

## **2005-2006 :: Environmental Health & Safety**

### **1. Mission Statement:**

The Office of Environmental, Health and, Safety support the University in its teaching, research and public service mission by providing a healthy, safe, and secure environment for faculty, staff, students and visitors.

### **2. Objectives:**

#### **2.1 Centralize monitoring report:** Centralize monitoring report of Fire and Life Safety Fire Alarm System

**2.1.1 Related General Education Outcome Item(s):** 1. Communication; 12. Guided Research; 13. Independent Research; 14. Ongoing Research; 15. Research & Design

#### **2.1.2 Related Strategic Plan Item(s):**

I-1 Research Enterprise Initiative; I-2 The Bio-World; I-3 Nanotechnology; IV-1 National and Global Security; IV-2 Energy and the Environment; V-1 Life Science Health Collaborations; V-2 Enhanced Quality of Life; VI-3 Business Leadership; VI-4 Community Outreach; VI-5 University Village

**2.1.3 Related Institutional Priority Item(s):** SP-4 Tell UTD's Story Better; COM-3 Sustain Progress toward Tier One Status in terms of programs, research and faculty quality

#### **2.1.4 Standards and Associations:**

National Fire Protection Association trainings National Safety Council Trainings Voting member of the National Fire Protection Association

#### **2.2 Fire and Life Safety procedure oversight:** To oversight fire and life sfety procedure at UTD

**2.2.1 Related General Education Outcome Item(s):** 1. Communication; 12. Guided Research; 13. Independent Research; 14. Ongoing Research; 15. Research & Design

#### **2.2.2 Related Strategic Plan Item(s):**

I-1 Research Enterprise Initiative; I-2 The Bio-World; I-3 Nanotechnology; IV-1 National and Global Security; IV-2 Energy and the Environment; V-1 Life Science Health Collaborations; V-2 Enhanced Quality of Life; VI-3 Business Leadership; VI-4 Community Outreach; VI-5 University Village

**2.2.3 Related Institutional Priority Item(s):** SP-4 Tell UTD's Story Better; CMP-3 Complete NSERL Building; CMP-4 Renovate Founders Hall

#### **2.2.4 Standards and Associations:**

National Fire Protection Association Trainings National Safety Council Trainings Voting member of the National Fire Protection Association

#### **2.3 Review fire and life safety plans:**

Fire and Life Safety pre-planning of construction, renovations and remodeling projects

**2.3.1 Related General Education Outcome Item(s):** 1. Communication; 12. Guided Research; 13. Independent Research; 14. Ongoing Research

#### **2.3.2 Related Strategic Plan Item(s):**

I-1 Research Enterprise Initiative; I-2 The Bio-World; I-3 Nanotechnology; IV-1 National and Global Security; IV-2 Energy and the Environment; VI-3 Business Leadership; VI-4 Community Outreach; VI-5 University Village

**2.3.3 Related Institutional Priority Item(s):** COM-3 Sustain Progress toward Tier One Status in terms of programs, research and faculty quality; CMP-3 Complete NSERL Building; CMP-4 Renovate Founders Hall

#### **2.3.4 Standards and Associations:**

National Fire Protection Association Trainings National Safety Council Trainings Voting member of the National Fire Protection Association

### **3. Measures & Findings:**

**3.1 Checklist of fire alarm panels & vendor report:** Cehcklist of fire alarm panels and Fiber-optic fire alarm interconnection Fire alarm panels on campus are being monitored via dialer or fiber-optic connection to Police dispatch. Vendor report on fire alarm panels

#### **3.1.1 Success Criteria:**

All of the critical safety and security alarms on campus report to the police dispatch - Fire alarm panels on campus are being monitored via dialer or fiber-optic connection to Police dispatch.

**3.1.2 Related Objective(s):** Centralize monitoring report

#### **3.1.3 Results Related To Success Criteria:**

All of the critical safety and security alarms on campus are connected to the police dispatch.

Safety personnel or University Police able to quickly assess the alarm

University Police has given positive feedback

All fire smoke detectors on campus inspected.

The frequency of nuisance alarms have decreased

**3.1.4 Achievement Level:** Met

**3.1.5 Further Action:** Yes

**3.2 Print out history at police dispatch:**

Print out history at police dispatch of all alarms at UT. Primary reporting of fire alarm to University Police. Time frame: once a year

**3.2.1 Success Criteria:** All Police and EHS respond within minutes

**3.2.2 Related Objective(s):** Centralize monitoring report

**3.2.3 Results Related To Success Criteria:** All critical safety and security calls are being received at the UT Police. Every call history is documented

All respond within minutes

University 24-7 Police dispatch receives all alarm calls from the campus. Where feasible, fire alarm system reporting is given by a fiber optic loop

**3.2.4 Achievement Level:** Met

**3.2.5 Further Action:** Yes

**3.3 Checklist on hot point device:**

Checklist on hot point device (smoke and heat detectors, pull stations) maintenance. Time frame: once a year

**3.3.1 Success Criteria:** All alarm devices are green tagged

**3.3.2 Related Objective(s):** Centralize monitoring report

**3.3.3 Results Related To Success Criteria:** All tagged

2500+ devices are green tagged a majority of time

**3.3.4 Achievement Level:** Met

**3.3.5 Further Action:** Yes

**3.4 Hot work/sprinkler impairment permits:** Hot work/sprinkler impairment permits. Time frame: once a year

**3.4.1 Success Criteria:**

All Open flame/spark activities (welding, grinding, pipe cutting) are reviewed by safety department

**3.4.2 Related Objective(s):** Fire and Life Safety procedure oversight

**3.4.3 Results Related To Success Criteria:**

All Open flame/spark activities (welding, grinding, pipe cutting) are reviewed by safety department.

Numerous permits on file.

Positive feedback from working crews are they are no longer causing nuisance alarms

Program is firmly established

If necessary EHS can direct the disabling or covering of alarm initiating devices for a specific work area

**3.4.4 Achievement Level:** Met

**3.4.5 Further Action:** Yes

**3.5 Test and training report:** hands-on fire extinguisher test and training report Time frame: once a year

**3.5.1 Success Criteria:** All Individual who attend this free training are confident to use a fire extinguisher

**3.5.2 Related Objective(s):** Fire and Life Safety procedure oversight

**3.5.3 Results Related To Success Criteria:**

All Individual who attend this free training are confident to use a fire extinguisher

**3.5.4 Achievement Level:** Met

**3.5.5 Further Action:** Yes

**3.6 Building inspections report:**

Report on building inspections Assess area for fire prevention practices and life safety issues. Time frame: once a year

**3.6.1 Success Criteria:** Generate a report identified areas with problems and conduct follow-up visits

**3.6.2 Related Objective(s):** Fire and Life Safety procedure oversight

**3.6.3 Results Related To Success Criteria:**

Generate a report identified areas with problems and conduct follow-up visits

**3.6.4 Achievement Level:** Met

**3.6.5 Further Action:** Yes

## 5. Closing the Loop:

### 5.1 Continue the monitoring system:

Continue/ maintain the monitoring system and make sure all of the fire alarms in new buildings construction / future buildings will report to the police dispatch.

**5.1.1 Related Objective(s):** Centralize monitoring report

**5.1.2 Related Measure(s):** Checklist of fire alarm panels & vendor report

**5.1.3 Responsible Person:** Zeke Barrera Director/Environmental Health and Safety

**5.1.4 Target Date:** Phase I Dec 2005,Phase II Dec 2006, check Feb 2007

**5.1.5 Priority:** High Priority

### 5.2 Maintain a good relationship with local fire dept: Maintain a good relationship with Local Fire Department and have a good working relationship on emergency response.

**5.2.1 Related Objective(s):** Centralize monitoring report

**5.2.2 Related Measure(s):** Print out history at police dispatch

**5.2.3 Responsible Person:** Zeke Barrera Director/Environmental Health and Safety

**5.2.4 Target Date:** Coordination Dec 2006, follow-up Feb 2007

**5.2.5 Priority:** Low Priority

### 5.3 Documented reports and 3rd party vendor feedback: Have third party vendor coming to check our fire alarm system. Maintenance reports of hot points are documented by building and file maintained at EHS

**5.3.1 Related Objective(s):** Centralize monitoring report

**5.3.2 Related Measure(s):** Checklist on hot point device

**5.3.3 Responsible Person:** Zeke Barrera Director/Environmental Health and Safety

**5.3.4 Target Date:** Phase I Dec 2005,Phase II Dec 2006, check Feb 2007

**5.3.5 Priority:** High Priority

### 5.4 Additional training:

Additional training for third party vendor(outsource contractors working on UTD project) for our hot work permits policy.

**5.4.1 Related Objective(s):** Fire and Life Safety procedure oversight

**5.4.2 Related Measure(s):** Hot work/sprinkler impairment permits

**5.4.3 Responsible Person:** Zeke Barrera Director/Environmental Health and Safety

**5.4.4 Target Date:** Dec 2006

**5.4.5 Priority:** Medium Priority

### 5.5 Increase awareness:

Increased buy in from occupants that the building has safety features at their disposal Increase campus awareness about the fire extinguisher training and that the equipment is user friendly, because practice makes perfect. Advertise the EHS services during the fire awareness month

**5.5.1 Related Objective(s):** Fire and Life Safety procedure oversight

**5.5.2 Related Measure(s):** Test and training report

**5.5.3 Responsible Person:** Zeke Barrera Director/Environmental Health and Safety

**5.5.4 Target Date:** Feb 2007

**5.5.5 Priority:** Medium Priority**5.6 Feedback from local fire department:**

Campus tours with the local fire department Feedback from local fire department personnel is welcome and reassure program success,

**5.6.1 Related Objective(s):** Fire and Life Safety procedure oversight

**5.6.2 Related Measure(s):** Building inspections report

**5.6.3 Responsible Person:** Zeke Barrera Director/Environmental Health and Safety

**5.6.4 Target Date:** Phase I Dec 2005, Phase II Dec 2006, check Feb 2007

**5.6.5 Priority:** Low Priority

**6. Analysis:****6.1 Program/Unit Strengths:****6.1.1 Objectives/Outcomes Exceeded or Met:**

The fire and life safety programs are being monitored and coordinated through a specialized individual in EHS.

**6.2 Program / Unit Weaknesses:**

**6.2.1 Objectives / Outcomes Partially or Not Met:** The fire and life safety service sustainability require annual budget modification as a function of campus growth and user complexity.

**7. Report:****7.1 Executive Summary:**

The establishment of Environmental Health and Safety leadership and start-up funds have initiated the development of core services to the UTD community

**7.2 Top 3 Program/Unit Accomplishments:** Fire and Life Safety systems are monitored 24-7 via University Police.

Emergency personnel response time to alarms occur within minutes.

UTD Logistical Tracking System used to track and outline safety related items received the 2006 Campus Safety Health and Environmental Management Association award in the unique and innovative safety category.

**7.3 Research Activities or Publications:**

New fire extinguisher simulation equipment will mimic fire hazards with the potential for flame reignition.

**7.4 Instructional/Training Activities (presented or received):** Fire extinguisher hands-on training program increases user confidence by practice of controlling small fires.

**7.5 Public Service:**

Local fire department has expressed interest in evaluating UTD fire extinguisher simulation equipment and training service

**7.6 Other External Activities:** Not applicable

**7.7 Contributions to UTD:**

Environmental Health and Safety Staff have received training and a set list of responsibilities leading to specialization. Development of five service categories: Fire and Life Safety, Laboratory Safety, Industrial Hygiene, Occupational and General Safety, and Environmental Management identify concerns and address user needs.

**7.8 Top 3 Program / Unit Challenges:**

As the university continues to grow, the fire and life services will require budget adjustments to address sustainability and proactive initiatives.

Environmental Management Services will be initiated to identify concerns and formulate action plans.