement program and for the purposes of developing a security plan to deter and manage further aggressive or violent acts of a similar nature. The plan includes, but shall not be limited to, security considerations relating to all of the following:
  - i. Physical layout.
  - ii. Staffing.
  - iii. Security personnel availability.
  - iv. Policy and training related to appropriate responses to violent acts.
  - v. Efforts to cooperate with local law enforcement regarding violent acts in the facility.
- h. In development of this plan, SVHMC considers guidelines or standards on violence in health care facilities issued by the department, the Division of Occupational Safety and Health, and the federal Occupational Safety and Health Administration. As part of the security plan, SVHMC adopts security policies including, but not limited to, personnel training policies designed to protect personnel, patients, and visitors from aggressive or violent behavior. In developing the plan and the assessment, SVHMC consults with affected employees and members of the Hospital medical staff.

## **2. PROCESSES FOR MANAGING SECURITY RISKS**

### **a. Security Risk Assessment**

- i. The Security Director manages the security risk assessment process for SVHMC and off-site facilities. He is designated to manage risk, coordinate risk reduction activities in the physical environment, collect deficiency information, and disseminate summaries of actions and results. He assures that compliance with applicable codes and regulations, and develops and maintains the Security Management Plan. On a routine basis, the Security Manager evaluates the scope, objectives, performance, and effectiveness of the Plan to manage the security risk of the staff, visitors, and patients at SVHMC.
- ii. SVHMC identifies security risks associated with the environment of care. Risks are identified from internal sources such as ongoing monitoring of the environment, results of root cause analyses, results of annual proactive risk assessment of high-risk processes, and from credible external sources such as Sentinel Event Alerts.
- iii. The risk assessment is used to evaluate the impact of the environment of care on the ability of the healthcare system to perform clinical and business activities. The impact may include disruption of normal functions or injury to individuals. The assessment will evaluate the risk from a variety of functions, including structure of the environment, the performance of everyday tasks, workplace violence, theft, infant abduction, and unrestricted access to medications.

### **b. Use of Risk Assessment Results**

- i. A Risk Assessment is used to evaluate the impact of the environment of care on the ability of the hospital to perform clinical and business activities. Where risks are identified, the current programs and processes to manage those risks are compared to the risks that have been identified. Where the identified risks are not appropriately handled, action must be taken to eliminate or minimize the risk. The actions may include creating new programs, processes, procedures, training programs. Monitoring programs may be developed to assure the risks have been controlled to achieve the lowest potential for adverse impact on the security of patients, staff, and visitors.

### **c. Identification Program**

- i. The Security Director coordinates the identification program. The Sr. Administrative Director of Plant Operations and Hospital Construction along with all supervisory personnel manage enforcement of the identification program.
- ii. Hospital administration maintains policies for identification of

patients, staff, visitors, and vendors. All employees are required to display an identification badge on their upper body while on duty. Personnel who fail to properly display their identification badge may be counseled individually by their department head. Identification badges are retrieved from personnel upon termination.

- iii. Visitors to patients are expected to have identification. Visitors should be recognizable by staff. The Security Officers assist in enforcement of visitor identification policies.
- iv. Where required, patient identification is provided at the nursing unit where patients are first admitted. If a patient wristband is damaged it is replaced by the nursing staff.
- v. The VendorMate program along with Human Resources provides vendor and contractor identification. Identification badges are controlled and stored in a secure area.

**d. Sensitive Areas**

- i. The Security Director works with leadership to identify security sensitive areas by utilizing risk assessments and analysis of incident reports.
- ii. The following areas are currently designated as sensitive areas:
  - a. Construction Areas
  - b. Emergency Department
  - c. Human Resources
  - d. Newborn Nursery
  - e. Labor & Delivery
  - f. Pediatrics
  - g. Pharmacy
  - h. Medical Records (HIM)
    - i. ICU/CCU
    - j. IDF Closets
  - k. Surgery
  - l. Business Office
- iii. Personnel assigned to work in sensitive areas receive department level continuing education on an annual basis that focuses on special precautions or responses that pertain to their area.

**e. Security Incident Procedures**

- i. The Security Director coordinates the development of organization-wide written security policies and procedures, and

provides assistance to department heads in development of departmental security procedures, as requested. These policies and procedures include infant/child abduction, workplace violence, and other events that are caused by individuals from either inside or outside the organization.

- ii. Individual department heads assist in the development of department-specific security policies and procedures for risks unique to their area of responsibility. The Security Director also assists department heads in the development of new department security procedures. Organization-wide security policies and procedures are distributed to all departments. Department heads are responsible for distribution of department level policies and procedures to their staff and for ensuring enforcement of security policies and procedures. Each staff member is responsible for following security policies and procedures.
- iii. Organization-wide and departmental security policies and procedures are reviewed at least every three years. Additional interim reviews may be performed on an as-needed basis. The Security Director coordinates the triennial and interim reviews of organization-wide procedures with department heads and other appropriate staff, and works with department heads to review departmental security policies and procedures.

**f. Security Incident Response**

- i. Upon notification of a security incident, the Security Director, or designee will assess the situation and implement the appropriate response procedures. The Security Director will notify Administration, if necessary, to obtain additional support. Security incidents that occur in the Emergency Department will be managed initially by the Officer on Duty by following the appropriate policies and procedures for that area. The Security Director will be notified about the incident as soon as possible.
- ii. Security incidents that occur in the departments will be managed according to the departmental or facility-wide policy. The Security Director will be notified about any incident that occurs in a department as soon as possible. Additional support will be provided from the Security Office.
- iii. In the event of a child reported missing, a Code Pink, is announced over the internal page system, as well as to selected radio pagers. Designated staff responds to doors and specified areas to observe for persons with children or packages, and call Security if such cases occur. Other staff checks designated areas, document information, provide support to the parents, and staff of the unit involved.

- a. The Code Pink response procedure is tested at least once a year, and the responses documented, evaluated, critiqued, and, as appropriate, corrective activity, additional training, or program improvements are made.
- iv. Following any security incident, a written "Security Incident Report" will be filed by the Security Officer managing the incident. The Report will be reviewed by the appropriate Security Supervisor and Security Director if necessary. Any deficiencies identified in the report will be corrected. A summary of these Reports will be furnished to the Environment of Care Committee on a regular basis.
- v. Any act of assault, as defined in Section 240 of the Penal Code, or battery, as defined in Section 242 of the Penal Code that results in injury or involves the use of a firearm or other dangerous weapon, against any on-duty hospital personnel shall be reported to the local law enforcement agency within 72 hours of the incident. Any other act of assault, as defined in Section 240 of the Penal Code, or battery, as defined in Section 242 of the Penal Code, against any on-duty hospital personnel may be reported to the local law enforcement agency within 72 hours of the incident.
- vi. No health facility or employee of a health facility who reports a known or suspected instance of assault or battery pursuant to this section will be civilly or criminally liable for any report required. No health facility or employee of a health facility who reports a known or suspected instance of assault or battery that is authorized, but not required, will be civilly or criminally liable for the report authorized by this section unless it can be proven that a false report was made and the health facility or its employee knew that the report was false or was made with reckless disregard of the truth or falsity of the report, and any health facility or employee of a health facility who makes a report known to be false or with reckless disregard of the truth or falsity of the report shall be liable for any damages caused.

## **2. Plan Management**

### **1. Evaluating the Management Plan**

- a. On an annual basis, Security Director and EOC Committee evaluates the scope, objectives, performance, and effectiveness of the Plan to manage the utility system risks to the staff, visitors, and patients at SVHMC.

### **2. Management Plan**

- a. SVHMC develops and maintains and on a routine basis, evaluates the effectiveness of the Security Management Plan to effectively manage the security risk of the staff, visitors, and patients at Salinas Valley health



Medical Center.

**3. Plan Responsibility**

1. The Security Director, in collaboration with the Chief Operating Officer and the Environment of Care Committee, is responsible for monitoring all aspects of the Security Program.

**4. Performance Measurement**

**1. PERFORMANCE ACTIVITIES**

- a. The performance measurement process is one part of the evaluation of the effectiveness of the Security program. Performance measures are established to measure at least one important aspect of the Security Management Plan and are meant to focus on areas that need improvement or affect the overall safety of patients, staff or visitors

**5. Orientation and Education**

1. Orientation, education and/or training is provided on an as needed basis.

## REFERENCES

- A. HSC Codes 1257.7 (a) (b) (c) (d), and 1257.8 (a).
- B. The Joint Commission Environment of Care Standards

## Approval Signatures

Step Description	Approver	Date
Board	Kathryn Haines: Administrative Assistant - PD	Pending
Board	Rebecca Alaga: Regulatory/ Accreditation Coordinator	Pending
ELG	Rebecca Alaga: Regulatory/ Accreditation Coordinator	04/2025
Policy Committees	Rebecca Alaga: Regulatory/ Accreditation Coordinator	03/2025
Policy Owner	Elias Gutierrez: Manager Security Program	03/2025

## Standards

No standards are associated with this document



Last ApprovedN/ANext Review1 year after approval

OwnerLaura Zerbe: Manager Facilities Construction and Plant OperatioAreaPlans and Program

# Utility Management Plan

## I. SCOPE

- A. The Utility Systems Program provides a process for the proper design, installation and maintenance of appropriate utility systems and equipment to support a safe patient care and treatment environment at Salinas Valley Health Medical Center (SVHMC).
- B. The Program will assure effective preparation of staff responsible for the use, maintenance, and repair of the utility systems, and manage risks associated with the operation and maintenance of utility systems. Finally, the Program is designed to assure continual availability of safe, effective equipment through a program of planned maintenance, timely repair, ongoing education, and training, and evaluation of all events that could have an adverse impact on the safety of patients or staff as applied to the building and services provided at SVHMC.

## II. OBJECTIVES/GOALS

- A. Objectives
- B. The goals for the Utility Systems Program are developed from information gathered during routine and special risk assessment activities, annual evaluation of the previous year's program activities, performance monitoring and environmental tours.

## III. DEFINITIONS

- A. EOC: Environment of Care Committee
- B. AEM: Alternate Equipment Maintenance

## IV. PLAN MANAGEMENT

- A. Plan Elements

1. Patient care providers are trained to understand how utility systems support patient care, limitations of system performance, safe operating conditions, safe work practices, and emergency clinical interventions during interruptions.
2. Hospital utility systems are highly complex. When upgrades and new installations are proposed, a multidisciplinary group approach is used to ensure that patient care needs, regulatory requirements and industry standards are met.
3. Utility systems are maintained to ensure proper operation and reduce potential for failures.
4. Emergency response procedures are required to manage utility system failures or service disruptions.

## **B. Plan Management**

### **1. Processes of Managing Utility System Risks**

#### **a. Management Plan**

- i. The organization develops and maintains the Utility Systems Management Plan to effectively manage the utility system risks to the staff, visitors, and patients at SVHMC.

#### **b. Design and Maintenance of Utility Systems**

- i. The Director of Facilities and Construction, Plant Operations or designee is responsible for managing the planning, design, construction, and commissioning of utility systems to meet the patient care and the operational needs of SVHMC. The construction and commissioning programs are designed to assure compliance with codes and standards, and to meet the specific needs of the occupants throughout the facility. The Director of Facilities and Construction, Plant Operations or designee is responsible for setting maintenance standards and implementing a program of planned maintenance and customer service to ensure a safe comfortable environment.

#### **c. Utility Inventory**

- i. SVHMC maintains an inventory of all operating components of the utility systems. These are categorized by potential impact to the safety of patients, staff and visitors in the event of failure. The Director, or designee, assesses systems and components to identify the appropriate maintenance strategies based on risk and impact. Added expectations of leaders and notifications to affected departments written criteria are used to identify risks associated with utility systems. Some of the risks include infections, occupant needs, and systems critical to patient care needs, including life support systems. The risks identified are used to assist in determining the strategies for maintenance, testing, and inspection of the utility systems. In addition, the identified risks are used to guide the development of training and education programs for staff that use or maintain

equipment.

- ii. Systems requiring a program of planned maintenance are listed as part of a maintenance inventory. The list includes operational components of utility systems maintained by in-house staff as well as equipment maintained by vendors.

**d. Testing Utility Systems Prior to Initial Use**

- i. The organization tests utility system components on the inventory before initial use and after major repairs or upgrades. The completion date of the tests is documented. The Facility Director, or designee, is responsible for implementation of the program of planned inspection, testing, and maintenance.

**e. Maintaining, Inspecting, and Testing Activities**

- i. The Director of Facilities and Construction, Plant Operations or designee identifies in writing the activities used for maintaining, inspecting, and testing all of the operational components of the utility systems in the inventory to assure safety and equipment longevity. The determination of the appropriate activity is made as part of the initial evaluation of equipment, as well as failure trends and equipment history.
- ii. Potential activities may be selected to ensure reliable performance including:
  - a. Preventive maintenance based on manufacturer's recommendations
  - b. Reliability-centered maintenance based on equipment history
  - c. Interval-based inspections, tests, inspections, and preventive maintenance activity
  - d. Corrective maintenance based on direct observation of deficiency or failure of designated testing protocol
  - e. Metered maintenance based on manufacturer's recommendation, as applicable.
- iii. The results of assessment are used to identify appropriate maintenance strategies, and to identify which equipment may be included in preventive maintenance program.
- iv. The results of assessing the risks of failures of the utility systems are also used to identify those systems and areas for which emergency management plans are needed to assure ongoing safety of patient care as well as the safety of staff and visitors.

**f. Maintenance, Inspection, and Testing Frequencies**

- i. The organization identifies the activities and associated

frequencies, in writing, for inspecting, testing, and maintaining all applicable operating components of utility systems on the inventory.

- ii. Potential frequency for conducting these activities may be selected to ensure reliable performance including:
  - a. Preventive maintenance based on manufacturer's recommendations
  - b. Reliability-centered maintenance based on equipment history
  - c. Interval-based inspections
  - d. Corrective maintenance based on direct observation of deficiency or failure of designated testing protocol
  - e. Metered maintenance base on manufacturer's recommendation, as applicable.
- iii. A reference of guidelines for physical plant equipment maintenance is the American Society for Healthcare Engineering (ASHE) book Maintenance Management for Health Care Facilities.
- iv. A computerized maintenance management system is used to schedule and track timely completion of preventive maintenance activities. Added expectations of leaders and notifications to affected departments

**g. Testing High-Risk Components of the Utility System**

- i. All high-risk components of the utility system on the inventory are tested, maintained, and inspected. A high-risk utility system includes components for which there is a risk of serious injury or even death to a patient or staff member should it fail, which includes life-support equipment.
- ii. Reports of the completion rate of scheduled inspection and maintenance are presented to the EC Committee each quarter. If the rate of completion falls below 100%, there will be an analysis to determine the cause of the problem and corrective actions taken.

**h. Testing Critical Components Supporting Infection Control**

- i. All critical components of the utility system supporting infection control on the inventory are tested, maintained, and inspected. The completion date and the results of the activities are documented.
- ii. The required activities and associated frequencies for maintaining, inspecting, and testing of utility systems components must have a 100% completion rate.

- iii. Reports of the completion rate of scheduled inspection and maintenance are presented to the EOC Committee each quarter. If the rate of completion falls below 100%, the Facility Director or designee will also present an analysis to determine the cause of the problem and take corrective actions. The corrective actions and retest of the systems will be documented.

**i. Testing Non-High Risk Components of the Utility System**

- i. All Non-high-risk utility system components on the inventory are tested, maintained, and inspected. The completion date and the results of the activities are documented.

**j. Maintaining Specific Components of Utility Systems**

- i. Specific inspecting, testing, and maintaining activities, and frequencies intervals for the following components of a utility system are conducted in accordance with the manufacturers' recommendations:
  - a. Equipment subject to federal or state law or Medicare Conditions of Participation in which inspecting, testing, and maintaining be in accordance with the manufacturers' recommendations, or otherwise establishes more stringent maintenance requirements
  - b. New operating components with insufficient maintenance history to support the use of alternative maintenances strategies.
- ii. The maintenance history used to determine the activities and frequencies may include, records provided by contractors used to service the utility systems, and information made public by nationally recognized sources. Experience of testing, maintaining, and inspecting components of the utility systems by the Facilities Management Department will also be used as history to determine the activities and frequencies required.

**k. Identifying Risk Criteria Used for Inclusion in AEM program**

- i. A qualified individual uses written criteria to support the determination whether it is safe to permit components of the utility systems to be maintained in an AEM program. The written criteria includes:
  - a. How the equipment is used, including the seriousness and prevalence of harm during normal use
  - b. Likely consequences of equipment failure or malfunction, including seriousness of and prevalence of harm
  - c. Availability of alternative or back-up equipment in the event the equipment fails or malfunctions

- d. Incident history of identical or similar equipment
- e. Maintenance requirements of the equipment
- ii. Once the appropriate program is determined, the information is entered into the record for the utility system in the inventory.

**l. Identifying Components Included in the AEM program**

- i. The hospital identifies operating components of utility systems on the inventory that is included in an AEM program. These are reviewed by the Assistant Director at appropriate intervals.

**m. Labeling Controls for Emergency Shutdown**

- i. The Director of Facilities and Construction, Plant Operations, or designee is responsible for labeling the locations of critical or emergency controls for a partial or complete shutdown of the utility systems. Critical or emergency operating components of utility systems are identified on historical documents or computerized drawings. A variety of techniques such as legends, symbols, labels, numbers, and color-coding are used to identify the location and type of critical or emergency controls. The corresponding physical control is identified by a tag or other indicator attached to the device. This process is designed to provide technicians with accurate information about the function of a control before it is activated for scheduled maintenance or during an emergency.

**n. Utility System Disruptions and Shutting off Malfunctioning System**

- i. SVHMC has identified and implemented procedures for responding to utility system disruptions or failures. These procedures are developed to include the criteria for implementing a utility response plan. The staff is responsible for making the decisions; activities and resources used to mitigate the emergency (e. g., an emergency power system to mitigate external power failure); and preparation for the failure (e. g., flashlights, staff training about how to respond to a power failure). The response plans are also included in a quick chart which is widely distributed and posted in a number of locations throughout the facility. The recovery plans focus on return to normal conditions, and the resetting and recovery of emergency equipment and supplies.
- ii. The Utility Systems include the following:
  - a. Electrical Distribution
  - b. Emergency Power
  - c. Medical Gas
  - d. HVAC



- e. Boiler & Steam
- f. Plumbing
- g. Vertical & Horizontal Transport
- h. Vacuum Systems
- i. Communication Systems

**o. Emergency Clinical Interventions**

- i. SVHMC has identified and implemented emergency procedures for responding to utility system disruptions or failures that require emergency clinical interventions. This is focused on clinical staff and support staff as well. The Environment of Care Committee will assist in obtaining the necessary procedures for those utility systems that could impact on the life support equipment. The clinical staff will be trained on the proper response to the disruption of life support utility services and the method of notifying the appropriate group. The response plans are also included in a quick chart which is widely distributed and posted in a number of locations throughout the facility.

**p. Emergency Repair Services**

- i. SVHMC has identified and implemented procedures for the emergency repair of operational components of the utility systems. The staff has been provided with an Emergency Phone Binder located in the Engineering Shop that identifies the major utility systems and the contact information to obtain repair services. Those components that have a direct impact on patient care have been identified and repair plans developed. The staff should contact their supervisor immediately to report disruption. The supervisor, or staff member, then contacts the Plant Operations / Engineering Department who will respond to assess the situation and contact additional assistance if needed.

**q. Management of Waterborne Pathogenic Agents**

- i. The organization has identified and implemented processes to minimize pathogenic biological agents in cooling towers, domestic hot and cold water systems, and other aerosolizing water systems through the proactive periodic treatment of these systems.
- ii. When the monitoring program of incidents for hospital-acquired infections identifies the presence of pathogenic biological agents in water systems, the Infection Control Manager and the Director of Facilities and Construction or designee, Plant Operations collaborate to identify an effective treatment and future growth prevention program.

- iii. When an outbreak of an infectious, waterborne disease (e. g., Legionella) is identified, the SVHMC Infection Control staff notifies the Plant Operations / Engineering Department staff that treats the affected domestic water system to eliminate the hazard.
- iv. Any ornamental water fixture within the facility is periodically treated and the potential aerosol is controlled by ventilation, or other methods acceptable to the Infection Control Practitioner.

**r. Maintenance of Air Pressurization, Filtration, & Filter Efficiency**

- i. SVHMC designs, installs, and maintains ventilation equipment to provide appropriate pressure relationships, air-exchange rates, and filtration efficiencies for ventilation systems serving areas specially designed to control air-borne contaminants (e. g., biological agents, gases, fumes, dust).
- ii. All windows shall remain closed to ensure the proper pressure relationships are maintained throughout the facility. Closed windows also prevent pests and outside air contaminants from entering the hospital.
- iii. The air handling and filtration equipment designed to control airborne contaminants including vapors, biological agents, dust, and fumes is monitored and maintained by the Plant Operations / Engineering Department. The schedule of regular inspection of filter performance monitoring equipment, air pressure sensing equipment, and air flow rate sensors is managed by the Engineering staff.
- iv. A qualified service provider is engaged to verify volume flow rates (air exchange rates, and positive or negative pressure rates) and pressure relationships as part of the commissioning of all new building projects and major space renovations. In addition, the air volume flow rates and pressure relationships are tested periodically throughout the hospital including investigation of complaints related to indoor air quality. The results of testing are used to adjust the performance of air handling systems by changing control software parameters and mechanical or electrical controls.
- v. If system performance cannot be adjusted to meet code requirements or occupant needs, the Engineering Staff works with appropriate Infection Control and clinical staff to develop temporary management practices to mitigate issues. In addition, a recommendation for upgrading or replacing the equipment involved is prepared and submitted to the CEO and Board as appropriate.

**s. Maintaining Appropriate Environment in Non-critical Areas**

- i. In non-critical care areas, the ventilation system provides required pressure relationships, temperature, and humidity. These areas include general care nursing units; clean and soiled utility rooms in acute care areas; general laboratories and pharmacy areas, diagnostic and treatment areas, food preparation areas, and other support departments.
- ii. An inventory of spaces requiring appropriate ventilation is maintained that includes the frequency and task for monitoring the environment affected. Periodic measurements pressure relationships, temperature, and humidity are taken in these areas throughout the organization at a frequency describe by the risks of that area. The frequency is reviewed periodically to determine the appropriate time-frame for monitoring.

**t. Mapping Utility Systems**

- i. Current documentation of the maps for distribution of all utility systems is maintained. The documents include "as-built" and record drawings, one line drawings, valve charts, and similar documents. The documents include original construction documentation and documentation of renovations, alterations, additions, and modernizations.
- ii. Hard copies of the documentation are maintained in Facility Management. Documents that are available in electronic format are maintained in the Facility Department server and are available to work stations throughout the organization.

**u. Maintaining Medical Gas Storage, Manifold, and Transfer Areas**

- i. Medical gas storage rooms and transfer and manifold rooms maintain the appropriate environment, including ventilation and temperature in accordance with NFPA 99-2012: 9.3.7. Indoor storage area, area containing a gas manifold and storage, such as manifold buildings for medical gases and cryogenic fluids shall be provided with natural ventilation or mechanical exhaust ventilation. The trans-filling of gas cylinder is prohibited in any compartment with patient care rooms.

**v. Maintaining Emergency Power Supply Systems & Environment**

- i. The emergency power supply system's equipment and environment are maintained per manufacturers' recommendations, including ambient temperature not less than 40°F; ventilation supply and exhaust; and water jacket temperature (when required). The environmental condition are monitored daily during period of cold weather to insure the appropriate environmental and water-jacket temperature are maintained. This information is documented.

**w. Managing Patient Risk during Repair or Maintenance Activities**

- i. When performing repairs or maintenance activities, an assessment is conducted to manage risks associated with air-quality requirements; infection control; utility requirements; noise, odor, dust, vibration; and other hazards that affect care, treatment, or services for patients, staff, and visitors. This assessment may be conducted by individuals trained in the Pre-construction or other Risk Assessment procedures. The results of the assessment, list of measures implemented to minimize or eliminate risk, and documentation of implementation of necessary measure will be documented.

## **2. PROCESSES MANAGING ELECTRICAL SYSTEMS**

### **a. Providing Essential Electrical Circuitry**

- i. The facility has the appropriate essential electrical systems. For those portions of the facility that was constructed since 1983, or had a change in occupancy type, or have undergone an electrical system upgrade have a Type 1 or Type 3 essential electrical system in accordance with NFPA 99, 2012 edition. The essential electrical system is divided into three branches, including the life safety branch, critical branch, and equipment branch. Both the life safety branch and the critical branch are kept independent of all other wiring and equipment, and they transfer within 10 seconds of electrical interruption. Each branch has at least one automatic transfer switch. The transfer of power and operation of the automatic transfer switch are tested regularly.

### **b. Electrical Distribution in the organization**

- i. Electrical distribution in the organization is based on the following categories:
  - a. Category 1: Critical care rooms served by a Type 1 essential electrical system (EES) in which electrical system failure is likely to cause major injury or death to patients, including all rooms where electric life support equipment is required.
  - b. Category 2: General care rooms served by a Type 1 or Type 2 EES in which electrical system failure is likely to cause minor injury to patients.
  - c. Category 3: Basic care rooms in which electrical system failure is not likely to cause injury to patients. Patient care rooms are required to have a Type 3 EES where the life safety branch has an alternate source of power that will be effective for 1 1/2 hours.

### **c. Electrical Receptacles**

- i. Hospital-grade receptacles at patient bed locations and where deep sedation or general anesthesia is administered are tested

after initial installation, replacement, or servicing. In pediatric locations, receptacles in patient rooms (other than nurseries), bathrooms, play rooms, and activity rooms are listed tamper-resistant or have a listed cover. Electrical receptacles or cover plates supplied from the life safety and critical branches have a distinctive color or marking.

**d. Power Strips**

- i. Special Purpose Relocatable Power Taps (SPRPT) in a patient care vicinity are only used for components of movable electrical equipment used for patient care that have been assembled by qualified personnel. These power strips meet UL 1363A or UL 60601-1. Power strips used outside of a patient care vicinity, but within the patient care room, meet UL 1363. In non-patient care rooms, power strips meet other UL standards.

**e. Extension Cords**

- i. Extension cords are not used as a substitute for fixed wiring in a building. Extension cords used temporarily are removed immediately upon completion of the purpose for which it was intended.

**f. Wet Procedure Locations**

- i. Operating rooms are considered wet procedure locations, unless otherwise determined by a risk assessment authorized by the facility governing body. Operating rooms defined as wet locations are protected by either isolated power or ground-fault circuit interrupters. A written record of the risk assessment is maintained and available for inspection.

**g. Testing Line Isolation Monitors**

- i. Line isolation monitors (LIM) are tested at least monthly by actuating the LIM test switch per NFPA 99, which activates both visual and audible alarms. For LIM circuits with automated self-testing, a manual test is performed at least annually. LIM circuits are tested per NFPA 99 after any repair or renovation to the electric distribution system. Records are maintained of required tests and associated repairs or modifications, containing date, room or area tested, and results.

**h. Maintaining the Environment for Electrical Distribution**

- i. The environment for the Emergency Power Supply (EPS) generator will be maintained for ventilation and temperature in accordance with NFPA 99-2012. This includes, but limited to:
  - a. The EPS shall be heated as necessary to maintain the water jacket temperature determined by the EPS manufacturer for cold start and load acceptance for

the type of EPSS.

- b. With the EPS running at rated load, ventilation airflow shall be provided to limit the maximum air temperature in the EPS room to the maximum ambient air temperature required by the EPS manufacturer.
- c. The EPS shall be heated as necessary to maintain the water jacket and battery temperature determined by the EPS manufacturer for cold start and load acceptance for the type of EPSS.
- d. With the EPS running at rated load, ventilation air flow shall be provided to limit the maximum air temperature in the EPS room to the maximum ambient air temperature required by the EPS manufacturer.
- e. Ventilation air supply shall be from outdoors or from a source outside of the building by an exterior wall opening or from a source outside the building by a 2-hour fire-rated air transfer system.
- f. Ventilation air shall be provided to supply and discharge cooling air for radiator cooling of the EPS when running at rated load.

### **3. MANAGING EMERGENCY POWER SYSTEMS**

- a. The Director of Facilities and Construction, Plant Operations or designee is responsible for managing a program of inspection, maintenance, and testing of the following essential electrical systems.
- b. **Emergency Electrical Power Systems**
  - i. Reliable emergency electrical power is supplied within 10 seconds of loss of "normal" power to specific the utility systems, including:
    - a. Alarm systems, as required by the Life Safety Code
    - b. Exit route and exit sign illumination, as required by the Life Safety Code
    - c. Emergency communication systems, as required by the Life Safety Code
    - d. Equipment that could cause patient harm when it fails, including life support systems; blood, bone, and tissue storage systems; medical air compressors; and medical and surgical vacuum systems
    - e. Areas in which loss of power could result in patient harm, including operating rooms, recovery rooms, obstetrical delivery rooms and nurseries
    - f. Emergency lighting at emergency generator locations

with a remote manual stop station with identifying label to prevent inadvertent or unintentional operation and a remote annunciator (powered by storage battery) located outside the generators location.

g. Elevators (at least one for non-ambulatory patients)

**c. Energizing Equipment by Emergency Power**

- i. Equipment designated to be powered by emergency power supply are energized by the organization's design. Staging of equipment start up is permissible.

**d. Battery and Flashlight Availability**

- i. Each department shall maintain an adequate supply of battery lamps and/or flashlights and replacement batteries.

**e. Emergency Lighting Systems and Exit Signs**

- i. The Director of Facilities and Construction, Plant Operations, or designee, is responsible for identifying all battery-powered lights installed to provide exit path illumination or for illumination of offsite patient care services.
- ii. The organization performs a functional test of emergency lighting systems and EXIT signs required for egress and task lighting for a minimum duration of 30 seconds, along with a visual inspection of other EXIT signs. The test results and completion dates are documented.
- iii. Every 12 months, the organization performs a functional test of battery-powered lights on the inventory required for egress and exit signs for a duration of 1 ½ hours. The results and completion dates are documented.
- iv. The annual test meets the requirements of applicable codes and standards and manufacturer recommendations. An alternate process for some systems is the annual replacement of batteries with random testing of 10% of all batteries for 1-1/2 hours. The date of the testing is recorded.

**f. Emergency Power Supply Systems (SEPSS)**

- i. Every quarter, the organization performs a functional test of stored emergency power supply systems (SEPSS) for 5 minutes or as specified for its class (whichever is less). The organization performs an annual test at full load for 60% of the full duration of its class. The completion dates of the tests are documented.

**g. Inspecting Emergency Generator Systems**

- i. At least weekly, the emergency power supply system (EPSS), including all associated components and batteries, is inspected in accordance with NFPA 110. The results and completion dates

of weekly inspections are documented.

**h. Monthly 30-Minute Emergency Generator Test**

- i. The Director of Facilities and Construction, Plant Operations or designee, tests emergency generators twelve times a year at intervals not less than 20 days or more than 40 days for at least 30 continuous minutes. The tests are conducted with a dynamic load of at least 30% of the nameplate rating of the generator or meet the recommendations of the manufacturers for prime mover of gas temperature. The completion date of the test is documented.
- ii. Appropriate notice of each test run is forwarded to departments throughout the organization. Tests will be delayed if a critical medical procedure is underway and unanticipated failure of the essential electrical system would result in immediate life threatening conditions, but testing is conducted within the defined time frames.
- iii. Testing is conducted for at least 30 minutes under full connected load at operating temperature. The test begins with a cold start, and the cool down period is not part of the 30 continuous minutes. Testing time starts when the generator reaches defined operating conditions, generally full operating temperature of either the exhaust system, or coolant water. Appropriate testing parameters are recorded and evaluated by the Director of Facilities and Construction, Plant Operations, or designee. Any indication of performance below code requirements or expectations is immediately evaluated to determine the source of the problem and rectified.
- iv. If any diesel engine powered motor/generator is not loaded to 30% or more of its nameplate capacity during connected load tests, temperature measurements are made to determine if the exhaust gas temperature reaches or exceeds the manufacturer's recommended temperature to prevent wet stacking. Any engine failing to meet the temperature recommendation will be exercised annually by connecting it to a dynamic load bank and performing the three step test process required by NFPA<sup>®</sup> 99 and NFPA<sup>®</sup> 110.

**i. Tri-annual Four-hour Generator Test**

- i. Additionally, all generators are tested for a minimum of four (4) continuous hours at least every three (3) years. The tests are conducted with a dynamic load of at least 30% of the nameplate rating of the generator or meet the recommendations of the manufacturers for prime mover of gas temperature. Test results and completion dates are documented.



**j. Monthly Automatic Transfer Switch Test**

- i. All automatic transfer switches are tested twelve times per year at intervals not less than 20 day or more than 40 days as part of the monthly generator load test. Test results and completion dates are documented. Their performance is generally verified during generator testing, as well as annual maintenance of each switch.

**k. Testing Generator Fuel Quality**

- i. At least annually, the organization tests the fuel quality to ASTM standards in accordance with NFPA 110-2010: 8.3.8. The test results and completion dates are documented.

**4. MANAGING THE MEDICAL GAS & VACUUM SYSTEM**

- a. The Director of Facilities and Construction, Plant Operations, or designee, is responsible for managing a program of inspection, maintenance, and testing of the following essential medical gas systems.
- b. Plant Operations / Engineering Department conduct a preventive maintenance (PM) program on the system at an annual frequency. The maintenance program includes inspecting, testing, and maintaining the critical components of the piped medical gas systems. Components that are maintained include the master signal panels (i. e., high and low pressure, transfer from normal to reserve indicators), area medical gas alarms, automatic pressure switches (high and low pressure), zone and main shutoff valves, flexible connectors (where installed), and medical gas outlets.
- c. The PM activity is conducted by contractors who are engaged to conduct the tests and inspections of elements that require special equipment and training. Documentation of the testing is maintained by the Plant Operations / Engineering Department.
- d. Containers, cylinders, and tanks are designed, fabricated, tested and marked in accordance with NFPA 99-2012.

**i. Designation of Medical Gas Systems**

- a. Medical gas, medical air, surgical vacuum, waste anesthetic gas disposal (WAGD), and air supply systems are designated as Category 1: Systems in which failure is likely to cause major injury or death to patients or caregivers.

**ii. Alarm Systems**

- a. All master, area, and local alarm systems used for medical gas and vacuum systems comply with the category 1–3 warning system requirements.

**iii. Storage Room Requirements**

- a. Locations containing only oxygen or medical air have doors labeled "Medical Gases: NO Smoking or Open Flame." Locations containing other gases have doors labeled "Positive Pressure Gases: NO Smoking or Open Flame. Room May Have Insufficient Oxygen. Open Door and Allow Room to Ventilate Before Opening."
  - i. A precautionary sign readable from five feet away is on each door or gate of a cylinder storage room, where the sign, at a minimum, includes the wording "CAUTION: OXIDIZING GAS(ES) STORED WITHIN NO SMOKING."
  - ii. Storage is planned so cylinders are used in order of which they are received from the supplier. Only gas cylinders and reusable shipping containers and their accessories are permitted to be stored in rooms containing central supply systems or gas cylinders.
  - iii. PAR levels are maintained by the Materials Management Department.

**iv. Threshold Pressure for Cylinders with Integral Pressure Gauge**

- a. When the organization uses cylinders with an integral pressure gauge, a threshold pressure considered empty is established when the volume of stored gases is as follows:
  - i. When more than 300 but less than 3,000 cubic feet, the storage locations are outdoors in an enclosure or within an enclosed interior space of non- or limited-combustible construction, with door (or gates outdoors) that can be secured. Oxidizing gases are not stored with flammables and are separated from combustibles by 20 feet (5 feet if sprinklers) or enclosed in a cabinet of noncombustible construction having a minimum 1/2-hour fire protection rating.
  - ii. When less than 301 cubic feet in a single smoke compartment, individual cylinders available for immediate use in patient care areas with an aggregate volume of less than or equal to 300 cubic feet are not required to be stored in an enclosure. Cylinders must be handled with precautions as specified in

**v. Maintaining Bulk Oxygen System and Connection**

- a. Any above ground, bulk oxygen system is placed in a locked enclosure (such as a fence) at least 10 feet from vehicles and sidewalks. There is permanent signage stating "OXYGEN – NO SMOKING – NO OPEN FLAMES in accordance with NFPA 99.
- b. In addition, an emergency oxygen supply connection is installed in a manner that allows a temporary auxiliary source to be connected in accordance with NFPA 99-2012.

**vi. Testing Installed, Modified, or Repaired Systems**

- a. SVHMC uses certified contractors, or specially trained staff to test and certify piped medical gas and vacuum systems when the systems are initially installed, modified, or invasively repaired. Testing includes verification that there is no cross-connection of piping and outlets; testing the piping for content purity and particulates, and verification that the pipes maintain pressure. Testing is done to demonstrate the system meets at least NFPA 99 and CGA 1 requirements. The results and completion dates are documented.

**vii. Labeling Main Supply Valves**

- a. The organization makes main supply valves and area shutoff valves for piped medical gas and vacuum systems accessible and clearly identifies what the valves control. Piping is labeled by stencil or adhesive markers identifying the gas or vacuum system, including the name of system or chemical symbol, color code (see NFPA 99-2012: Table 5.1.11), and operating pressure if other than standard. Labels are at intervals of 20 feet or less and are in every room, at both sides of wall penetrations, and on every story traversed by riser. Piping is not painted. Shutoff valves are identified with the name or chemical symbol of the gas or vacuum system, room or area served, and caution to not use the valve except in emergency.

**viii. Handling and Transporting Gas Cylinders**

- a. The organization has implemented a policy on all cylinders within the organization that includes labeling, handling and transporting (for example, in carts, attached to equipment, on racks) in accordance with NFPA 99-2012. See MEDICAL GAS CYLINDER

## HANDLING AND STORAGE (#6024)

### ix. **Transfilling Gas Cylinders**

- a. At no time is transfilling done in any patient care room. A designated area is used away from any section of the organization where patients are housed, treated, or examined. The designated area is separated by a barrier of at least one-hour–fire-resistant construction from any patient care areas. Transfilling cylinders is only of the same gas (no mixing of different compressed gases). Transfilling of liquid oxygen is only done in an area that is mechanically ventilated, with a sprinkler system, and has a ceramic or concrete flooring. Storage and use of liquid oxygen in base reservoir containers and portable containers comply with sections NFPA 99-2012

### x. **Medical Gas and Vacuum Systems Installation, Testing, and Maintenance**

- a. In time frames defined by the organization, the organization inspects, tests, and maintains critical components of piped medical gas and vacuum systems; waste anesthetic gas disposal (WAGD); and support gas systems on the inventory. This inventory of critical components includes at least all source subsystems, control valves, alarms, manufactured assemblies containing patient gases and inlets and outlets. Activities, dates, and results are documented. Persons maintaining the systems are qualified by training and certification to the requirements of the American Society of Sanitary Engineers (ASSE) 6030 or 6040.
- b. Deficiencies found during testing that present a high risk to patient care will be reported immediately. Other deficiencies will be reported at the end of the testing day. Corrective action will be conducted and Respiratory Therapy will be notified. Interim patient safety measures will be implemented based on the assessment of the risk of the deficiency. The results of the assessment process, corrective actions, and interim measures will be documented.

### xi. **Areas Designated for Administration of General Anesthesia**

- a. Areas designated for administration of general anesthesia (specifically, inhaled anesthetics) using medical gases or vacuum are in accordance with NFPA 101-2012: 8.7 and NFPA 99-2012 as follows:

- i. Zone valves are located immediately outside each anesthetizing location for medical gas or vacuum, readily accessible in an emergency, and arranged so shutting off any one anesthetizing location will not affect others.
  - ii. Area alarm panels are installed to monitor all medical gas, medical-surgical vacuum, and piped waste anesthetic gas disposal (WAGD) systems. Alarm panels include visual and audible sensors and are in locations that provide for surveillance, including medical gas pressure decreases of 20% and vacuum decreases of 12-inch gauge HgV.
- b. Areas designated for the administration of general anesthesia (specifically, inhaled anesthetics) using medical gases or vacuum are as follows:
  - i. Heating, cooling, and ventilation are in accordance with ASHRAE 170, medical supply and equipment manufacturers' instructions are considered before reducing humidity levels to those allowed by ASHRAE.
  - ii. Existing smoke control systems automatically vent smoke, prevent the recirculation of smoke originating within the surgical suite, and prevent the circulation of smoke entering the system intake, without interfering with exhaust function. New occupancies have no smoke control requirement.
  - iii. For hospitals that use Joint Commission accreditations for deemed status purposes: Existing smoke control systems are maintained according to the edition of NFPA 101 adopted by the Centers for Medicare & Medicaid Service at the time of installation.
- c. Alarm sensors are installed either on the source side of individual room zone valve box assemblies or on the patient/use side of each of the individual zone box valve assemblies.
  - i. Areas designated for administration of general anesthesia (specifically, inhaled anesthetics) using medical gases or vacuum

are in accordance with NFPA 101 and NFPA 99 as follows:

- ii. The essential electrical system's (EES) critical branch supplies power for task illumination, fixed equipment, select receptacles, and select power circuits. The EES equipment system supplies power to the ventilation system.

**C. Plan Responsibility**

- 1. The Chief Engineer works under the general direction of the Director of Facilities and Construction, Plant Operations. They are responsible for operation and maintenance of the utility systems and management of contractors working on the utility systems.

**D. Performance Measurement**

**1. EVALUATING THE MANAGEMENT PLAN**

- a. On an annual basis, the EOC Committee evaluate the scope, objectives, performance, and effectiveness of the Plan to manage the utility system risks to the staff, visitors, and patients at SVHMC.

**2. PERFORMANCE STANDARDS**

- a. The performance measurement process is one part of the evaluation of the effectiveness of the Utility Systems Program. Performance measures are established to measure at least one important aspect of the Utility Systems Program and are meant to focus on areas that need improvement or affect the overall safety of patient, staff, or visitors.

**E. Orientation and Education**

- 1. Orientation, education and/or training is provided on an as needed basis.

**V. REFERENCES**

- A. N/A

**Approval Signatures**

Step Description	Approver	Date
Policy Owner	Laura Zerbe: Manager Facilities Construction and Plant Operatio	Pending

## Standards

No standards are associated with this document

# SAFETY AND RELIABILITY COMMITTEE

## SUMMARY REPORT

*VERBAL*

*(KUKLA)*



## *CLOSED SESSION*

*(Report on Items to be  
Discussed in Closed Session)*

*RECONVENE OPEN SESSION/  
REPORT ON CLOSED SESSION*

*(Meeting Chair)*

# *ADJOURNMENT*