# Environmental Management System



# **Stephen F. Austin State University**

Environmental Health, Safety, & Risk Management Department PO Box 6113, SFA Station

> 430 East Austin Street Nacogdoches, TX 75962

Original Implementation: March 2016 Revision Date: January 2023

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# **Introduction**

The Environmental Management System (EMS) provides a framework for environmental management and the implementation of environmental policies and procedures at Stephen F. Austin State University (SFA). It is not intended to supersede any specific operational rules or procedures that have been adopted by the University to comply with health, safety, and other environmental regulations or policies. Current environmental programs at SFA are listed in *Appendix A* (p. 19) of this manual, and are available online at the Environmental Health, Safety, and Risk Management (EHSRM) website: <a href="https://www.sfasu.edu/safety">www.sfasu.edu/safety</a>.

In April 2011, HRP Associates and peer auditors from six different Texas colleges and universities conducted and Environmental Compliance Audit of the SFA campus. The audit was conducted as part of the Environmental Protection Agency (EPA) Region 6 and Texas Commission on Environmental Quality (TCEQ) sanctioned Environmental Compliance Audit Program with the Texas Association of Community Colleges, Texas Council of Public University Presidents and Chancellors, and Independent Colleges and Universities of Texas (ICUT). Fifty-three (53) institutions joined this program and SFA was the eighteenth (18<sup>th</sup>) institution to be audited under the program.

The purpose of the audit was to identify areas of non-compliance related to environmental regulations, take corrective action to address the potential violations, and disclose such findings and corrective actions to the EPA and the TCEQ.

The EPA Peer Audit identified 273 potential violations and areas of non-compliance. Corrective actions were immediately implemented, and all areas of non-compliance were corrected. The TCEQ has issued a letter recognizing SFA's compliance with environmental regulations based on the audit report and associated corrective actions, and states that "no further action is required". A copy of the letter from the TCEQ is attached in *Appendix B* (p. 20).

Please check the EHSRM website to be sure that you have the most recent version of this manual. In addition, we welcome your input and comments so we can continue to improve the University's environmental programs.

The Environmental Management System is in partial fulfillment of the requirements of the compliance agreement between Stephen F. Austin State University and the U.S. Environmental Protection Agency.

# **Environmental Management Policy (13.26)**

Original Implementation: October 27, 2014

**Last Revision:** October 26, 2020

#### **PURPOSE**

The purpose of this policy is to aid in protecting the environment and promote environmental stewardship among Stephen F. Austin State University's faculty, staff, students, and visitors. To achieve this purpose the Environmental Health, Safety, and Risk Management (EHSRM) department is committed to continuous environmental improvement and protection through a variety of training and inspection programs.

#### GENERAL

The EHSRM department has primary responsibility for promulgating environmental health, safety, and risk management policies and procedures, to ensure that the university complies with federal, state, and local guidelines, as well as best management practices related to environmental compliance and protection. Program safety manuals and detailed safety procedures are available on the EHSRM website.

Stephen F. Austin State University is committed to the protection and enhancement of the environment, while continually seeking new ways to minimize the environmental impact of our past, present, and future activities. As a result of this continuous effort, an environmental management system (EMS) has been created to serve as a planned, documented, systematic, and comprehensive program for managing environmental compliance at SFA. Detailed information on the EMS can be found on the EHSRM website.

#### **GOALS**

Stephen F. Austin State University shall:

- 1. Ensure compliance with applicable federal, state, and local environmental legislation, regulations, and best management practices.
- 2. Prevent pollution by managing and reducing: water and energy consumption, air emissions, discharges to water, and contamination of soil and/or groundwater.
- 3. Facilitate employee and student awareness of environmental issues through education and training for further protection of the surrounding environment.
- 4. Promote and facilitate the reduction, reuse, and recycling of waste.
- 5. Consider the impact on the environment when designing new projects and procedures or changing existing practices.

#### RESPONSIBILITIES

It is imperative that Stephen F. Austin State University employees comply with federal, state, and local environmental health, safety, and risk management legislation, and relevant environmental compliance and protection codes. In addition, it is essential that employees observe industry best practices and comply with SFA safety policies, programs, and procedures.

Noncompliance may result in disciplinary action.

The director of EHSRM (or designee) has primary responsibility for administration of and compliance with the university's EMS. Duties of the EHSRM department include:

- a) Ensure the most current legal environmental requirements are identified and evaluated for compliance.
- b) Establish, coordinate, and adhere to the environmental management programs outlined in the university's EMS, to comply with regulatory requirements or upon request of department supervisors.
- c) Provide training focused on protecting the environment and ensuring environmental compliance.
- d) Inspect university buildings and property for environmental compliance and protection, or in response to a notice of a possible violation. In carrying out this duty the EHSRM director or representative shall have the authority to enter any university building, structure, room, office, or laboratory without prior notice to department supervisors and staff.
- e) Serve as the official university contact for federal, state, and local environmental regulatory agencies regarding environmental compliance and communicate compliance requirements to university officials. These include, but are not limited to the U.S. Environmental Protection Agency (EPA), Texas Commission on Environmental Quality (TCEQ), Texas Department of State Health Services (TDSHS), Texas State Office of Risk Management (SORM), and the city of Nacogdoches.

University employees must comply with the following guidelines and responsibilities:

- a) Comply with all permit requirements, regulations, programs, and procedures specified by the EHSRM department and described in the university's EMS.
- b) Attend environmental training courses and use required protective equipment provided by departments.
- c) Handle all hazardous waste in accordance with the SFA hazardous waste and universal waste manuals. Each department is responsible for the payment of fees associated with the disposal of their hazardous and/or regulated waste.
- d) Report environmental non-compliance issues or concerns through administrative channels or to the director of EHSRM.

**Cross Reference:** SFA Environmental Management System, SFA Hazardous Waste Manual, SFA Universal Waste Manual.

Responsible for Implementation: Vice President for Finance and Administration

Contact for Revision: Director of Environmental Health, Safety, and Risk Management

Forms: None

**Board Committee Assignment:** Finance and Audit

# **EMS Scope**

#### A. Implementation

The EMS includes all of Stephen F. Austin State University including all main campus facilities, academic departments, and any off-campus facilities or operation under SFA jurisdiction. SFA maintains procedures for identifying existing and potential impacts to the environment and concerns related to University activities. The Environmental Safety Officer is responsible for the EMS who identifies the relevant regulatory program area(s), requirements to maintain compliance, and best management practices. The Environmental Safety Officer also communicates this information to the appropriate department director, chair, dean, supervisor, and/or University leadership.

When there is a change or addition to the activities on campus, the Environmental Safety Officer will assist the departments in identifying the potential environmental impacts, regulations, and best management practices associated with the new activity. New environmental programs will be implemented as needed.

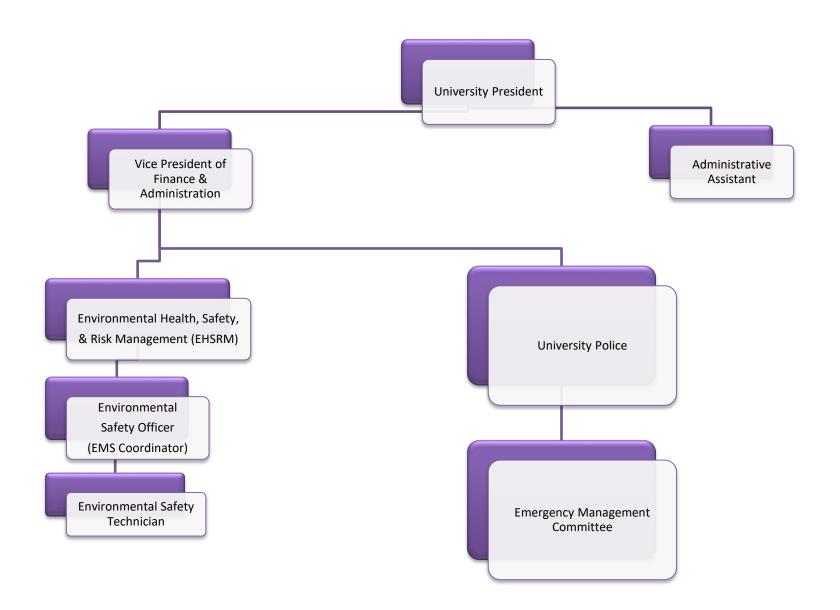
#### **B. Regulatory Program Areas**

The EMS includes the following regulatory program areas. More detailed information on the regulatory program areas that apply to SFA can be found in the related program manuals on the EHSRM website: <a href="https://www.sfasu.edu/safety">www.sfasu.edu/safety</a>.

<b>Environmental Concerns</b>	Regulatory Program Area
Waste Management	<ul> <li>Hazardous Waste Management</li> <li>Universal Waste Management</li> <li>Electronic Waste</li> <li>Medical Waste</li> <li>Biological Waste</li> <li>Laboratory Waste (Non-Hazardous)</li> </ul>
Air Emissions	<ul> <li>Boiler Emissions</li> <li>Freon (CFC) Management</li> <li>Agriculture Incinerators</li> <li>Emergency Generators</li> <li>Paint Booth Operations (PPD)</li> <li>Asbestos Management &amp; Inspections</li> </ul>
Oil Storage and Handling	<ul> <li>Spill Prevention, Control, and Countermeasures (SPCC)</li> </ul>
Chemical Storage and Handling	<ul> <li>Hazard Communication</li> <li>Laboratory Chemical Hygiene Plan</li> <li>Annual Chemical Inventory</li> <li>Pesticide Use on Campus</li> <li>Security of Chemical Stock</li> <li>Emergency Planning and Community Right to Know</li> <li>Tier II Reporting</li> </ul>
Surface Water Protection	<ul><li>Industrial Wastewater Discharge (City of Nacogdoches)</li><li>SPCC</li></ul>
Oversight of Property Acquisition and Management	<ul><li>Permitting</li><li>Environmental Surveys</li><li>Site Acquisition and Due Diligence</li></ul>
Radiation Safety	<ul><li>X-ray Equipment Registration</li><li>Laser Licensing</li><li>Radioactive Materials Licensing</li></ul>
Laboratory Management	<ul> <li>Chemical Safety</li> <li>Laboratory Inspections</li> <li>Hazardous Waste Disposal Procedures</li> <li>Exposure Control Measures</li> <li>Emergency Procedures</li> </ul>

# **EMS Organization and Oversight**

The management and oversight of the EMS can be summarized by the following schematic chart:



# **Environmental Requirements**

There are numerous environmental requirements at the federal, state, and local levels that apply to SFA and are addressed in this EMS. The University also reserves the right to adopt requirements that are more restrictive than those required by law. Each of the legal requirements applicable to SFA are addressed in the Environmental Requirements Table attached as *Appendix C* (p. 21) to this manual. This table includes summaries of applicable laws and regulations, and a link to the regulatory program area's website where the details of the requirements are found. All applicable federal, state, and city regulations and best practices are also referenced in their respective program areas and manuals available on the EHSRM website: <a href="www.sfasu.edu/safety">www.sfasu.edu/safety</a>. The environmental regulatory agencies responsible for enacting and enforcing environmental requirements applicable to the University are listed in *Appendix D* (p. 26). Several environmental regulations applicable to SFA require permits issued by the appropriate regulatory agency. Copies of the current permits issued to the University are attached in *Appendix E* (p. 27).

The EHSRM department maintains an Environmental Compliance Calendar that lists due dates for environmental requirements such as: inspections, training, reports, and permit renewals. See *Appendix F* (p. 46) for the current Environmental Compliance Calendar.

The EHSRM department also maintains communication with upper management as well as department faculty and staff about the applicable environmental requirements, and maintains them through various training events and on the EHSRM website.

Changing activities and operations at the University will change how environmental requirements apply. Likewise, as new environmental requirements are adopted, their applicability and impact on University operations will also change. The University is committed to tracking and complying with all relevant environmental requirements.

# **Environmental Impacts**

There are numerous work practices and activities on the SFA campus that have the potential to have a negative impact on the environment if not managed properly. The environmental impacts associated with the campus work activities and procedures were identified during the EPA Peer Audit. University activities that are relevant to the scope of this EMS have been noted in the EPA Audit report, which is available in a hard copy format at the EHSRM Office.

Some examples of environmental impacts include: energy consumption, waste creation, water usage, air emissions, and the potential for spills. Some of these, such as energy consumption and waste creation, are universal across the campus and others are specific to each department.

# **Continuing Program Evaluation**

#### A. EMS Reviews.

An EMS review will be conducted by the Environmental Safety Officer and the Director of EHSRM every three years or when significant changes are made to University processes and procedures. The EMS review will evaluate ongoing implementation of the EMS and assess environmental protection, compliance with applicable regulations, program improvements, and necessary changes based on regulatory requirements and best practices.

#### **B. Compliance Audits**

An environmental compliance audit will be conducted at least every five years by the EHSRM department. The compliance audit will review compliance with environmental requirements. The purpose of a compliance audit will be to identify areas of non-compliance or areas that although compliant, are not consistent with best management practices (BMPs), so that appropriate corrective actions or improvements can be implemented.

# **Documentation and Records Management**

Environmental regulations require that SFA document and maintain certain records and documents pertaining to activities related to environmental protection, submit reports; and maintain records as required by all relevant federal, state, and local laws and regulations; by University policies or to the extent required by any investigation or litigation. The current SFA *Records Management Policy (2.9)* is attached in *Appendix G* (p. 52).

The SFA Department of EHSRM may inspect University records to determine the compliance status of the University with applicable regulations and this EMS. These records include but are not limited to: lab safety and spill prevention (SPCC) inspection reports, hazardous waste manifests and disposal certificates, and environmental training records. Environmental compliance records are kept at the EHSRM office. Records are backed up daily by the University's IT department.

Written reports detailing inspection findings, corrective actions, and reviews of this EMS will be generated by EHSRM and distributed to the appropriate department supervisors.

# **Environmental Training Program**

#### A. Training Program

The EHSRM Department, in coordination with department supervisors, will ensure that all SFA personnel receive required environmental and safety training in accordance with applicable regulatory requirements and as appropriate for their position. Supervisors are responsible for training their employees on site-specific environmental compliance and protection procedures. Failure to comply with training requirements in a timely manner will be considered a violation of the SFA Environmental Management Policy (13.26).

Department supervisors should consult with EHSRM to determine which environmental training their employees are required to take. All new employees should receive the required environmental and safety training(s) upon initial job assignment.

If a department supervisor is uncertain as to which training courses are required, they should consult with the EHSRM department. Copies of all environmental training records should be forwarded to the EHSRM department.

A list of environmental training programs is provided in the table below.

#### **B. Environmental Training Courses**

The following training curriculum and programs are required training for all designated personnel in each targeted department.

Training Description Targeted Departments		Frequency	Delivery Method
Spill Prevention Control and Countermeasures	PPD & Agriculture Farm (Select Personnel)	Annual	Classroom/On-Site
Pesticide Safety Training	Forestry, Agriculture, PPD Grounds (Select Personnel)	Every 5 years	Classroom
Bulb Crusher Training	PPD & Residence Life	Every 5 years	On-Site/Hands on
Universal Waste Management	PPD & Residence Life	Every 3 years	Classroom
CHEMATIX (HAZCOM)	Sciences, Chemistry, Forestry, & Agriculture	Every 5 years	Classroom
Hazard Communication (HAZCOM)	Chemical Users Campus-wide	New employees and when chemicals or hazards change	Classroom or On-Site

Blood Borne Pathogens	Kinesiology, Campus Recreation, Athletics, ECRC, PPD, Residence Life, Agriculture, & Sciences (Select Personnel)	New Hires and Annual Refresher	Classroom
Shipping Biological Materials	Sciences & Forestry (Select Personnel)	Every 3 years or as requested	Classroom
DOT Training for Hazardous Materials	Safety & select personnel shipping hazardous materials	Every 3 years	Video & Hands on
Aerosol Can Management/Disposal	Residence Life, PPD, Agriculture, & Art	New hires	Hands on
Radiation Safety	Select radiation personnel	Every 3 years	Classroom
Lab Safety – Beginner	Sciences, Chemistry, Forestry, & Agriculture	Upon Initial Assignment	Classroom
Lab Safety – Refresher	Sciences, Chemistry, Forestry, & Agriculture	Every 5 years	Classroom
Hazardous Waste Management – Beginner	Sciences, Chemistry, PPD, Residence Life, & Forestry	Upon Initial Assignment	Classroom/Hands on
Hazardous Waste Management – Refresher	Sciences, Chemistry, PPD, Residence Life, & Forestry	Every 5 years	Classroom/Hands On
Biological Safety	Select Science personnel working with biological hazards in labs	Annual or As Requested	Classroom
Lab Clean Outs	Laboratory Personnel	As Requested	Classroom
Universal Waste Management	PPD, Residence Life, & Student Center (Select Personnel)	Every 5 years	Face to Face/Hands on
Autoclave & Compressed Gas Cylinders	Select personnel in Sciences, Chemistry, Forestry, Agriculture, & Art	As Requested	Face to Face/Hands on

# **Operating Procedures**

This EMS serves as the primary standard operating procedure for University-wide environmental compliance. Copies of this manual and other relevant documents will be posted on the EHSRM website or made available upon request.

Each department should consult with EHSRM to ensure that their department specific, standard operating procedures (SOP) are in compliance with applicable regulations and best management practices. SOPs and revisions to operating procedures that have the potential to impact the environment should be forwarded to the EHSRM Department for review.

EHSRM has implemented a chemical tracking system (CHEMATIX). The Chematix system enables the University to identify, date, departmentalize, and track the majority of the chemicals on campus. An inventory of chemicals that are not in the Chematix system will be maintained at the department level and copies of the chemical inventory will be forwarded to the EHSRM Department. Chemical inventory updates, through Chematix or other approved methods, are required annually. Chemical inventory updates should be sent to the EHSRM department no later than December 15, of each year.

# **Inspection Program**

EHSRM Officers will regularly conduct inspections of buildings, laboratories, mechanical rooms, classrooms, offices, and other University areas, as well as monitor renovation and construction projects. The scope and frequency of these inspections varies depending on the regulatory program area involved, applicable environmental requirements, and perceived compliance risk.

If any problem identified during an inspection can be rectified by immediate corrective action (e.g., putting lids on containers, correcting labeling, properly storing waste containers, etc.), the Environmental Safety Officer (or designee) conducting the inspection shall request that the problem be corrected immediately. Such a request shall be made to the supervisor in a laboratory or to any other appropriate employee. In addition, if the inspection involves an area for which the inspector is responsible (e.g., SPCC inspections), the inspector may take corrective action him/herself.

A written inspection report will be created to describe the inspection findings, including any problems identified, the apparent cause of such problems, and recommendations for corrective actions. Copies of inspection reports will be distributed to the appropriate department supervisor and retained by the EHSRM Department.

Once informed of a problem, the department director, dean, chair, or supervisor will be responsible for ensuring that the corrective actions are taken promptly and a notice of completed corrective actions is given to the EHSRM Department. If a problem cannot be rectified promptly, EHSRM (and the relevant supervisor) will set a timeframe for compliance.

Upon completion of an inspection, the EHSRM inspector will determine whether a re-inspection is required and the date on which such re-inspection will take place. Such information will be included in the inspection report. Examples of environmental inspection checklists can be found in *Appendix H* (p. 54) to this manual.

# **Emergency Preparedness and Response**

Emergency preparedness and response at SFA is coordinated through the Emergency Management Committee which includes representatives from various campus departments. The University Police Department (UPD) is the first responder to emergencies (eg. chemical spills, fires, explosions, gas releases, severe weather) and coordinates with the Nacogdoches Fire Department and Nacogdoches Police Department as needed. EHSRM officers are on call 24 hours a day to assist in response to accidental spills, releases, and other campus emergencies.

The Emergency Operations Plan (SFA policy 13.8) provides a framework for preparedness and response to emergencies on campus. The Emergency Operations Plan is available online at: http://www.sfasu.edu/policies/emergency-operations-plan.pdf.

EHSRM also maintains spill emergency information on their website at: <a href="http://www.sfasu.edu/safety/446.asp">http://www.sfasu.edu/safety/446.asp</a>. Topics included on the Spill Emergencies page include: laboratory emergency procedures, general spills guidance, chemical spills, biological spills, and radiation spills/leaks procedures. The SFA SPCC Plan includes an Emergency Procedure Flowchart attached as *Appendix I* (p. 62). The flowchart provides emergency procedures for the spill and/or release of hazardous materials.

# Environmental Planning, Pollution Prevention, and Sustainability

As a part of the implementation of the EMS, the University is committed to pollution prevention, conservation of natural resources, and sustainability.

#### A. Pollution Prevention Program and Sustainability

SFA is committed to promoting pollution prevention and sustainability practices.

- 1. **Recycling.** Recycling measures at the University include: student organization recycling programs, as well as recycling and/or reuse of used oil, batteries, light bulbs, scrap metal, and other waste whenever possible.
- 2. **Conservation.** Existing water and energy conservation measures are in place, as established by the University's Energy and Water Audit Program. See *Appendix J* (p. 63), SFA 2020 Resource Efficiency Plan, for details on the University's energy and water conservation programs.
- 3. Release Prevention. A third category of pollution prevention measures implemented by the University include those designed to minimize, to the greatest extent possible, the risk of potential release of any pollutant to the environment. The University has implemented a program of training employees on spill prevention and response involving hazardous chemicals and bulk storage of oil and other petroleum products (SPCC). This program includes provisions for inspecting and maintaining storage containing oil and other petroleum based products of 55 gallons or more, as well as containers of hazardous chemicals in laboratories and work areas campus wide. SFA strictly prohibits the discharge of any hazardous or potentially harmful chemical or substance by pouring down sink or floor drains, storm drains, onto the ground, or into surface water. All hazardous or potentially harmful substances must be disposed of properly through approved methods coordinated by the EHSRM Department.

#### B. Conservation of Natural Resources (Energy and Water Audits)

SFA has embarked on a mission to reduce energy and water consumption throughout the campus. The University has contracted with Siemens Building Technologies who conducted energy and water audits for the entire campus, and made recommendations for various equipment upgrades and procedure changes that resulted in significant reductions in SFA's energy and water consumption.

The SFA Physical Plant Department has written a Resource Efficiency Plan (*Appendix J*, p. 63) based on the Siemens energy and water audits, and recommendations for improvements to reduce consumption. This plan outlines the University's total energy and water consumption history from Fiscal Year 2008 – 2013, and the implementation of a 3 phase energy management and control systems plan. After authorizing a detailed utility assessment report, securing necessary funding, and subsequently completing all approved conservation measures, SFA reduced its Energy Use Index (EUI) from 152.1 MBtu / conditioned square foot of space in 2008, to 118.0 MBtu in 2013. This represents a 22.4% energy use reduction over the five year period.

During 2015, water sub-meters were installed on buildings and irrigation systems throughout the campus to more accurately monitor water consumption. The addition of these water meters will help monitor water use at the buildings and irrigation systems aiding in identifying leaks and areas of excessive water use. Continued fine tuning of the newly implemented systems is expected to further reduce annual energy and water consumption.

See *Appendix J* (p. 63) for a copy of the entire SFA Resource Efficiency Plan which describes in further detail the University's energy and water conservation efforts.

# Appendix A: SFA Environmental Programs

The following list of environmental safety programs and procedures are discussed in more detail on the EHSRM website, <a href="www.sfasu.edu/safety">www.sfasu.edu/safety</a>:

- Hazardous Communication (HAZCOM)
- Laboratory Safety
- Hazardous Waste Management
- Universal Waste Management
- Spill Prevention Control and Countermeasures (SPCC)
- Chemical Inventory Program (CHEMATIX)
- Radiation Safety
- Asbestos Management
- Laser Safety
- Biological Safety
- Pesticide Safety
- Spill Emergencies

# **Appendix B: TCEO Letter of Compliance**

Bryan W. Shaw, Ph.D., Chairman Carlos Rubinstein, Commissioner Toby Baker, Commissioner Zak Covar, Executive Director



#### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 27, 2013

Mr. Troy A. Bataille, Attorney at Law Goldberg Segalla, LLP 100 Pearl Street, 7th Floor Hartford, Connecticut 06103-4506

Re: Disclosure of Violations Letter Dated March 7, 2011 Texas Environmental, Health, and Safety Audit Privilege Act Stephen F. Austin State University, Nacogdoches, Nacogdoches and San Augustine County, Texas CN600983928 Multiple Sites - See Attached Chart

Dear Mr. Bataille:

We received your letter dated March 7, 2013 which was submitted pursuant to the Texas Environmental, Health, and Safety Audit Privilege Act ("Audit Act") to provide additional information regarding violations discovered during the environmental audit that began on April 4, 2011. As confirmed in the disclosure dated March 7, 2013, Stephen F. Austin University has corrected each disclosed violation. After reviewing the letter, the Texas Commission on Environmental Quality ("TCEQ") has determined that no further action is required.

Thank you for working with the TCEQ to ensure compliance with State environmental laws. We would appreciate receiving any follow-up information you might offer that would help us evaluate the effectiveness of the Audit Act.

If you have any questions regarding this matter, please contact Ms. Suzanne Walrath at (512) 239-2134 and reference the investigation number listed above.

Sincerely,

Bryan Sinclair, Director **Enforcement Division** 

> Ms. Heather Feldman, Regional Director, Beaumont Regional Office, TCEQ Ms. Anna Treadwell, Attorney, Litigation Division, TCEQ

# Appendix C: Environmental Requirements Table

Requirement	Regulation	Applicability	Regulatory Agency/Entity
Clean Air Act – Title V Air Emissions Inventory	40 CFR 70 30 TAC 116.110 30 TAC 116.119	Any new sources of air emissions must be added to the SFA Air Emissions Inventory. Title V Permitting is currently not applicable; SFA emissions are below the threshold limits. New sources of air emissions could put SFA above the threshold limits for certain contaminants requiring an Air Permit issued by the Texas Commission on Environmental Quality (TCEQ). Educational labs are exempt from air permitting regulations in Texas as "de minimus" sources of air emissions.	U.S. Environmental Protection Agency (EPA)  Texas Commission on Environmental Quality (TCEQ)
Clean Air Act – New Source Performance Standards (NSPS)	40 CFR 60.48(c) 40 CFR 60 Subpart IV	New stationary sources of air emissions require an initial notification to the EPA Regional Office as well as specific requirements for recordkeeping. Specific requirements for annual performance tests and record keeping for emergency generators.	EPA
Clean Air Act – State Implementation Plans (SIP)	40 CFR 52 Subpart SS 30 TAC 116.110	Specific to Texas, this regulation requires SFA to comply with Texas regulations for air contaminant emissions. State air permits are required for certain emission sources. Equipment used strictly for educational purposes is exempt from the permitting requirement.	EPA TCEQ
Clean Air Act – Protection of Stratospheric Ozone	40 CFR 82.162	EPA registration of CFC Recovery and Recycling equipment used to recover refrigerant from refrigerators, freezers, A/C units, etc., must be maintained. Any new equipment used for this purpose must also be registered with the EPA.	EPA
Clean Water Act – National Pollutant Discharge Elimination System (NPDES)	40 CFR 122.41(a) 40 CFR 122.1(b) 40 CFR 122.21(a) 30 TAC 205.4(a) 30 TAC 305.1(b)	Requires SFA to comply with state regulations and obtain any required state permits related to pollutant discharge to surface water. This applies to washing of parking garages, parking lots, and other chemical washing activities on the main campus and at the Agriculture Research Center. Sediment controls are required for construction projects of 1 acre or more.	EPA TCEQ

Clean Water Act - NPDES	40 CFR 122.23 40 CFR 122.41 30 TAC 321.46	A Nutrient Management Plan must be maintained for the storage of animal waste and land application of animal and septic waste at the Agriculture Research Center	EPA
Clean Water Act – Pretreatment	40 CFR 403.5 30 TAC 315.1	Prohibits the discharge of any pollutants to the local Wastewater Treatment Plant (WWTP) without prior approval from the City of Nacogdoches WWTP.	EPA
Clean Water Act – Spill Prevention Control and Countermeasures (SPCC)	40 CFR 112	EPA's Oil Spill Prevention Program requires SFA to maintain a SPCC plan to prevent a discharge of oil into navigable waters (surface water). This regulation applies to bulk above ground storage of oil and petroleum products of 1,320 gallons or more and requires secondary containment and monthly inspections of storage containers.	EPA
Emergency Planning and Community Right-to-Know Act (EPCRA)	40 CFR 370 25 TAC 295.182	SFA is required to submit a Tier II report of hazardous chemicals above threshold limits annually to TDSHS, and notify the Local Emergency Planning Committee. This currently applies to hydraulic elevator oil, transformer oil, diesel, and gasoline at various locations on the SFA main campus and Agriculture Research Center.	EPA  TX Department of State Health Services (TDSHS)
Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)	40 CFR 156.10(a) 40 CFR 171	Pesticides products must meet specific labeling requirements. Employees applying pesticides on SFA property must submit a copy of their pesticide applicators license.	EPA
Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)	40 CFR 170  TX Agriculture Code 5 Subtitle G, Ch. 125	Worker protection standards related to pesticides must be maintained. The regulation requires pesticide safety training for workers using pesticide products to be conducted every 5 years.	EPA  TX Department of Agriculture
Resource Conservation & Recovery Act (RCRA)– Hazardous Waste	40 CFR 262.34 & 40 CFR 265.173 30 TAC 335.69	Specific requirements for the proper storage, handling, labeling, and disposal of hazardous waste must be maintained. Hazardous waste containers must be marked with the words "Hazardous Waste", contents, and accumulation start date. Containers should be kept closed when not in use.	EPA TCEQ

RCRA -	40 CFR 264.11	Evaporation of hazardous waste in	EPA
Hazardous Waste	30 TAC 335.152	chemical fume hoods is prohibited. SFA is not licensed to treat hazardous waste.	TCEQ
RCRA – Hazardous Waste	40 CFR 261.7 40 CFR 262.11 30 TAC 335.41(f) 30 TAC 335.62	Used aerosol cans must be punctured prior to disposal using the approved aerosol can puncturing machine located at the EHSRM office. Punctured cans may then be placed in the University's metal recycling bin located at Grounds & Transportation.	EPA TCEQ
RCRA – Hazardous Waste	40 CFR 262.11 30 TAC 335.62	Obsolete electronics (e-waste) must be sent to SFA Surplus for re-use or recycling by approved methods. E-waste cannot be discarded in the regular trash. Obsolete and legacy chemicals should be disposed of through the SFA hazardous waste program. Conduct a waste stream determination on all chemical waste streams to determine if the waste is hazardous.	EPA TCEQ
RCRA – Hazardous Waste	40 CFR 262, Subpart A	Solid or liquid waste removed from sink traps and collected in maintenance shops and laboratories must be analyzed by user knowledge or analytical testing to determine if it is hazardous. Proper handling, labeling, storage, and disposal of hazardous waste is required. This also applies to all old or obsolete chemicals.	U.S. Environmental Protection Agency
RCRA – Hazardous Waste	40 CFR 262 .34	Emergency Contact Information and Procedures must be posted in areas where chemicals and hazardous waste are	EPA
	30 TAC 335.69	generated, stored, used, and accumulated.	TCEQ
RCRA – Hazardous Waste	40 CFR 262, Subpart C	SFA currently maintains a Conditionally Exempt Small Quantity Generator (CESQG) status with the Texas Commission on Environmental Quality (TCEQ). The TCEQ must be notified in writing to obtain a "One-Time Shipment" number if the amount of hazardous waste for disposal exceeds 220 lbs. per month or 2.2 lbs. per month of acutely hazardous waste. Refer to the SFA Hazardous Waste Manual	U.S. Environmental Protection Agency
RCRA – Hazardous Waste	40 CFR 262.30-32 30 TAC 335.65-67	DOT Hazardous Materials Training is required for all personnel who package or ship hazardous materials including hazardous waste. This training is required every three (3) years.	EPA TCEQ
RCRA – Hazardous Waste	40 CFR 265.174 30 TAC 335.112	Hazardous waste inspections are required at least annually. Records of inspections must be kept for at least three (3) years.	EPA TCEQ

RCRA – Hazardous Waste	40 CFR 262.42 40 CFR 268.7 30 TAC 335.13 30 TAC 335.431	Hazardous waste manifests and land disposal restriction notifications should be signed and returned from the treatment and disposal facility within 45 days of shipment. Hazardous wastes manifests and related documents must be kept onsite for at least three (3) years.	EPA TCEQ
RCRA – Universal Waste	40 CFR 273.13 30 TAC 335.261 30 TAC 335.262	Specific requirements for the handling, labeling, storage, and disposal of Universal Waste is required. This applies to used light bulbs, batteries, pesticides, and mercury containing equipment. These items must be stored in a closed leak tight container to prevent breakage and leakage. Specific labeling requirements apply. Universal waste must not be kept on-site for more than 1 year. No smoking signs are required in areas where ignitable waste is stored.	EPA TCEQ
RCRA – Universal Waste	30 TAC 335.26	Fluorescent light bulb crushing using a Bulb-eater lamp crusher is subject to industrial and hazardous waste permitting through the TCEQ. The lamp crushers located at PPD and Residence Life Universal Waste areas are currently permitted by the TCEQ.	TCEQ
RCRA – Used Oil	40 CFR 279.22 30 TAC 324.6	Used oil containers, tanks, and associated piping must be clearly labeled with the words "Used Oil" and maintained to prevent leakage and spills.	EPA TCEQ
Toxic Substances Control Act (TSCA) - Asbestos	40 CFR 763.122	Maintenance and custodial staff are required to be trained annually in Asbestos Awareness.	EPA
Toxic Substances Control Act (TSCA) - Asbestos	40 CFR 763.80 40 CFR 763.99	An Asbestos Management Plan must be created and submitted to the EPA Regional Office for any school building used for K-12. OSHA AHERA requirements must be met in regards to training, inspections, and documentation. Any newly constructed buildings used for K-12, must be certified by the architect that the building contains no asbestos materials. This currently applies to the SFA Early Childhood Research Center.	EPA
National Emission Standards for Hazardous Air Pollutants (NESHAP)	40 CFR 61 Subpart M	Requires the inspection of building materials for Asbestos prior to demolition or renovation. Also requires a 10 day notification to TX Dept. of State Health Services prior to the removal of any Asbestos.	EPA

		Disabassas of the same of the last	
Toxic Substances Control Act (TSCA) – Lead Based Paint	40 CFR 745.107 40 CFR 745.113	Disclosure of the presence of any known lead-based paint and/or the hazards of lead-based paint is required for residents in target housing built before 1978. This currently applies to apartments in Mays, North, South, Todd, Hall 10, Hall 14, Griffith, Hall 16, Steen, Kerr, Wisely, and any other homes or apartments rented or leased that were built before 1978. "Zerobedroom dwellings" such as typical dorm rooms are exempt from this requirement. Records should be kept for at least three (3) years.	EPA
Toxic Substances Control Act (TSCA) - Pre- manufacture Notices (PMN)	40 CFR 720.36(c)	Newly manufactured chemicals used for research and development must communicate in writing, the associated health risks. New chemicals shipped to other laboratories must be accompanied by a statement communicating that the chemical is for research and development purposes and the associated health risks of the chemical. This currently applies to chemicals produced by the National Center for Pharmaceutical Crops.	EPA
Clean Water Act – NPDES	40 CFR 122.41 30 TAC 205.4	Follow the provisions of the TCEQ general permit. Sediment controls such as silt fencing is required around construction sites greater than one (1) acre or in cases of excessive dirt work. Prepare and implement a Stormwater Pollution Prevention Plan (SWPP).	EPA TCEQ
Clean Water Act – NPDES	40 CFR 122.1 40 CFR 122.21 30 TAC 305.1	Hazardous chemicals and wastewaters from outdoor cleaning activities should not be allowed to enter storm drains.	EPA TCEQ
Clean Water Act – Pretreatment	40 CFR 403.5 30 TAC 315.1	The discharge of chemicals down sink drains is prohibited unless express consent is given by the City of Nacogdoches Wastewater Treatment Plant. Hazardous chemicals and waste are never allowed down sink drains.	EPA TCEQ
Medical Waste	30 TAC 330.1207- 1219	Specific requirements for the handling, storage, and disposal of medical waste must be met. Records must be kept for a minimum of three (3) years. Treatment of medical waste using Autoclave must be recorded in a log book and is limited to fifty (50) pounds per month.	TCEQ

# **Appendix D:**

# **Environmental Regulatory Agencies**

Federal and State agencies that are responsible for enacting and enforcing environmental regulations that apply to SFA are listed in the table below:

Agency	Address	<b>Contact Person</b>	Contact Info
Texas Commission on Environmental Quality – Central Office	12100 Park 35 Circle Austin, TX 78753	Air Permits Division 512-239-1250 Water Quality Division 512-239-4671	ac@tceq.state.tx.gov
Texas Commission on Environmental Quality – Region 10 Office	3870 Eastex Fwy. Beaumont, TX 77703	Ronald Hebert 409-898-3838	ronald.hebert@tceq.texas.gov
Environmental Protection Agency Asbestos Program	U.S. EPA, Region 6 1445 Ross Avenue, Ste. 1200 Dallas, TX 75202	Elvia E. Evering 214-665-7575	evering.elvia@epa.gov
TX Department of State Health Services – Asbestos Program	Env. Health Notifications Group P.O. Box 143538 Austin, TX 78714	Notifications – 512-834-6747 Licensing – 512-834-6600 Ext. 2174	EHNG.help@dshs.state.tx.us asbestos.reg@dshs.state.tx.us
TX Department of State Health Services – Radiation Control Program	Radiation Control Program MC 2835 Texas Department of State Health Services P. O. Box 149347 Austin, Texas 78714	Radiation Control 512-834-6670 ext. 2843	psqarad@dshs.state.tx.us
Texas Department of Agriculture - Pesticides	1700 N. Congress Austin, TX 78701 PO Box 12847 Austin, TX 78711	Agriculture Info 800-835-5832 Licensing Division 877-542-2474	pesticides@texasagriculture.gov
City of Nacogdoches - Industrial Pretreatment	PO Box 635030 Nacogdoches, TX 75963	Charles Bennett 936-564-5046	bennettc@ci.nacogdoches.tx.us

# Appendix E: Environmental Permits

Regulation	Permit Number	Permit Description	Expiration Date	Permitting Agency/Entity
Air Emissions	103344	Physical Plant Paint Booth emissions	N/A	TCEQ
Permit by Rule	70446	Agricultural Research Facility animal feeding operations and two waste incinerators	N/A	TCEQ
Permit by Rule	73748	Pilot Testing Facility at SRC	N/A	TCEQ
Authorization for Bulb Crusher	N/A	Issued 8/16/2012	N/A	TCEQ
Industrial Wastewater Discharge Permit	IU-SFA	Permit for discharge of non- domestic wastewater into City of Nacogdoches sewer system.	07/31/2017	City of Nacogdoches – Industrial Pretreatment Program
Radiation Safety	R03844	X-ray producing machines in Athletics, Geography, and Kinesiology	11/30/2022	TX Department of State Health Services
Laser Safety	Z00247	Lasers for use in education and research in Physics	01/31/2019	TX Department of State Health Services
PWCC Permit Termination Letter		Piney Woods Conservation Center permit termination documentation	N/A	TCEQ

# **TCEQ Air Permit - Physical Plant Painting Facility**

Bryan W. Shaw, Ph.D., Chairman Carlos Rubinstein, Commissioner Toby Baker, Commissioner Zak Covar, Executive Director



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 9, 2012

DR SUNIL CHITHIRI SAFETY OFFICER STEPHEN F AUSTIN STATE UNIVERSITY PO BOX 6113 SFA STATION NACOGDOCHES TX 75962-0001

Permit by Rule Registration Number:

Location/City/County:

1936 North St, Nacogdoches, Nacogdoches County Stephen F Austin State University North Street

Project Description/Unit: Regulated Entity Number: Customer Reference Number:

RN106428907 CN600983928

New or Existing Site: Affected Permit (if applicable): Renewal Date (if applicable):

New None None

Stephen F. Austin State University has certified the emissions associated with the Stephen F Austin State University North Street painting facility under Title 30 Texas Administrative Code §§ 106.262, 106.433. For rule information see:

www.tceq.texas.gov/permitting/air/nav/numerical\_index.html No planned MSS emissions have been represented or reviewed for this registration. The company is also reminded that these facilities may be subject to and must comply with other state and federal air quality requirements.

This certification is taken under the authority delegated by the Executive Director of the TCEQ. If you have questions, please contact Mr. Robert Chavez at (512) 239-0442.

Sincerely,

Certified Emissions:

o.60 tpy VOC <0.01 tpy PM<sub>2.5/10</sub>

Anne M. Inman, P.E., Manager Rule Registrations Section Air Permits Division

Environmental Health Officer, Environmental Health Administration, City of Nacogdoches Inspection Services, Nacogdoches Air Section Manager, Region 10 - Beaumont

Project Number: 178646

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • tceq.texas.gov

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# **TCEO Air Permit - Agriculture Research Center**

Bryan W. Shaw, Ph.D., Chairman Carlos Rubinstein, Commissioner Toby Baker, Commissioner Zak Covar, Executive Director



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 5, 2012

MR SUNIL CHITHIRI SAFETY OFFICER STEPHEN F AUSTIN STATE UNIVERSITY PO BOX 6113 NACOGDOCHES TX 75962-0001

Permit by Rule Registration Number:

Location/City/County:

Project Description/Unit: Regulated Entity Number:

Customer Reference Number:

New or Existing Site: Affected Permit (if applicable):

13536 US Hwy 259, Nacogdoches, Nacogdoches County Educational Agricultural Research Facility

RN104028162 CN600983928 Existing

None Stephen F. Austin State University has registered animal feeding operations and two

pathological waste incinerators utilized at the Educational Agricultural Research Facility under Title 30 Texas Administrative Code § 106.161, and § 106.494.

 $For \ rule \ information \ see: www.tceq.texas.gov/permitting/air/nav/numerical\_index.html$ 

No planned MSS emissions have been represented or reviewed for this registration and none will be authorized. The company is also reminded that these facilities may be subject to and must comply with other state and federal air quality requirements.

This registration is taken under the authority delegated by the Executive Director of the TCEQ. If you have questions, please contact Ms. Donna Wurst at (512) 239-5258.

Sincerely.

Anne M. Inman, P.E., Manager Rule Registrations Section

Air Permits Division

Environmental Health Officer, Environmental Health Administration, City of Nacogdoches Inspection Services, Nacogdoches Air Section Manager, Region 10 - Beaumont

Project Number: 178808

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • tceq.texas.gov

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#### TCEQ Air Permit - National Center for Pharmaceutical Crops Pilot Testing Facility

Kathleen Hartnett White, Chairman R. B. "Ralph" Marquez, Commissioner Larry R. Soward, Commissioner Glenn Shankle, Executive Director



#### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 8, 2004

Mr. Scott Beasley Dean of the College of Forestry Stephen F. Austin State University P.O. Box 6109 SFA Station Nacogdoches, Texas 75962

Re: Permits by Rule Registration Number: 73748

**CPT Pilot Plant** 

Nacodoches, Nacogdoches County Regulated Entity Number: RN101890473 Customer Reference Number: CN600983928

Dear Mr. Beasley:

This is in response to your Form PI-7, entitled "Registration for Permits by Rule," concerning the proposed installation and operational use of the Stephen F. Austin State University (SFA) pilot testing facility for the Science Research Center located at 7308 Stallings Drive in Nacodoches, Nacogdoches County. As per your application, the pilot plant facility will be assembled in the existing Environmental Science Laboratory. The major organic solvents used for extraction and separation in the facility will be ethanol, methanol, and chloroform. Hexane will also be used in the process to remove fatty acid and chlorophyll. The total fugitive emissions associated with the referenced activities are estimated as 2.1 tons per year of volatile organic compounds.

After evaluation of the information which you have furnished, we have determined that your installation is authorized under Title 30 Texas Administrative Code § 106.124 (30 TAC § 106.124) if constructed and operated as described in your registration request. This permit by rule was authorized by the Texas Commission on Environmental Quality (TCEQ) pursuant to 30 TAC Chapter 106.

A copy of the permit by rule in effect at the time of this registration is enclosed. You must install facilities in accordance with the version of the permit by rule in effect when installation actually begins [see  $30 \, \text{TAC} \, \S \, 106.4(a)(5)$ ]. After completion of the installation, the facility shall be operated in compliance with all the applicable conditions of the claimed permit by rule and  $30 \, \text{TAC} \, \S \, 106.4$ .

P.O. Box 13087 • Austin, Texas 78711-3087 • 512/239-1000 • Internet address: www.tceq.state.tx.us

Mr. Scott Beasley Page 2 October 8, 2004

Re: Permits by Rule Registration Number: 73748

You are reminded that regardless of whether a permit is required, these facilities must be in compliance with all rules and regulations of the TCEQ and of the U.S. Environmental Protection Agency at all times.

Please reference the regulated entity number (RN), customer reference number (CN), and permit number noted in this document in all your future correspondence for the referenced facility or site. The RN replaces the former TCEQ account number for the facility (if portable) or site (if permanent). The CN is a unique number assigned to the company or corporation and applies to all facilities and sites owned or operated by this company or corporation.

Your cooperation in this matter is appreciated. If you have any questions concerning this permit by rule, please contact Mr. Miguel Galvan at (361) 825-3420 or write to the Texas Commission on Environmental Quality, Office of Permitting, Remediation, and Registration, Air Permits Division (MC-163), P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,

Anne M. Inman, Manager

General/Standard/Rule (GSR) Permit Section

Air Permits Division

Texas Commission on Environmental Quality

AMI/MOG/alb

Enclosure

cc: Mr. Stuart Mueller, Air Section Manager, Region 10 - Beaumont Mr. Billy A. Wolcott, President, Wolcott & Associates, Village Mills

Project Number: 110469

TITLE 30 ENVIRONMENTAL QUALITY

PART 1 TEXAS COMMISSION ON ENVIRONMENTAL

**QUALITY** 

CHAPTER 106 PERMITS BY RULE

SUBCHAPTER D ANALYSIS AND TESTING

RULE §§106.124 Pilot Plants

Any new or modified pilot plant is permitted by rule, provided the following conditions of this section are met.

(1) For purposes of this section, a pilot plant is defined as a facility that is constructed and operated only for one of the following purposes:

- (A) testing the manufacturing or marketing potential of a proposed product; or
- (B) defining the design of a larger plant; or
- (C) studying the behavior of an existing plant through modeling in the pilot plant.
- (2) The sum of product, co-product, and by-product production design capacity from the pilot plant shall not exceed five million pounds per year.
- (3) Operation of the pilot plant for purposes of testing market potential of a product, co-product, or by- product may not occur beyond the end of the fifth calendar year from the year of initial production (year 1) of the specific product, co-product, or by-product, unless a permit is obtained under §§116.110 of this title (relating to Applicability). This five-year limit on pilot plant activity applies to equipment devoted to development of one specific product or process; therefore, that equipment can be subsequently used for development of other process(es) or product(s), setting a new time limit for its use.
- (4) The pilot plant shall be located at least 500 feet from any recreational area or residence or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located.
- (5) New or increased emissions shall not exceed 6.0 pounds per hour (lb/hr) and ten tons per year in total (including fugitives) and shall not exceed 1.0 lb/hr at any single stack (excluding fugitives). In addition, total new or increased emissions of each specific chemical shall not exceed the most stringent applicable requirement of the following:
  - (A) the chemical-specific emission limits determined by §§106.262(3) of this title (relating to Facilities (Emission and Distance Limitations));
  - (B) the chemical-specific emission limits determined by §§106.261(4) of this title (relating to Facilities (Emission Limitations)); or
  - (C) 6.0 lb/hr for any simple asphyxiant as defined by the American Conference of Governmental Industrial Hygienists.

Source Note: The provisions of this §§106.124 adopted to be effective March 14, 1997, 22 TexReg 2439; amended to be effective September 4, 2000, 25 TexReg 8653

## **TCEQ Air Permit - Authorization for Bulb Crusher**

Bryan W. Shaw, Ph.D., Chairman Carlos Rubinstein, Commissioner Toby Baker, Commissioner Zak Covar, Executive Director

### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 16, 2012

Dr. Sunil Chithiri, Safety Officer Stephen F. Austin State University P.O. Box 6113, SFA Station Nacogdoches, TX 75962

Re:

Authorization for Bulb Crusher RN106428907/CN600983928 Mailog Number 3381

Dear Dr. Chithiri:

The Industrial and Hazardous Waste (I&HW) Permits Section of the Texas Commission on Environmental Quality (TCEQ) has received your letter of July 26,2012 requesting permission to crush mercury vapor lamps under the provisions of 30 Texas Administrative Code (TAC) Section 335.261(e).

The I&HW Permits Section as reviewed the documentation submitted with your letter (i.e., a copy of the Permit by Rule No. 103344 issued by the TCEQ's Air Permits Division and analytical test results based on NIOSH Method 6009 for mercury emissions). Based on this review there appears to be no reason to object to your facility operating its bulb crusher under the provisions of 30 TAC Chapter 335, Section 335.261(e).

If you have any questions regarding this matter, please contact Mr. Jesse Boultinghouse at (512) 239-6865. If you respond in writing, please use mail code 130 in the address.

Sincerely,

M. Sutt Grun

Scott Green, Work Leader Industrial and Hazardous Waste Permits Section Waste Permits Division

MSG/JKB/sdm

#### City of Nacogdoches - Industrial Wastewater Discharge Permit



City of Nacogdoches Industrial Pretreatment Program

#### INDUSTRIAL WASTEWATER DISCHARGE PERMIT

Date of Issuance: January 1, 2021 Date of Expiration: December 31, 2023

Permit #: IU-SFASU

In accordance with all terms and conditions of the City of Nacogdoches Code of Ordinances, Section 106, and also with any applicable provisions of the Federal or State laws or regulations, permission is hereby granted to:

Stephen F. Austin State University 13031 SFA Station Nacogdoches, TX 75962

for the contribution of non-domestic wastewater into the City of Nacogdoches Sewer. This permit is granted in accordance with the application filed in the office of the Environmental Coordinator – Wastewater Treatment, and in conformity with plans, specification, and other data submitted to the Environmental Coordinator – Wastewater Treatment in support of the above application, all of which are filed with and considered as part of this permit, together with the following named conditions and requirements.

#### **Permit Duration**

This permit shall be effective for a period of two years, to expire at midnight on the date of expiration listed above. The permittee shall not discharge after the date of expiration. If the permittee wishes to continue to discharge after this expiration date, an application must be filed for renewal of this permit in accordance with the requirements of the City of Nacogdoches Code of Ordinance Sec. 106-67, at a minimum of 90 days prior to the expiration date.

Permit Standards and Requirements - The following is table of contents for your pretreatment standards and requirements.

Addendum I - Numerical Pollutant Limitations

Addendum II - Prohibited Discharges

Addendum III - Pretreatment Requirements & Best Management Practices

Addendum IV - Notification Requirements & Water Utilities Contact Information

Addendum V - Administration and Enforcement

This permit shall become effective upon receipt by the industrial user and shall expire on December 31, 2023. Issued this the 1st day of January 2021 by:

Joy L. Yarbrough, Environmental Coordinator - Wastewater Treatment

City of Nacogdoches, Water Utilities

JLY 2020

# **Addendum I**Pollutant Limitations

Technically Based Local Limits as prescribed in Sec. 106-214 & 106-215 of the City of Nacogdoches Code of Ordinances

## Technically Based Local Limits (mg/l)

Substance	Daily Composite	Monthly Average	
Aluminum	2.2	2.2	
Arsenic	0.3	0.3	
Cadmium	0.05	0.025	
Chromium (total)	3.4	3.4	
Chromium (hex)	0.0012	0.0012	
Copper	2	0.9	
Cyanide	0.25	0.1	
Lead	0.1	0.04	
Mercury	0.000*	0.000*	
Nickel	3.1	1.5	
Silver	0.5	0.25	
Zinc	0.7	0.65	

## Other Hazardous Metals (mg/l)

Substance	Daily Composite	Monthly Average	Grab
Barium	2	1	4
Manganese	2	1 1	3
Selenium	0.1	0.05	0.2

<sup>\*</sup>For mercury, permit compliance/noncompliance determinations will be based on the minimum analytical level of 0.0002 mg/l. Monitored discharge concentrations measured as less than 0.0002 mg/l shall be deemed to be compliant. Conversely, any detection of mercury will be deemed as noncompliant.

2 of 6

# **Addendum II**Prohibited Discharges

No person shall discharge either directly or indirectly any of the following described substances, materials, waters or wastes:

- Free or emulsified oil and/or grease exceeding 100 parts per million (mg/l)
- Pollutants that create a fire or explosive hazard in the sewage works
- Any waters or wastes having a pH lower than 5.5 or higher than 9.5
- Any solids, slurries, or viscous substances capable of obstructing the flow in sewers
- Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin
- Pollutants that result in the presence of toxic gases, vapors, or fumes
- Wastes containing wax, oils, plastics or other substance that may solidify
- Any garbage, except properly shredded garbage as defined in section 106-66
- Any waters or wastes containing oxygen demanding pollutants, toxic, or poisonous substances in sufficient quantity to:
  - o interfere with any sewage treatment process,
  - o to constitute a hazard to persons or animals,
  - o or to create any hazard in the receiving stream of the sewage treatment plant
- Any antibiotics, bactericidal solutions, or bacteriostatic solutions
- Sludge, screenings, or other residues from the pretreatment of wastes
- Medical wastes, unless specifically authorized in a permit
- Sewage causing the treatment plant effluent to fail a toxicity test
- Detergents, surfactants, or other substances that may cause excessive foaming in the treatment plant
- Liquids having a temperature higher than 150° F
- Trucked or hauled wastes
- Any materials causing excessive discoloration to the treatment plant effluent
- Substances causing unusual or immediate chemical or biochemical or oxygen demand
- Hydrogen sulfide concentrations sufficient to cause structural corrosion.
- Radioactive wastes
- Cyanide or cyanogens compounds capable of liberating hydrocyanic gas on acidification in excess of 0.5 ppm by weight as Cn
- Chlorides in excess of 250 mg/l
- And any other substance deemed a hazard by pretreatment personnel.

3 of 6

#### **Addendum III**

#### Pretreatment Requirements & Best Management Practices

#### **Pretreatment Generally**

Any industrial user who operates pretreatment facilities as a requirement for meeting pretreatment standards or requirements shall:

- Keep pretreatment facilities in fully efficient operation at all times during discharge of process wastewater to the City's sewage works.
- 2) Route all designated industrial wastewater through such facilities prior to discharging. Dilution of pollutant concentrations by increased use of process water or by any other means shall not be an acceptable method of pretreatment. Bypassing pretreatment facilities, either completely or partially, is prohibited except as provided by state and local regulations.

#### Site Specific Pretreatment Requirements

**Permitted Outfall(s):** The wastewater discharge from this facility may be sampled to determine compliance with applicable pollutant limitations. In order to collect samples containing an accurate representation of this facility's process wastewater, one or more sampling points shall be designated and approved by the expiration date of this permit. Compliance monitoring shall be conducted at this point and all limits and prohibitions listed in addendum I and addendum II shall apply here. Interim sampling locations may vary.

Sand/Grit Traps: Sand traps and/or grit traps shall be completely evacuated at least once every six months. Cleaning more frequently may be required.

**Off-Site Waste Disposal:** Manifests for wastes disposed off-site, showing transporter and <u>final disposal</u> information, shall be maintained for three years and be readily available for inspection.

#### **Best Management Practices**

Inflow & Infiltration: Manholes, clean-outs, sampling ports, tank lids and all other points of entry to the sewer system shall be constructed and maintained so as to, at all times, exclude groundwater, rain water, or other non-wastewater sources from entering the City's sewer system.

Chemical Storage / Storm water: This facility shall maintain its chemical storage areas in such a manner so as to prevent pollution or contamination of stormwater run-off, groundwater sources, and/or surface water bodies of the State of Texas. Chemicals or industrial products shall be stored in such a manner so as to, in the event of a spill or container breach, prevent entry into the sanitary sewer or stormwater outfalls. Secondary containment may be required.

Pollution Prevention (P2) Measures: P2 activities include the reduction of wastes, wastestreams, or individual pollutants via source reduction, beneficial reuse, and/or process control. This facility's pollution prevention activities will be evaluated at least annually, but will not be used for compliance/non-compliance determinations. Pollution prevention goals should be expressed in standard units (i.e.: gallons, kilowatt hours, pounds, % VOC, etc.). Pollution prevention activities should be implemented in a manner that allows for periodic measurement and evaluation of progress.

4 of 6

### **Addendum IV Notification Requirements**

Industrial user permits are issued to a specific user for a specific operation and are not assignable to another user or transferable to any other location without the prior written approval of the Pretreatment Coordinator. In the event of sale, the permittee shall inform the purchaser of all responsibilities and obligations under this permit.

The permittee shall apply for permit renewal a minimum of <u>ninety (90) days</u> prior to permit expiration.

The permittee shall notify the City Pretreatment Department thirty (30) days prior to:

- changes in ownership
- significant change in process,
- wastewater strength, character or volume,
- discharge practices, or pretreatment operations.

The permittee shall notify the City Pretreatment Department within twenty-four (24) hours of an identified effluent violation.

The permittee shall notify the pretreatment coordinator and the wastewater treatment facility **immediately** in the event of an accidental or slug discharge. Emergency numbers and contact information shall be posted for employees at all times.

### City of Nacogdoches Water Utilities Contact Information:

Charles Bennett

Pretreatment Coordinator......Direct: (936) 559-1902; Cell: (936) 465-3913; Fax: (936) 569-2729

E-mail: Bennettc@ci.nacogdoches.tx.us

Wastewater Treatment Plant

Office Hours (8am-5pm, M-F)......Phone: (936) 564-5046; Fax: (936) 569-2729

After Hours Water or Sewer Emergency.....(936) 559-2900

Mailing Address

City of Nacogdoches, Water Utilities PO Box 635030

Nacogdoches, TX 75963

Physical Address

City of Nacogdoches, Wastewater Treatment Facility

2996 FM 1275

Nacogdoches, TX 75961

5 of 6

# Addendum V Administration & Enforcement

### **Record Keeping Requirements**

This industrial user shall maintain a current wastewater discharge permit.

- 2. This industrial user shall maintain records of, and all information resulting from, sampling and analysis of process wastewater for a minimum of three (3) years. All records shall be readily available for inspection and copying by the city.
- This industrial user shall maintain records of, and all information resulting from, off-site disposal of wastes for a minimum of three (3) years. All records shall be readily available for inspection and copying by city personnel.

### **Penalties**

If a permittee or individual violates any section of this division, and thereby violates a state or federal statute or injunction, the city may seek prosecution of the responsible company official or individual in the appropriate state or federal court, and may seek such penalties as are prescribed by that statute or injunction. If any permittee or individual violates any section of this division, and the violation is not punishable in state or federal courts, the responsible company official or individual shall be guilty of a misdemeanor upon conviction in the city court. Each offense shall be punished by a fine not to exceed two thousand dollars (\$2,000.00) as provided in Subdivision II of the City of Nacogdoches Code of Ordinances. Each day of such a violation shall be deemed as a separate offense.

Any permittee or individual violating any of the sections of this division shall become liable to the city for any expenses, loss, or damage incurred by the city because of such violation. Such recoverable expenses shall include but not be limited to reasonable attorney's fees, court costs, and other expenses associated with enforcement activities, including sampling and monitoring expenses. Any penalties imposed under this division, including penalties imposed by state or federal courts, shall not relieve the violator from further state or federal prosecution.

#### **Right of Access**

The permittee shall allow the City of Nacogdoches or other authorized representatives, upon presentation of credentials and other documents as may be required, to:

- a) enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit,
- b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, (records shall be maintained for a minimum of three (3) years at the facility addressed above),
- c) inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations,
- d) sample or monitor, for the purposes of assuring compliance, any substances or parameters at any location, and/or
- e) inspect any production, manufacturing, fabricating, or storage area where pollutants could originate.

Authorized personnel from the City of Nacogdoches, Texas Commission on Environmental Quality, or the Environmental Protection Agency bearing credentials and identification shall be permitted to gain ready access (within 15 minutes) at all reasonable times to such properties as may be necessary for the purpose of inspection, calibration, examining, and copying records in accordance with this division. When a user has security measures requiring proper identification and clearance before entry into its premises, the user shall arrange with its security guards for the pretreatment coordinator to enter without delay upon presenting suitable identification. The city may seek issuance of a search warrant from the appropriate city or state court if the pretreatment coordinator has been refused access to a building, structure, or property, or any part thereof, and can demonstrate:

- a. probable cause to believe that their may be a violation of this division; or
- b. the need to inspect and/or sample as part of a routine inspection and sampling program of the city designed to:
- c. verify compliance with this division or any permit or order issued under this division; or
- d. protect the overall public health, safety, and welfare of the community.

6 of 6

### TX Dept. of State Health Services - Registration for Radiation Machines (X-Ray)

RC Form 12-1 Rev 7-07



# Department of State Health Services CERTIFICATE OF REGISTRATION FOR INDUSTRIAL RADIATION MACHINES

Pursuant to the Texas Radiation Control Act, Title 25 Texas Administrative Code (TAC) §289 (as amended), and in reliance on statements and representations made by the registrant, this Certificate of Registration is issued authorizing the registrant to receive, possess transfer or acquire radiation equipment and to use such machines for the purpose(s) and at the place(s) designated below. This registration is subject to all applicable rules, regulations and orders of Texas Department of State Health Services in effect and to the conditions specified below.

Name and Mailing address of registrant:

STEPHEN F AUSTIN STATE UNIVERSITY
ATTN MATT ROMIG RSO
PO BOX 6113
SFA STATION
NACOGDOCHES TX 75962

R03844
Registration Number
_
8
Amendment Number
30 NOVEMBER 2022
Expiration Date

. 1

#### **CONDITIONS**

1.	The	authorized	use and	records	location(	$(\mathbf{s})$	is
Ι.	1116	aumonzeu	use and	records	location	5	

Site Location

003 1936 North Street, Nacogdoches, 75962

- 2. The individual designated to perform the functions of radiation safety officer for this registration is Matt Romig.
- 3. The licensed practitioner directing the use of the medical radiographic machine located in the Sports Medicine Center Athletic Field House is **Steven Charles Dickhaut**, **M.D.**
- 4. The licensed practitioner directing the use of the medical radiographic machine located in the Kinesiology Human Performance Laboratory is **Kyle McMorries**, **M.D.**
- 5. The registrant *shall notify* the agency, in writing, of any change in the information shown on the application for registration or this Certificate of Registration in accordance with 25 TAC §289.226.
- 6. The registrant shall comply with the provisions of 25 TAC §289.203, §289.204, §289.205, §289.226, §289.227, §289.228, and §289.231.
- 7. Radiation exposures are authorized for teaching, training and education.
- 8. This certificate will remain in effect until the expiration date, a written request for termination is submitted by the registrant or restrictive action is taken by the agency. This does not alleviate the registrant's responsibility to comply with 25 TAC §289.226. If the registrant files an application for renewal prior to the expiration date, the Certificate of Registration will not expire until the application status has been finally determined by the agency.

Issuance of this Certification of Registration does not alleviate you from compliance with any outstanding notices of violation or payment of any fees due.

05 DECEMBER 2014	Chealleser
Date Issued	Radiation Safety Licensing Branch

### **AUTHORIZED USE CATEGORIES**

DATE: 05 DECEMBER 2014

PAGE 1 OF 1

FACILITY NAME: STEPHEN F. AUSTIN STATE UNIVERSITY REGISTRATION NO.: R03844

USE CATEGORY	Maximum Number of Units	Site
572 Minimal Threat	01	003
576 – Medical Radiographic	02	003

### TX Dept. of State Health Services - Registration for Lasers



### CERTIFICATE OF REGISTRATION FOR LASERS

Pursuant to the Texas Radiation Control Act, Title 25 Texas Administrative Code (TAC) §289 (as amended), and in reliance on statements and representations made by the registrant, this Certificate of Registration is issued authorizing the registrant to receive, possess transfer or acquire radiation machines and to use such machines for the purpose(s) and at the place(s) designated below. This registration is subject to the Texas Radiation Control Act, all applicable rules, regulations, and orders of the Texas Department of State Health Services in effect and to the conditions in this certificate.

Name and Mailing Address of Registrant:

STEPHANEN F AUSTIN STATE UNIVERSITY ATTN GREGORY MOORE LSO PO BOX 6113 SFA STATION NACOGDOCHES TX 75962 Z00247 Registration Number

31 JANUARY 2029 Expiration Date

#### CONDITIONS

1. The authorized use location(s) is:

Site: Location

000 1936 Nort Street, Nacogdoches, 75962

- The individual designated to perform the functions of laser safety officer for this registration is Gregory Moore.
- The registrant shall notify the Agency, in writing, of any changes in the information shown on the application for registration or this Certificate of Registration in accordance with 25 TAC §289.301.
- The registrant shall comply with the provisions of 25 TAC §289.203, §289.204, §289.205, §289.231, and §289.301.
- Deliberate laser radiation exposure of humans is prohibited. Lasers authorized for academic, educational and research are for use with phantoms only.
- 6. This certificate will remain in effect until the expiration date, a written request for termination is submitted by the registrant, or restrictive action is taken by the Agency. This does not alleviate the registrant's responsibility to comply with 25 TAC §289.301. If the registrant files a renewal application prior to the expiration date, the Certificate of Registration will not expire until the application status has been finally determined by the Agency.

Issuance of this Certification of Laser Registration does not alleviate you from compliance with any outstanding notices of violation or payment of any fees due.

31 JANUARY 2023

Date Issued

MuLan Jin

### AUTHORIZED USE CATEGORIES

DATE: 31 JANUARY 2023 PAGE 1 OF 1

FACILITY NAME: STEPHANEN F. AUSTIN STATE UNIVERSITY REGISTRATION NO: Z00247

USE CATEGORY	Maximum Number of Units	Site
601 - Laser (Academic/Educational/Research)	15	000

# **PWCC Permit Termination Letter**

The Piney Woods Conservation Center wastewater permit was terminated in September 2021 following the sale of the property



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

# REQUEST TO CANCEL A WATER QUALITY PERMIT OR REGISTRATION

If you have questions about completing this form please contact the Applications Review and Processing Team at 512-239-4671.

Review and Processing Team at 512-239-4671.
Current Permit or Registration Information
What is the TCEQ Water Quality Permit or Registration Number? <u>WQ0013161001</u>
What is the EPA I.D. Number? TX TX0098744
Current Name on Permit or Registration: <u>Piney Woods Conservation Center – Stephen F. Austin State</u> <u>University</u>
What is the Customer Number (CN) for the current Permittee? CN 600983928
What is the Regulated Entity Reference Number (RN): RN 102341468
Do you have a Domestic Reclaimed Water Authorization? Yes $\Box$
If yes, the Domestic Reclaimed Water Authorization will be cancelled at the same time.
Reason for Cancelling
The activities authorized by the permit/registration (select all that apply):  Never started (facility was not constructed or was not put in service)
☐ Terminated service on (Month/Day/Year):
☐ Facility is/will be dismantled
□ Facility is/will be sold and relocated
☐ Diverted to another permitted facility
Date of diversion (Month/Day/Year):
Name of Permit/Registration Holder:
Permit/Registration Number:

# **Responsible Official Information**

Land application site closed (Month/Day/Year):

Prefix (Mr., Ms., Miss): Dr.

Other, Specify:

TCEQ-20029 (11/16/2015) Request to Cancel a Water Quality Permit or Registration

Page 1 of 2

. The

termination documents are listed below as a record of proof.

First and Last Name: Scott Gordon

Organization Name: Stephen F. Austin State University

Mailing Address: P.O. Box 6113, SFA Station

City, State, and Zip Code: Nacogdoches, TX, 75962

Phone Number: 936-468-6034 Fax Number: 936-468-7312

E-mail Address: scott.gordon@sfasu.edu

### **Delinquent Fees and Penalties**

Do you owe fees or penalties to the TCEQ? Yes □ No ⊠

If yes, please provide the amount past due, the type of fee or penalty, and an identifying number.

### Certification and Signature

Responsible Official Name: Dr. Scott Gordon

Responsible Official Title: President

I certify that there are no remaining nuisance conditions or materials at the permitted/ registered site which would endanger ground or surface water quality. I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign this document and can provide documentation in proof of such authorization upon request.

Signature (use blue ink):

Date: 9|32|

## Mail completed form to:

Texas Commission on Environmental Quality Applications Review and Processing Team (MC-148) PO Box 13087 Austin TX 78711-3087

# **Appendix F:**

# **Environmental Compliance Calendar**

# **January**

### Training:

- Asbestos Awareness First full week of the month
- <u>Asbestos Inspector/Management Planner Refresher</u> Annually for select safety personnel

### **Inspections:**

- **SPCC Inspections** monthly
- Hazardous/Universal Waste Storage monthly
- Radiation Documents Review Quarterly dose reports and performance maintenance

### Other:

- Air Emissions Inventory review and update as needed every 3 years.
- Laser Registration Renewal Every 5 years, current registration expires on 01/31/2019.

# **February**

### **Training:**

 <u>Biological Safety & Shipping Biological Materials</u> – Every 2 years Fall Semester and/or as requested for select personnel.

### **Inspections:**

- **SPCC Inspections** monthly
- <u>Hazardous/Universal Waste Storage</u> monthly
- <u>Laboratory Safety Inspections</u> Fall and Spring Semester
- <u>Fume Hood Inspections</u> Fall Semester, included in laboratory safety inspections (certify at least annually)

#### Other:

Tier II Reporting due - annually before March 1st

# **March**

### **Training:**

• <u>Universal and Hazardous Waste Management</u> – PPD, Res. Life, Student Center select personnel with a refresher training every 3 years.

### **Inspections:**

- **SPCC Inspections** monthly
- Hazardous/Universal Waste Storage monthly

# **April**

### **Training:**

- <u>Bulb Crusher Training</u> New hires using a bulb crusher with refresher training every 5 years.
- Aerosol Can Management Fall Semester as needed

### **Inspections:**

- **SPCC Inspections** monthly
- Hazardous/Universal Waste Storage monthly
- <u>Radiation (X-ray) Machines Inventory & Inspection</u> Inspect radiation areas and protective devices (lead aprons) annually. Review records and onsite documentation for completeness.
- Radiation Documents Review Quarterly dose reports and performance maintenance

### Other:

- Environmental Management System (EMS) Review Every 3 years
- <u>Radiation Badges</u> Distribute new badges to Athletics and Safety. Return used badges for analysis.

# May

### **Training:**

• Spill Prevention Control and Countermeasure (SPCC) Training – Spring Semester

### Inspections:

- **SPCC Inspections** monthly
- Hazardous/Universal Waste Storage monthly

### Other:

• <u>Radiation Program Audit</u> – Texas Dept. of State Health Services will notify by mail of the date.

# <u>June</u>

### **Training:**

 <u>Pesticide Safety Training</u> – Spring Semester, refresher every 5 years. EHSRM obtains copies of individual pesticide applicators license.

### **Inspections:**

- **SPCC Inspections** monthly
- <u>Hazardous/Universal Waste Storage</u> monthly

### Other:

- Battery Recycling Transport used Lead Acid batteries to A-1 Recycling
- <u>City of Nacogdoches Waste Water Discharge Permit</u> Renew every 2 years. Current permit expires 12/31/2023.

# July

## Inspections:

- **SPCC Inspections** monthly
- <u>Hazardous/Universal Waste Storage</u> monthly
- <u>Safety Shower and Eyewash</u> test all safety showers and eyewash stations and certify at least annually
- Radiation Documents Review Quarterly dose reports and performance maintenance

# **August**

### Inspections:

- **SPCC Inspections** monthly
- Hazardous/Universal Waste Storage monthly

### Other:

• <u>GASB 49 Pollution Remediation Questionnaire</u> – Complete annually, https://fmx.cpa.state.tx.us/fmx/finrpt/index.php

# **September**

### **Training:**

- <u>Laboratory Safety (Beginner)</u> As requested and upon initial assignment for new lab employees.
- Laboratory Safety (Refresher) Fall Semester every 5 years.
- **CHEMATIX** New hires who manage chemicals with a refresher every 3 years (site specific).

### **Inspections:**

- Spill Prevention Control & Countermeasures (SPCC) Inspections Monthly
- *Hazardous/Universal Waste Storage* Monthly
- Laboratory Safety Inspections Fall semester
- <u>Fume Hood Inspections</u> Fall Semester, included in laboratory safety inspections (certify at least annually)

### Other:

- **Chemical Inventory** Send reminder emails to department supervisors using chemicals.
- Renew CHEMATIX License with SIVCO annually

# **October**

### **Training:**

- <u>Hazard Communication (General)</u> New hires using chemicals are trained by their supervisor. Retraining occurs when changes are made to the program and/or products. EHSRM obtains training records from department supervisors.
- <u>Autoclave and Compressed Gas Cylinders</u> Fall Semester (Upon Request)
- Site Specific Decontamination Procedures upon request.
- *Lab Clean-Outs* as requested

### **Inspections:**

- **SPCC Inspections** monthly
- <u>Hazardous/Universal Waste Storage</u> monthly
- Radiation Documents Review Quarterly dose reports and performance maintenance

### Other:

- <u>Chemical Inventory</u> all departments with chemicals. Send email notifications to all departments using chemicals requesting an updated inventory of chemicals by December 31.
- <u>Controlled Laboratory Glassware</u> Send email to lab supervisors communicating the requirement to report (within 5 days) significant losses of controlled laboratory glassware.
- Radiation (X-ray) Registration Renewal current registration expires 11/30/2022.
- <u>Hazardous Waste Disposal Notifications</u> contact each department generating hazardous waste to coordinate pickup. Contact Veolia to schedule waste disposal for Early December or early January.

# **November**

### Training:

- <u>Universal & Hazardous Waste Management (Beginner)</u> As requested and upon initial assignment for new employees handling hazardous waste.
- Universal & Hazardous Waste Management (Refresher) Fall Semester every 5 years.
- <u>Radiation Safety</u> Select radiation (x-ray) personnel with refresher training every 3 years.
- **DOT Hazardous Materials** Select safety personnel every 3 years. Current certificate expires 12/8/2017.

### **Inspections:**

- **SPCC Inspections** monthly
- Hazardous/Universal Waste Storage monthly

### Other:

- <u>Radiation Equipment Registration Renewal</u> TX Dept. of State Health Services, due every 2 years
- <u>Hazardous Waste Disposal Notifications</u> contact each department generating hazardous waste to coordinate pickup. Contact Veolia to schedule waste disposal for early January.

# **December**

### **Training:**

• Respirator Medical, Fit Test – Annually, for all employees required to use a respirator.

### **Inspections:**

- **SPCC Inspections** monthly
- Hazardous/Universal Waste Storage monthly

### Other:

 <u>Hazardous Waste Disposal Notifications</u> – Send a reminder email to departments requesting hazardous waste disposal. Send final inventory of hazardous/universal waste to Veolia.

# Appendix G: Records Management Policy (2.9)

Original Implementation: February, 1975

Last Revisions: July 27, 2021

### **Purpose**

This policy establishes the guidelines whereby Stephen F. Austin State University will adhere to state code regarding record retention/disposal and the handling of state publications.

### **Definitions**

A **record** is any written, photographic, machine-readable, or other recorded information createdor received by or on behalf of the university that documents activities in the conduct of state business or use of public resources. The term does not include library or museum material madeor acquired and preserved solely for reference or exhibition purposes, an extra copy of recorded information preserved only for reference, or a stock of publications or blank forms.

A **state publication** is information in any format that is produced by the authority of or at thetotal or partial expense of a state agency or is required to be distributed under law by the agency and is publicly distributed by or for the agency. The term does not include information the distribution of which is limited to contractors with or grantees of the agency, persons within the agency or within other government agencies, or members of the public under a request made under the open records law.

### General

Stephen F. Austin State University adheres to state regulations for the management of its records. The retention schedule lists the university's records series and identifies legal, audit, archival and/or retention requirements. Statutory confidentiality requirements must be maintained. Certaininactive records are retained to meet legal and fiscal requirements, future administrative needs, orhistorical significance.

The university is also required to deposit or make accessible copies of all state publications to the Texas State Publications Depository Program, which collects and maintains state publications in acentralized location.

### **Records Management**

University records will be managed according to the following guidelines:

- 1. University records are the property of the university.
- 2. University records must not be destroyed without the approval of the unit head in accordance with the retention schedule.
- 3. A record may be destroyed prior to its retention period on the retention schedule only with the special consent of the Records Management Division of the Texas State Libraryand Archives Commission and, if the record possesses fiscal or financial value, with the concurrent consent of the State Auditor.
- 4. Records with archival value listed on the retention schedule must be transferred to the East Texas Research Center. For records determined to have archival value, but not listed as suchon the schedule, contact the university archivist.
- 5. Administrative officers will consult with the general counsel on any question of compliancewith the Texas Public Information Act.
- 6. Each administrative office will designate an individual as the records management coordinator for their office and provide this person's contact information to the university records manager. Each office's records management coordinator will consult with the university records manager regarding implementation of the records management program to include the following:
  - A. Evaluate and inventory records at least once a year to ensure that records are retained inaccordance with the SFA records retention schedule.
  - B. Dispose of obsolete records with no archival value according to the retention schedule.
  - C. List all records on the SFA approved Records Disposition Log before destruction andforward the log to the university records manager.

### **State Publications**

The university will designate a publications liaison who is responsible for receiving publications from university departments and offices. Six copies of qualifying publications will be submitted to the publications liaison within thirty days of publication. Requests for special exemption may be submitted to the publications liaison who will forward them to the state librarian.

The university should send a publication if it meets the following three criteria:

- It is information published on paper or microform, audio or videotape, vinyl or compactdises, or film.
- It is produced at the total or partial expense of a college or university or is published underits authority.
- It is distributed outside of the university on request or in multiple copies.

These criteria also apply to a publication that the university has sponsored or purchased for distribution as well as one that results from a consultant contract with a research firm or other private entity.

Cross Reference: Tex. Gov't Code §§ 441.180-.205; 13 Tex. Admin. Code Ch. 6, 13 Tex. Admin. Code Ch. 3

**Responsible for Implementation:** President

Contact for Revision: SFA Records Management Officer; General Counsel

**Forms:** Records Inventory Worksheet (RMD 103); Records Disposition Log; Request to Dispose of Records not listed in Records Retention Schedule (RMD 102); Records RetentionSchedule (SLR 105); SFA Publications Deposit Form

Board Committee Assignment: Academic and Student Affairs

**Original Implementation**: February, 1975

Last Revisions: January 28, 2014

The university adheres to state regulations for the management of its records. All university records, regardless of medium (including print or electronic), created or received in connection with the normal course of business are considered state records. Extra copies maintained only for reference are not subject to the university records retention schedule. The retention schedule lists the university's records series and identifies legal, audit, archival and/or retention requirements.

Statutory confidentiality requirements must be maintained.

Certain inactive records are retained to meet legal and fiscal requirements, future administrative needs, or historical significance.

Unit heads must manage university records according to the following guidelines:

1. University records are the property of the university.

2. University records must not be destroyed without the approval of the unit head in

accordance with the retention schedule.

3. The Records Management Division of the Texas State Library and Archives Commission must approve the destruction of any record not listed in the retention schedule. The approval of the

State Auditor is required to destroy records of a fiscal or financial nature.

4. Records with archival value listed on the retention schedule must be transferred to the East

Texas Research Center. For records determined to have archival value, but not listed as such on

the schedule, contact the university archivist.

5. Administrative officers will consult with the general counsel on any question of compliance

with the Texas Public Information Act.

6. Each administrative office will designate an individual to consult with the university archivist

regarding implementation of the records management program to include the following:

A. Evaluate files at least once a year to ensure that records are retained in accordance with

the SFA records retention schedule.

B. Dispose of obsolete records with no archival value according to the retention schedule.

C. Obtain permission from the state to dispose of records not listed on the retention schedule. Certain records exempted by the Texas State Library do not require approval

for destruction.

D. List all records on the Records Disposition Log before destruction, maintain the log until

the end of the fiscal year and forward the log to the university archivist.

Cross Reference: Tex. Gov't Code §§ 441.180-.205; 13 Tex. Admin. Code Ch. 6

**Responsible for Implementation:** President

**Contact for Revision:** SFA Records Administrator; General Counsel

Forms: Records Inventory Worksheet (RMD 103); Records Disposition Log; Request to Dispose

of Records not listed in Records Retention Schedule (RMD 102); and Records Retention

Schedule (SLR 105C)

**Board Committee Assignment:** Academic and Student Affairs

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# **Appendix H:**

# **Environmental Inspection Checklists**



### **LABORATORY SAFETY INSPECTION CHECKLIST**

# Stephen F. Austin State University Environmental Health, Safety, & Risk Management

Building:	Room:	Date:

<u>Inspector</u>: <u>Lab Personnel</u>: <u>Lab Contact</u>:

Gener	al Safety and Hygiene	Yes	No	N/A
1	Work areas are clean and free of spilled materials			
2	No Food and Drink observed			
3	Lab is free from slip, trip or fall hazards			
4	Hazard warning signs available and properly used			
5	SDS available and employees are trained			
6	Lab refrigerators are clean and labeled "No Food or Drink"			
7	Mold <u>not</u> observed			
8	No penetrations in walls, floor, or ceiling/			
9	All ceiling tiles in place			
10	Lab is free from inappropriate or permanent use of extension cords			
11	Noise below safety levels (85 dBA TWA MAX recommended)			
Comp	ressed gas cylinders			
12	Gas cylinders properly secured in an upright position			
13	Cylinder capped when not in use			
14	Fuel gases segregated from oxygen (>20ft)			
15	Pressure relieved from valves on cylinders not in use			
16	Gas cylinders are at least 20 feet away from all flammable,			
	combustible or incompatible substances			
Fume	Hoods			
17	Inspection current and status posted			
18	Fume Hoods functioning properly			
19	Fume hood not used as permanent storage/clutter in fume hood			
20	Fume hood sash closed when unattended			

Trainin	ng .		
21	Lab personnel know how to get SDS from EHS, Lab and internet		
22	Lab personnel have PPE available		
23	Chemical Hygiene Plan is written and readily accessible		
Emerg	ency Equipment and Procedures	l l	
24	Emergency contact list posted in the lab (near phone/door)		
25	Eyewash and Emergency shower available		
26	Emergency shower and eyewash are working properly and not blocked		
27	Fire extinguisher is available, mounted and clearly marked		
28	Exits, aisles, and fire extinguishers clear of obstruction		
29	First aid kit readily available and adequately stocked		
30	Spill cleanup materials are present.		
Chemi	cal Storage & Chemical Inventory & Hazardous Material/Atmospher	е	
31	Chemical Inventory is complete		
32	Incompatible chemicals stored properly		
33	Containers are properly used and labeled		
34	Flammables are stored in flammables cabinets		
35	Are all chemicals stored by hazard class, eg: Flammables, oxidizers		
	Acids, bases, reactives and toxins?		
36	Chemical waste containers closed and properly labeled		
37	Hazardous Chemicals are stored below eye level		
38	No Bad odors are present in the lab		
39	Ventilation where chemicals used is available		
40	No breakable chemical containers stored on the floor		
41	Bench tops and sink areas clean and tidy		
Radiat	ion Safety		
42	No radioactive materials or machines in this lab?		
	TOTAL (SAFE)		
	TOTAL (UNSAFE)		
	Lab Safety percentage		



## MONTHLY SPCC PLAN INSPECTION LOG

# Stephen F. Austin State University Environmental Health, Safety, & Risk Management

			В	ULK	STOR	AGE	CONT	AINER	S																											
Name of Inspecto	or:																																			
Signature:								Date	of Ins	pection	n:																									
Tank Location / Description	Secondary Containment Maintained (complete dike draining log as necessary)		Containment Maintained (complete dike draining log		Containment Maintained (complete dike draining log		Containment Maintained (complete dike draining log		Containment Maintained (complete dike draining log		Containment Maintained (complete dike draining log		Containment Maintained (complete dike draining log		Containment Maintained (complete dike draining log		Containment Maintained (complete dike draining log		Containment Maintained (complete dike draining log		Containment Maintained (complete dike draining log		Containment Maintained (complete dike draining log		Containment Maintained (complete dike draining log		Dr Va Seco	and rain lves urely cked	Lea	ee of ks or pills	and in Con (corr stu	tainers piping Good dition no osion, urdy orts and lations)	Indi	evel cator ctional	Problems Identified (enter work order as necessary)	Corrective Actions Taken & Date
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO																										
GROUNDS AND TR																																				
Spill Kit fully stock a	and acc	essible?	Yes N	0																																
Diesel AST (AST1)																																				
Gasoline AST																																				
(AST2)																																				
Used Oil AST																																				
(AST3)																																				
Transmission Fluid																																				
AST (AST4)																																				
Motor Oil AST (AST5)																																				
55-gallon Drums																																				
(D1)																																				
WASTE KITCHEN (																																				
Spill Kit fully stock a	and acc	essible?	Yes N	0		1	1			1	T																									
East College																																				
Cafeteria (KG1)																																				
University Center																																				
(KG2)																																				
ACDICIU TUDE DE	CE 4DC	THE CENT	ED /DA	111 mn 1	DECE	ADCII 1	~ = 1	n																												
AGRICULTURE RE					KESEA	AKCH (	ENTE	Υ																												
Spill Kit fully stock a	and acc	essible?	res N	0		ı	1			1																										
Diesel AST (AST6)																																				
Broiler House Generator (EG2)																																				
PRC Generator (EG7)							1																													



# MONTHLY SPCC PLAN INSPECTION LOG

# Stephen F. Austin State University Environmental Health, Safety, & Risk Management

				BU	JLK S	TORA	GE C	ONTAI	NERS			
Name of In	specto	or:										
Signature:					_			Ι	Date of	f Inspe	ction:	
Tank Location / Description  Maintained (complete dike draining log as necessary)		Drain Sec Lo	l and Valves urely cked	Lea Sj	ee of ks or pills	Containers and piping in Good Condition (no corrosion, sturdy supports and foundations)		Level Indicator Functional		Problems Identified (enter work order as necessary)	Corrective Actions Taken & Date	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO		
<b>EMERGENC</b>	Y GEN	ERATOR	RS									
Boynton (EG1)												
Dewitt Nursing (EG3)												
Human Services (EG4)												
Library (EG5)			_									
Mobile – On Trailer (SRC)												
(EG6)	Spill I	Kit fully	stock ar	nd access	ible? Y	es No						



# ANNUAL SPCC PLAN INSPECTION LOG

# Stephen F. Austin State University Environmental Health, Safety, & Risk Management

# OIL-FILLED OPERATIONAL EQUIPMENT

Name of Inspector:						
Signature: Date of Inspection:						
Tank Location / Description	Free of Leaks or Spills		Units maintained in Good Condition (no corrosion, sturdy supports and foundations)		Problems Identified	Corrective Actions Taken & Date
ELEL/4TODG	YES	NO	YES	NO		
Ailmon Posting Carago 2 (E1)						
Aikman Parking Garage 2 (E1) Aikman Parking Garage 3 (E2)						
Austin Building (E3)						
Boynton Building (E4)						
Chemistry Building (E5)						
Baker Pattillo Student Center #1 (E6)						
Baker Pattillo Student Center #2 (E7)						
Baker Pattillo Student Center #3 (E8)						
Baker Pattillo Student Center #4 (E9)						
Baker Pattillo Student Center #5 (E10)						
Baker Pattillo Student Center #5 (E11)						
Early Childhood Research Center #1 (E12)						
Early Childhood Research Center #2 (E13)						
Ferguson Liberal Arts Building #1 (E14)						
Ferguson Liberal Arts Building #2 (E15)						
Forestry Building (E16)						
Griffith Dormitory - Hall 15 #1 (E17)						
Griffith Dormitory - Hall 15 #2 (E18)						
Griffith Fine Arts (E19)						
Homer Brice Stadium Pressbox #1 (E20)						
Homer Brice Stadium Pressbox #2 (E21)						

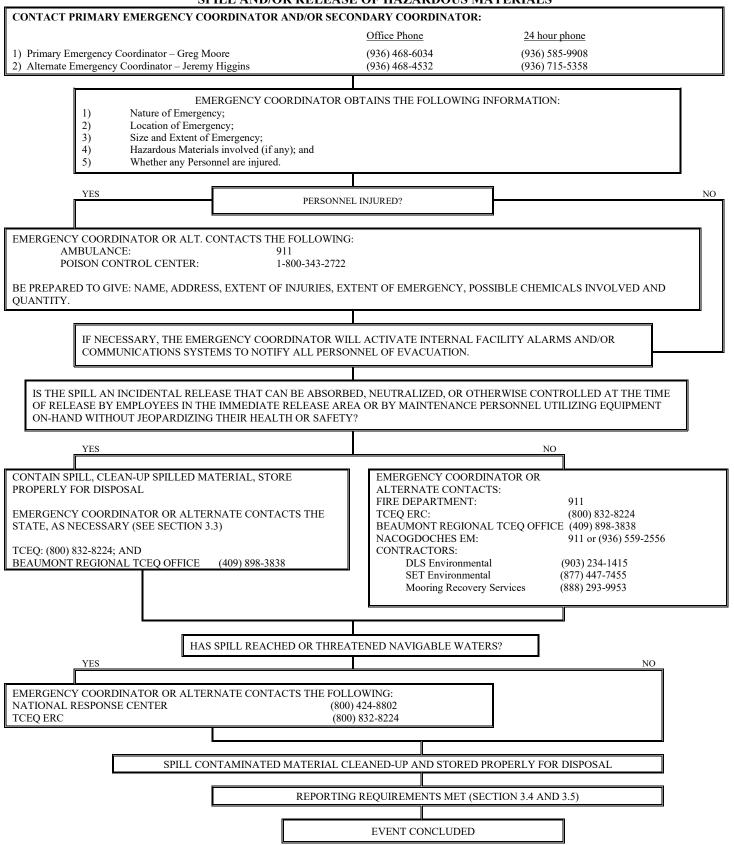
Homer Brice Stadium Fieldhouse (E22)  HPE Complex (E23)  Human Services Building #1 (E24)  Human Services Building #2 (E25)  Kerr Dormitory - Hall 18 #1 (E26)  Kerr Dormitory - Hall 18 #2				
HPE Complex (E23) Human Services Building #1 (E24) Human Services Building #2 (E25) Kerr Dormitory - Hall 18 #1 (E26)				
Human Services Building #1 (E24) Human Services Building #2 (E25) Kerr Dormitory - Hall 18 #1 (E26)				
(E24) Human Services Building #2 (E25) Kerr Dormitory - Hall 18 #1 (E26)				
(E25) Kerr Dormitory - Hall 18 #1 (E26)				
(E26)				
` /				
(E27)				
(E27) Liberal Arts North #1 (E28)				
Liberal Arts North #2 (E29)				
Lumberjack Garage #1 (E30)				
Lumberjack Garage #2 (E31)				
Lumberjack Lodge #1 (E32)				
Lumberjack Lodge #2 (E33)				
Lumberjack Village Bldg 1 #1 (E34)				
Lumberjack Village Bldg 1 #2 (E35)				
Lumberjack Village Bldg 2 (E36)				
Lumberjack Village Bldg 3 (E37)				
Math/ Nursing Building #1 (E38)				
Math/ Nursing Building #2 (E39)				
McGee Business Building #2				
(E40)			1	
McGee Business Building #1 (E41)				
McKibbon Education Building #1 (E42)				
McKibbon Education Building #2 (E43)				
Miller Science Building #1 (E44)				
Miller Science Building #2 (E45)				
Miller Science Building #3 (E46)				
North and South Dormitory – Hall 20 #1 (E47)				
North and South Dormitory - Hall 20 #2 (E48)				
Physical Plant (E49)				
Power Plant 2 (E50)				
Purchasing/ Central Stores (Warehouse Building) (E51)				

Rusk Building (E52)					
Social Works Building (E53)					
Steen Library - 1st Floor (E54)					
Steen Library - 2nd Floor #1					
(E55)					
Steen Library - 2nd Floor #2					
(E56)					
Steen Library - 2nd Floor #3 (E57)					
Steen Library - 2nd Floor #4 (E58)					
Steen Library - East Side Elev. Mechanical (E59)					
Student Center Garage #1 (E60)					
Student Center Garage #2 (E61)					
Student Recreation Center (E62)					
Wright Music (E63)					
Wilson Parking Garage #1 (E64)					
Wilson Parking Garage #2 (E65)					
TRANSFORMERS					
Art Studio (T1)					
Austin Building (T2)					
Cafeteria - East (T3)					
Coliseum (T4)					
Concessions - East (T5)					
Early Childhood Lab (T6)					
Education Building (T7)					
Gibbs Hall (Housing Ops) (T8)					
HPE (T9)					
Hall 9 - North (T10)					
Hall 12 – South (T11)					
Hall 14 (T12)					
Hall 15 – Griffith #1 (T13)					
Hall 15 – Griffith #2 (T14)					
Hall 15 – Griffith #3 (T15)					
Hall 16 - #1 (T16)					
Hall 16 - #2 (T17)					
Hall 16 - #3 (T18)					
Hall 17 - Steen (T19)					
Hall 18 – Kerr #1 (T20)					
Hall 18 – Kerr #2 (T21)					
Hall 18 – Kerr #3 (T22)					
Hall 18 – Kerr #4 (T23)					
Hall 19 – Garner #1 (24)					
()		1	l .	<u> </u>	<u> </u>

Hall 19 – Garner #2 (T25)			
Hall 20 #1 (T26)			
Hall 20 #2 (T27)			
Health Services Building (T28)			
Human Sciences - North (T29)			
Human Sciences - South (T30)			
Human Services (T31)			
Liberal Arts & Ferguson (T32)			
Library #2 (T33)			
Lumberjack Lodge (T34)			
McGee Building (T35)			
Miller Science Building #1 (T36)			
Miller Science Building #2 (T37)			
Music Building #1 (T38)			
Music Building #2 (T39)			
New Raguet - North (T40)			
Nursing/Math Building (T41)			
PPI – North (T42)			
PPI - South (T43)			
PPII-A (T44)			
PPII-B (T45)			
PPII-C (T46)			
Rusk Building (T47)			
Stadium - East (T48)			
Stadium – Field House (T49)			
Stadium – Press Box (T50)			
Wellness Center (T51)			
Wisely Hall/UPD (T52)			

# **Appendix I: Emergency Procedure Flowchart**

### SPILL AND/OR RELEASE OF HAZARDOUS MATERIALS



# Appendix J: 2020 Energy & Water Management Plan

2020

# Energy & Water Management Plan



Finance & Administration

Stephen F. Austin State University

October, 2020



**Energy & Water Management Plan** 



### **Progress Report**

In January of 2009, SFASU embarked on a mission to reduce utility costs that involved an issuing of a RFQ for a performance contract with an energy service contractor. Prior to that time, little had been done on campus to reduce energy or water consumption and curb associated costs. Building systems were run indiscriminately—often being left in "hand" position, therefore bypassing automated controls—in order to minimize impact to business operations. As a result, SFASU combined annual utility costs reached nearly \$10.9M in fiscal year 2008, and the energy use index (EUI) peaked at 152.1 MBtu per conditioned square foot of space.

SFASU began by establishing an Energy Conservation Committee with a goal of reducing energy consumption by 30% over a 10-year period. After a lengthy review and evaluation process, SFASU selected Siemens Building Technologies Inc. (Siemens Industry, INC.) as its energy service contractor and authorized the preparation of a detailed utility assessment report. After securing necessary funding, and subsequently completing all approved conservation measures (phases 1 & 2), SFASU reduced annual utility costs to under \$7.5M in 2013, while reducing its EUI to 118.0. Continued fine tuning of building systems and favorable utility rates further reduced the annual utility spend to \$6.56M in fiscal year 2014.

As a result of the success of the initial energy service contract, SFASU commissioned another study (phase 3) to identify additional facility improvement measures to reduce the consumption and/or costs of campus utilities. These improvements were completed in March of 2016 and included building HVAC/Automation improvements, water sub-metering for sewer credits, and additional lighting projects. The third full year energy savings for electricity and natural gas were 8.43 MWh and 55,340 MMBtu respectively. Sewer credits from irrigation activities, cooling tower evaporation, and swimming pool water loss were 34,932 kgals for the same period.

Most recently, Siemens had prepared a preliminary report for the next round of facility improvement measures (phase 4). The scope of work and associated costs were reviewed by SFASU Administration and tabled for future discussions. Siemens has since offered to implement their Desigo CC Management Platform, which is a flexible, full client-server architecture and it presents a single point of entry for users to operate, monitor, and optimize building automation. SFASU is currently undergoing implementation of this system. This system will help SFASU to continue to strive for energy reduction initiatives and enable SFASU to review current energy saving techniques for further analysis.

In addition to saving energy and dramatically reducing costs, SFASU has strategically replaced inefficient, aging equipment that may have otherwise ended up on a long list of capital replacement needs in line fighting for shrinking funds with other institutional factions.

### **Energy & Water Management Plan**



Energy and water usage reductions coupled with favorable electricity and natural gas commodity rates reduced SFASU fiscal year 2020 utility spend to approximately \$4.80M, down 57% from the baseline year of 2008. It should be noted that conditioned space gross square footage increased by approximately 8.9% (338,000) during this same period, city water and sewer rate increased significantly, and SFASU lost the benefit of a 20% electricity distribution credit in 2017. Furthermore, the global COVID-19 Pandemic dramatically changed the landscape of the University and affected the energy consumption across the entire footprint of SFASU. SFASU transitioned to near 100% online instruction inMarch of 2020 through August 2020.

Summaries of each phase of utility facility improvement projects are included on the following page.

### **Phase 1 Summary:**

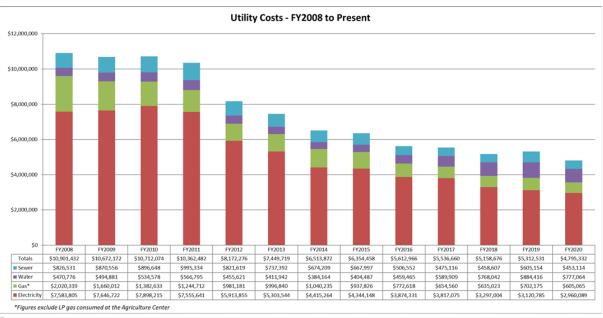
- Start Date: July, 2010
- Completion Date: December, 2011
- Scope of Work:
  - ✓ Energy Management and Control Systems Chiller Plant Optimization
  - ✓ Energy Management and Control Systems Airside Optimization
  - ✓ Water Management Upgrades (80% of total in phase 1; 20% in phase 2)
- Project Cost: \$9,817,962
- Cumulative 8-year Guaranteed Savings: \$9,590,850
- Cumulative 8-year Measured Savings: \$14,168,369 (148% of guarantee)

### **Phase 2 Summary:**

- Start Date: July, 2010
- Completion Date: December, 2011
- Scope of Work:
  - ✓ Deferred Maintenance (central plant #1 boiler replacement, outside air handling unit Music Building)
  - ✓ Water Management and Upgrades (20% of total in phase 2; 80% in phase 1)
  - ✓ Lighting Efficiency Retrofits (lamp technology and controls)
  - ✓ Power Factor Correction
- Project Cost: \$7,427,500
- Cumulative 8-year Guaranteed Savings: \$8,060,712
- Cumulative 8-year Measured Savings: \$8,556,647 (106% of guarantee)

**Energy & Water Management Plan** 





### **Phase 3 Summary:**

Start Date: January, 2015
Completion Date: March, 2016

Scope of Work:

- ✓ Building automation/HVAC upgrades in 15 buildings (combined 1.3M gross square feet)
- ✓ Deferred maintenance (central plant #2 and auxiliary building boiler replacement), lighting retrofits
- ✓ Sewer credit sub-metering for irrigation, cooling tower evaporation, and swimming pool water.
- Project Cost: \$11,345,915
- Cumulative 46-month Guaranteed Savings: \$3,337,714
- Cumulative 46-month Measured Savings: \$3,806,686 (114% of guarantee)

### **Phase 4 Summary:**

- Survey completed in September, 2015
- Proposed scope was reviewed by SFASU Administration in FY2019 and Phase 4 was tabled.
- Scope included additional building system upgrades (automation & HVAC upgrades), and campus-wide irrigation system upgrades.

### **Historical Data:**

The chart below shows the utility costs (Electricity, Natural Gas, Water, & Sewer) since FY2008. Note that while total costs have gone down substantially, there has been a net gain of approximately 340,000 conditioned square feet of space.

**Energy & Water Management Plan** 



### **UAR Documentation:**

The Utility Assessment Reports and Annual Savings Reports are on file with the SFASU Physical Plant Department.

### Goals

SFASU has made tremendous strides reducing utility consumption by implementing various facility improvement measures as well as reducing associated rates by employing strategic negotiating techniques. As a result, SFASU has reduced the total annual utility spend (electricity, natural gas, water & sewer) by 57% since the base year of FY2008. Results and future short-term goals for each utility are listed below.

### **Electricity:**

Achieved:

SFASU reached its peak electrical consumption in FY2008 with just over 88.5 MWh. Electricity costs peaked in FY2010 at just under \$7.9M. FY2020 actual figures were 60.2 MWh and \$2.96M. These figures represent reductions of 32.0% in consumption and 62.5% in associated costs from the respective peak years. Note that FY2020 figures were down from FY2019 figures, primarily due to the global COVID-19 Pandemic and subsequent initiative of near 100% online instruction from March 2020 through August 2020. SFASU's President placed a campus wide directive that called for a minimal student population residing in residence halls during this period as well.

Future:

Negotiated electric rate reductions for fiscal years 2018 – 2021 are expected to save approximately \$700k per year in electricity costs. The subsequent loss of a 20% State College and University Discount (SCUD) for distribution charges was eliminated in 2017 which will offset some of the anticipated savings from the lower commodity rate.

**Energy & Water Management Plan** 



### **Natural Gas:**

Achieved:

SFASU reached its peak natural gas consumption in FY2009 with just over 227,000 MMBtu. Natural gas costs peaked in FY2008 at just over \$2.0M. FY2020 actual figures were 173,412 MMBtu at a cost of \$605,065. These figures represent reductions of 23.7% in consumption and 70.1% in associated costs from the respective peak periods. Note that FY2020 figures were down from FY2019 figures, primarily due to the global COVID-19 Pandemic and subsequent initiative of near 100% online instruction from March 2020 through August 2020. SFASU's President placed a campus wide directive that called for a minimal student population residing in residence halls during this period as well.

Future:

Phase 4 Implementation has been tabled as previously stated, however SFASU will evaluate future possibilities in savings and usage reduction and discuss the feasibility of incorporating initiatives in FY2021.

### Water & Sewer:

Achieved:

Annual water and sewer reduction results are more difficult to track at SFASU because of the lack of historical data available and the influence of weather conditions on consumption.

During the four year period from FY2008 – 2011, the campus averaged 215,683 kgals per year. Over the past nine years, the average consumption has dropped to 156,961 kgals per year. This figure represents an average reduction in consumption of 27.2%.

### **Energy & Water Management Plan**



In addition, adding sub-meters throughout the campus to measure irrigation, cooling tower evaporation, and swimming pool water loss helped reduce the annual billed sewer units from an average of 163,250 to 89,097 kgals in FY2020 which represents an overall reduction of 45.4%.

Despite an increase in city sewer charges, these costs fell from a high of \$995k in FY2011 to \$453k in FY2020 (54.5% reduction) despite a 30% increase in city sewer charges beginning in October 2016.

Note that FY2020 figures were down from FY2019 figures, primarily due to the global COVID-19 Pandemic and subsequent initiative of near 100% online instruction from March 2020 through August 2020. SFASU's President placed a campus wide directive that called for a minimal student population residing in residence halls during this period as well.

#### Future:

Phase 4 Implementation has been tabled as previously stated, however SFASU will evaluate future possibilities in savings and usage reduction and discuss the feasibility of incorporating initiatives in FY2021.

Note that a new water/sewer rate schedule approved by the City of Nacogdoches increased the water and sewer rates substantially in 2017. As approved, the city's water/sewer rates substantially increased in 2019 and another increase will be applied in 2021.



## **Strategy for Achieving Goals**

SFASU will continue to build on the success achieved through the implementation of recent facility improvement measures, including the use of performance contracting, opportunities presented through the capital renewal process, taking advantage of available funding incentives, and by achieving best practices through its operations and maintenance programs. Specifically this includes, but is not limited to the following:

### **Performance Contracting:**

SFASU has already realized the benefits of performance based contracts in its pursuit of achieving utility reductions. Due to the results achieved through this partnership, it is expected that SFASU will continue exploring other viable facility improvement measures in this manner.

### **Capital Renewal Program:**

- Perform economic analysis and life cycle costing for major system purchases.
- Specify cool roofing technology for replacement projects.
- Upgrading constant volume air distribution systems with variable air volume systems.
- Replacing pneumatically controlled systems with direct digital control.
- Replacing boilers with more efficient condensing units.
- Upgrading existing HID lighting at outdoor athletic venues to LED technology.

### **Incentive Programs:**

- Apply for utility rebates where applicable.
- Utilize tax credits where appropriate.
- Applying for grants when available.

### **Operations & Maintenance Practices:**

- Controlling conditioned environments remotely through an integrated building automation system to approved standards and schedules.
- Continue upgrading lighting as reliable technological advancements dictate.
- Replacing motors with premium efficiency units; installing variable frequency drive units where feasible.
- Perform maintenance on all related equipment and components in accordance with manufacturer recommendations and established and evolving best practices.
- Monitoring and reporting consumption levels and variances for all utilities.

**Energy & Water Management Plan** 



# **Implementation Schedule**

Due to the tabling of Phase 4, SFASU entered into an agreement with a professional engineering & consulting service to expand Central Utility Plant #1. The agreement and subsequent results from evaluation(s) have been completed under the first step of a project that will enable Central Utility Plant #1 to feed three additional buildings in conjunction with planned construction activities. This construction project is tentatively scheduled to begin in November 2020.

The SFASU plan for measurement and verification of savings for each facility improvement measure (FIM) is consistent with the International Performance Measurement and Verification Protocol.

Depending on the improvement measure, one of the following four options will be used:

### Option A - Retrofit Isolation: Key Parameter Measurement

Savings are determined by field measurement of the key performance parameter(s) which define the energy use of the FIMs affected system(s) and/or the success of the project. Measurement frequency ranges from short-term to continuous, depending of the expected variations in the measured parameter, and the length of the reporting period. Parameters not selected for field measurement are estimated. Estimates can be based on historical data, manufacturer's specifications, or engineering judgment. Documentation of the source or justification of the estimated parameter is required. The plausible savings error arising from the estimation rather than measurement is evaluated.

### Option B - Retrofit Isolation: All Parameter Measurement

Savings are determined by field measurement of the energy use of the FIM-affected system. Measurement frequency ranges from short term to continuous, depending on the expected variations in the savings and the length of the reporting period.

### **Option C - Whole Facility**

Savings are determined by measuring energy use at the whole facility or sub-facility level. Continuous measurements of the entire facility's energy use are taken throughout the reporting period.

Energy & Water Management Plan



## **Option D - Calibrated Simulation**

Savings are determined through simulation of the energy use of the whole facility, or of a sub-facility. Simulation routines are demonstrated to adequately model actual energy performance measured in the facility.



# **Finance Strategy**

SFASU has incurred debt in excess of \$28M to finance various facility improvement measures to reduce energy and water consumption. As of September 1, 2020, SFASU had the following outstanding debt related to energy service contracts:

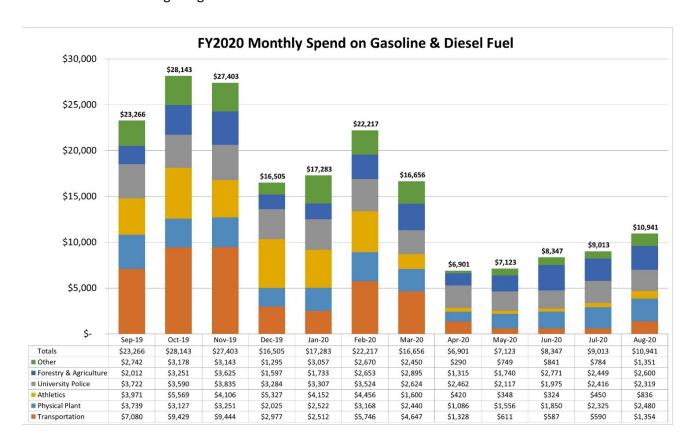
Date (Fiscal Year)	Phase I & II Beg Balance	Phase I & II Payment	Phase III Beg Balance	Phase III Payment
FY 2021	\$1,655,805	\$1,506,436	\$8,723,373	\$956,737
FY 2022	\$182,666	\$190,913	\$8,001,294	\$977,991
FY 2023	\$0		\$7,238,538	\$999,735
FY 2024			\$6,433,520	\$1,021,979
FY 2025			\$5,584,603	\$1,044,735
FY 2026			\$4,690,093	\$1,068,017
FY 2027			\$3,748,240	\$1,091,834
FY 2028			\$2,757,234	\$1,116,202
FY 2029			\$1,715,202	\$1,141,133
FY 2030			\$620,208	\$636,891
FY 2031			\$0	

SFASU will continue exploring feasible opportunities while managing its debt obligations. Future projects will be funded with available capital improvement funds and likely will utilize energy service performance contracting.



## **Gasoline Consumption**

During fiscal year 2020, SFASU reported using 94,225 gallons of gasoline and diesel (fuel) at a total cost of \$193,799 and an average cost of \$2.06 per gallon. These figures represent a decrease in consumption of 25.1% and a cost decrease of \$98,666 for the year. These dramatic decreases can be attributed to the Global Pandemic, subsequent mandated furlough days for staff partners, and the campus directive of moving to near 100% remote/online learning for almost the entire second half of fiscal year 2020. The average cost per gallon decreased by \$0.27 for the year. Monthly consumption is broken down on the following chart. Note that SFASU was shut down for twelve days around the Christmas / New Year's holiday season, another nine days in March for Spring Break and nine days for the week of Thanksgiving. Furthermore, as noted previously the Global Pandemic can be seen by the dramatic decreases in the chart from March through August 2020.



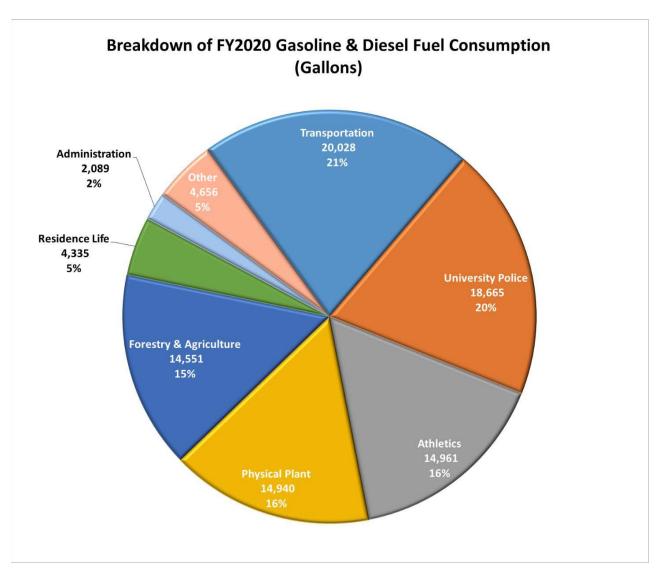
The chart on the following page shows the breakdown of fuel (gallons) by SFASU department. The Transportation Department was the biggest user of fuel, which provides vehicles, vans, road buses, and shuttle service for the campus community. The university police department was the second largest user of fuel. This department is driving "rounds" throughout the campus on a 24/7 basis. The Athletics Department, accounting for road games and recruitment activities was the third highest user. The Physical Plant Department, which is the largest department on campus providing various building

Energy & Water Management Plan



trades, custodial and trash collection services, and grounds maintenance was the fourth highest user. The College of Forestry and Agriculture was the fifth highest user.





**Energy & Water Management Plan** 



Identified gasoline reduction opportunities, include:

- Continue updating fleet with models that offer improved mileage.
- Research and implement fuel saving technologies such as fuel additives, alternative fuels, electric vehicles, hybrids where feasible as well as any infrastructure improvements necessary to support the technology.
- Plan fleet design and utilization starting from the top, as a whole institution, rather than individualized departments.
- Set department limits on fuel consumption and/or award/penalize departments who cannot meet limits or cannot improve fuel consumption.
- Consider renting vehicles for longer trips when rental vehicles offer better fuel mileage.
- An implemented plan of choosing the most economical vehicle for the desired trip (i.e. do not use a twelve passenger van with only two passengers), is on hold due to COVID-19.
- Analyze and implement department head approval for travel and what type of vehicle should be taken.
- Encourage car-pooling for travel and or work assignments.
- Plan daily trips to maximize traveling efficiency.
- Encourage walking or using the shuttle service for inter-campus travel.
- Implement stronger security controls over fuel purchases.
- Reduce access to fuel cards for vehicles in each department.

SFASU uses two battery powered ATV's for grounds maintenance. These vehicles are out and about campus each weekday. They help campus gardeners perform their duties and the special services group to collect trash from exterior waste receptacles on a regular basis.





SFASU will carefully consider the feasibility of alternative forms of transportation as each fleet vehicle is due for replacement.



## **Employee Awareness Plan**

Employee awareness initiatives on the SFASU campus include the following:

- 1. Maintaining a sustainability website that includes:
  - Definition of sustainability
  - Vision Statement
  - Goals and objectives (with graphs of results)
  - Campus initiatives outlines various facility improvement initiatives completed at SFASU
  - Getting Involved campus and local events
  - News i.e. announcing new electric utility vehicles for grounds maintenance
  - Fun facts
  - Student Tips (shown below)

### Tips for Students

### In the Residence Hall:

- Use compact fluorescent bulbs, which last longer and use less energy than regular bulbs.
- Turn off unnecessary electrical devices when you leave a room for more than 15 minutes.
- Do not leave computers on all night.
- Unplug appliances and electronics when not in use, or use a power strip and turn it off when not using it.
- Use natural light rather than electric whenever possible.
- Buy inexpensive mugs and plates that you can wash rather than disposable ones and avoid over-packaged takeout food.
- Buy a water filter and refill a reusable container instead of buying cases of bottled water.
- Share magazines and books.

#### In the bathroom:

- Take shorter showers; don't run the water before getting in, and turn off the water when lathering.
- Report leaky faucets and showerheads.
- Don't use the toilet as a garbage bin. Toss tissues and waste in the trash cans.

### In the laundry room:

- Only wash full loads of laundry.
- Wash your clothes in cold water.
- Use products containing the least amount of bleaches, dyes and fragrances.
- Air dry whenever possible.

#### In the classroom:

- Use refillable binders instead of notebooks or use a laptop.
- Take notes on both sides of paper.
- Unless you're handicapped, don't use automatic handicap doors.
- If it's OK with your professor, hand in assignments by printing on both pages, or online.

#### In the dining hall:

- Carry a reusable cup or water bottle. Some water bottles come with built-in filters if you're worried about the quality of the tap water.
- Limit the use of paper napkins.
- Only take what you will eat to limit food waste.
- Dispose of waste in the correct container.

The SFASU Sustainability website can be viewed at http://www.sfasu.edu/sustainability/

**Energy & Water Management Plan** 



- 2. Communications from senior management to all staff regarding the conservation program, results achieved, and contractual obligations of SFASU.
- 3. Friendly shutdown reminders during the institution down time encouraging all to turn off everything possible and avoid using the facilities.

om: VP of Finance and Administration No Reply

ALLFACSTAFF-L

blect: Soring Break 2020 Campus Notification

Subject: Spring Break 2020 Campus Notification Date: Monday, March 2, 2020 10:47:24 AM

### Notice:

In an effort to maximize utility savings associated with the Spring Break week closure, the following operational changes will be in effect from March 7 - March 15, 2020.

- Power Plant Chillers (cooling) and building air handling equipment will operate only for critical areas.
- Buildings with dedicated HVAC equipment will be shut down or adjusted manually to conserve energy.

In addition, we ask that you please do your part by participating in the reduction efforts. Below is a list of actions that will help us realize our energy consumption and associated cost reduction goals:

- Minimize use of SFASU buildings (this will help stabilize interior conditions and keep the lights off).
- Turn off peripheral electronic equipment (printer, monitor(s), copier, etc.) before leaving on the afternoon on Friday, March 6, 2020.
- DO NOT turn off your PC; there will be updates applied by IT over Spring Break and all machines MUST remain on to receive these updates.
- Adjust your thermostats down or turn the heating option "off" if you are in one of the smaller off-campus buildings.

Should you have questions or concerns, please contact the following:

During Normal Working Hours

Manager of Mechanical Maintenance & Building Trades Office: x4546 / Mobile:

After Normal Working Hours University Police Department x2608

- 4. Passive reminders reminding everyone to conserve, such as lighting controls throughout thecampus and water aerators at bathroom/kitchen lavatories and resident showers.
- 5. In January, 2014, SFASU officially opened the Ina Brundrett Conservation Education Building in SFASU's Pineywoods Native Plant Center. The 3,100 square foot facility will assist with the development and presentation of environmental education programs year-round, rain or shine. Funded entirely through private donations, the building is designed to integrate educational andoutreach programs offered to the more than 17,000 SFASU Gardens visitors each year. The facility includes a 12.75 kW solar array system installed on the building's roof which results in approximately 50% energy savings. The solar array was acquired through a \$30,000 donation from the Sun Club, a program of Green Mountain Energy, which is the country's longest-serving renewable energy retailer. The array and its energy-use monitoring system also will serve to educate students and visitors about solar energy.
- 6. Annual Earth Day activities held in the main plaza in which various student organizationsparticipate in order to raise awareness to their specific causes.
- 7. Consolidation of observed holidays to achieve prolonged equipment shutdown periods in order reduce energy consumption and realize greater savings.