TEXAS STATE UNIVERSITY

The rising STAR *of Texas*

Office of Environmental Health Safety and Risk Management

July 12, 2018

Mr. Ron Riggins
City of San Marcos
Water Quality Manager
630 E. Hopkins
San Marcos, Texas 78666

Subject: Texas State University – Compliance Order
Industrial Permit No. 0512-09

Dear Mr. Riggins:

Please find attached the corrective action documentation required by the Compliance Order received by Texas State on May 15, 2018. The documentation submitted today is the final completed corrective action required by the order.

Texas State Response, Compliance Order Requirement No. 3
Texas State has attached the Slug Control Plan for the University main campus. The plan will be posted on the EHSRM website, and its requirements will be included in the required annual training activities described in the plan.

The following certification is provided as required by the permit:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

If you have any questions or need additional information, please do not hesitate to contact me.

Regards,

Mr. Gordon Green
Interim Director
Environmental Health Safety and Risk Management

Enclosures

TEXAS STATE UNIVERSITY®

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SLUG CONTROL PLAN

June 2018

INTRODUCTION AND PURPOSE

The purpose of this Slug Control Plan is to describe measures implemented by Texas State University (Texas State) to minimize and prevent accidental discharges of pollutants that could reach the sanitary sewer and cause a violation of our permit or damage to the City of San Marcos' Publicly Owned Treatment Works (POTW).

The Slug Control Plan describes procedures for identifying potential spill sources, implementing preventative measures, conducting spill response and notifying the appropriate authorities in the event of an accidental slug discharge to the sanitary sewer. In addition, this plan presents best management practices for preventing slug discharges to sanitary sewers.

The plan was created in the Spring of 2018 and applies to the Texas State main campus in San Marcos, Texas.

REGULATORY OVERVIEW AND APPLICABILITY

Texas State University operates and maintains a wastewater collection system and has a permit to discharge industrial wastewater to the City of San Marcos. Wastewater generated by the University is treated by the City of San Marcos Publicly Owned Treatment Works (POTW). Locally-derived numerical limits are provided by the City of San Marcos to the user to limit the industrial user (IU) pollutant discharges. Those requirements are outlined in Texas States Industrial User Permit and discussed in this plan.

Industrial User Name: Texas State University
Industrial User Address: 601 University Drive

Industrial User Permit No.
8908-01, 89008-02, 8908-03, 9008-04, 9205-05, 9401-06, 9802-07, 0512-09, 0804-10, 1209-11

This Slug Control Plan has been prepared and implemented in accordance the permit and ordinance requirements of the City of San Marcos Industrial Waste Discharge Regulations (Chapter 86, Division 2). The plan applies to all campus operations where there is a potential for slug discharges, including research and teaching laboratories, facilities operations, food preparations, construction sites and hazardous waste accumulation areas.

DEFINITIONS

Sanitary Sewer: A pipe or conduit owned, controlled, or subject to the jurisdiction of the city, designed to collect and transport sewage and industrial waste.

Slug Discharge: any accidental or non-routine discharge to the sanitary sewer which has the potential to violate permit limits, or damage the wastewater collection system or treatment plant, or which could interfere with the treatment process. Examples of a slug discharge may include:

- A spill of hazardous materials near a floor drain;
- A non-routine discharge of wastewater which may violate permit limits, such as:
    - water with a low or high pH;
    - water with a temperature above 104^{o}F
    - water which has a sheen or visible oil

Wastewater Collection System: a system of conveyances, including drains, pipes, mains, interceptors, and lift stations, which carry wastewater from the source to the treatment facility. The term may be used interchangeably with the term "sanitary sewer."

FACILITY INFORMATION

Texas State University operates and maintains a private wastewater collection system which is a subscriber system to the City of San Marcos POTW. The University is considered a Significant Industrial User of the City's POTW. **Appendix A** contains drawings showing the area location and site-specific information. **Figure 1-1** shows the location of the facility relative to the organized collection lines and forced mains on campus.

DISCHARGE PRACTICES

The University discharges a total estimated daily average flow of 0.5 MG to the City's POTW. Approximately two-thirds of the daily average flow is from domestic dormitory sources and approximately one-third of this flow is considered "industrial" flow a from variety of operations, including research and teaching laboratories, shop and facility operations, food preparation and janitorial activities.

Routine wastewater discharges from the following activities that meet permit limits are authorized: academic and research laboratory activities, food service/restaurant activities, cooling tower and boiler blowdown, water treatment backwash, wastewater generator resulting from building maintenance, vehicle washing, and swimming pool backwash discharges.

All food service operations on campus are equipped with grease traps which are serviced in accordance with the requirements of the City of San Marcos. The Facilities vehicle wash garage is equipped with an oil/water separator and a grit trap which is cleaned and serviced routinely.

Figures 1-2 in Appendix A shows the locations of the thermal plants, hazardous waste 90-day storage area, the food establishments and the facilities shops, warehouses, and garages at the University.

Non-Routine Discharges

Occasionally, it is necessary to discharge wastewater which is considered non-routine. Non-routine discharges may include those from hydronic piping drain downs, discharges from the cleaning and passivation of hydronic piping, swimming pool drain downs, or other similar episodic-type discharges.

For these non-routine discharges, the discharger must contact the Environmental Health Safety and Risk Management (EHSRM) Office at (512) 245-3616 as soon as becoming aware of the need to discharge. In order to obtain discharge approval from the City, EHSRM may need to collect samples prior to authorization. The sampling process may take up to two weeks, so the discharger should plan accordingly.

DESCRIPTION OF STORED CHEMICALS

All users of hazardous materials at Texas State University are required to maintain a chemical inventory and submit it to EHSRM. The chemical inventory is updated and maintained in an online software system called EHS Assistant. EHSRM compiles this inventory and submits reports to the TCEQ and the Local Emergency Management Coordinator for the City of San Marcos on an annual basis. Safety Data Sheets for all chemicals are readily accessed through EHS Assistant and copies are required to be maintained in all chemical storage areas.

Below is a summary of the major chemical storage areas on campus.

Laboratories

There are over 200 laboratories on campus which store hazardous materials in varying amounts. The labs house flammable, toxic, corrosive, and reactive chemicals; however, single containers are typically limited to 20 Liters or less. The campus Chemical Hygiene Plan (CHP) dictates proper storage of hazardous materials and limits the volume of chemicals which can be stored on a benchtop. Chemicals are required to be stored in cabinets which are compatible and provide secondary containment whenever possible. Lab staff and faculty are required to take Hazardous Waste Disposal training at least annually. This training includes instructions stating that chemicals can not be sink drained. Laboratory safety inspections are conducted quarterly to assess housekeeping and storage practices in these environments. Signs stating “No Chemicals Down the Drain” are posted near sink drains in all laboratories.

The locations of buildings with laboratories that store hazardous chemicals is shown in Figure 1-3.

Hazardous Waste Storage Areas

There are two Container Accumulation Areas (CAA) for the 90-day storage of hazardous wastes on the main campus. The main CAA building is located in the RF Mitte building loading dock area. Its location is identified in Appendix A, Figure 1-2. The building is equipped with a spill containment system, and there are no floor drains that lead to the sanitary sewer located inside or outside the building. Chemicals and wastes are stored in carboys, drums, or in secondary containment. A permitted hazardous waste transportation company packages and transports waste from the CAA to permitted disposal sites.

The Department of Chemistry and Biochemistry has one 90-day hazardous waste accumulation area. Room 249 of the Chemistry Building is used to temporarily store flammable and non- flammable solvents, as well as some corrosive, reactive or toxic chemicals and wastes. There are no open floor drains in these rooms. EHSRM personnel pick up the waste from this location weekly and transport it to the main CAA for storage.

Utility Operations

There are 5 thermal plants on campus: the East Plant, West Plant, South Plant, Central Plant, and the new South/ East Chill Plant. Each plant stores bulk chemicals for use in the water treatment process. The plants are equipped with telemetry systems that communicate with a supervisory control and data acquisition (SCADA) system at the Central Plant. The Central Plant is manned at all times by an operator who monitors the system and plant activities throughout campus. The Central Plant operators and all Utilities staff are trained on spill response and notification protocols. This training is provided annually in the Environmental Permits training by EHSRM.

Appendix B includes a list of all thermal plant bulk chemicals and their storage locations.

Mechanical Rooms

Across campus, in each building, there are likely to be rooms housing machinery such as compressors, electrical switches and transformers, and elevators. Coolant, hydraulic fluids, or lubricants may be stored in these rooms to service machinery. The University does routine maintenance and inspection of these areas to reduce the risk of releases to both the sanitary sewer. All Facilities personnel have access to spill absorbent materials for stopping leaks and spills before the chemicals reach the sanitary sewer. Implementing secondary containment and placing notification procedure signage in all mechanical rooms is an on-going process.

Facility Maintenance Shops

Maintenance Shops on campus may house flammable, toxic, and corrosive materials for daily operations. Chemical inventories are required to be maintained for each shop and submitted to EHSRM annually. The chemical inventories are compiled and submitted annually to the TCEQ and the City of San Marcos Local Emergency Management Coordinator.

AC Shop – oils, lubricants, coolants

Paint Shop – paint, paint thinner

Electrical Shop – solvents, lubricants

Carpenter Shop – lubricants, solvents

Custodial –floor finish, floor stripper, disinfectants, degreaser, soaps and detergents

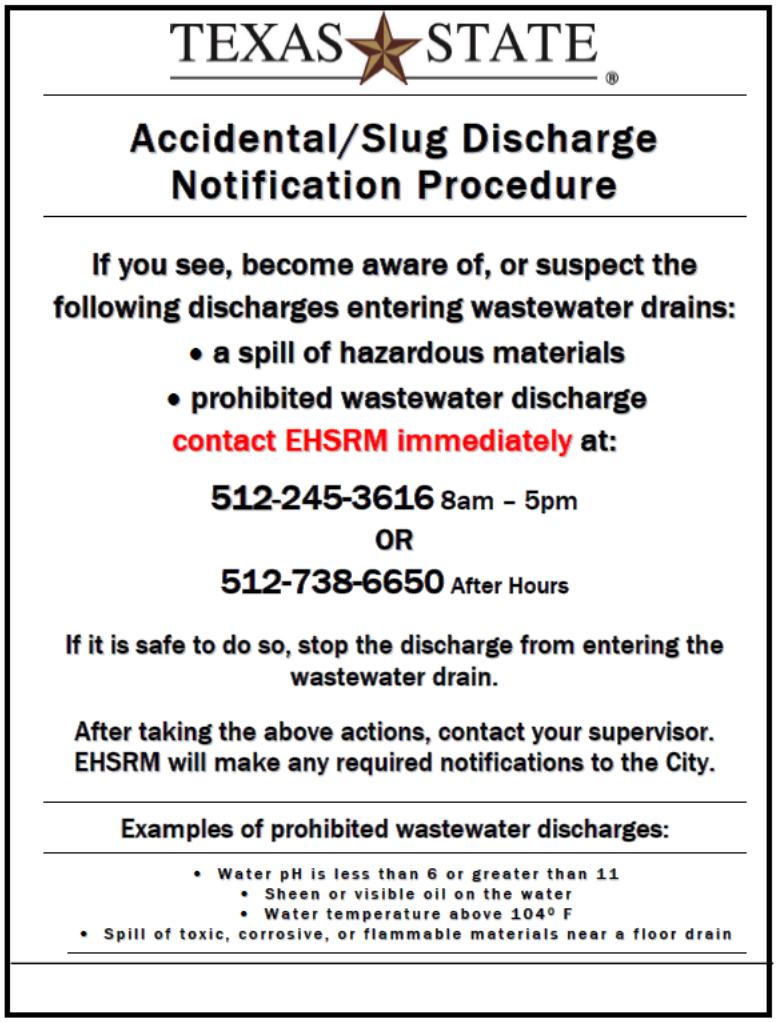
Grounds – PVC glue, pesticides, herbicides

Garage – lubricants, coolants, windshield wiper fluid, brake fluid, solvents

DHRL Maintenance – paint, paint thinner, lubricants, sealants, detergents, solvents

PROCEDURES FOR NOTIFICATION OF AN ACCIDENTAL OR SLUG DISCHARGE

Below is the spill notification which is posted in areas where there is a potential for a slug discharge. The posting provides notification information for personnel to use in the event that a slug discharge or accidental chemical spill enters a sink or floor drain.



TEXAS STATE

Accidental/Slug Discharge Notification Procedure

If you see, become aware of, or suspect the following discharges entering wastewater drains:

- **a spill of hazardous materials**
- **prohibited wastewater discharge**

contact EHSRM immediately at:

512-245-3616 8am – 5pm
OR
512-738-6650 After Hours

If it is safe to do so, stop the discharge from entering the wastewater drain.

After taking the above actions, contact your supervisor. EHSRM will make any required notifications to the City.

Examples of prohibited wastewater discharges:

- Water pH is less than 6 or greater than 11
- Sheen or visible oil on the water
- Water temperature above 104° F
- Spill of toxic, corrosive, or flammable materials near a floor drain

This notification is a required posting in all areas where there is the potential for a slug discharge to the sanitary sewer or storm drain. The Emergency Spill Procedure notification posting for laboratories is included in the Chemical Hygiene Plan (CHP).

Upon receiving a report of a prohibited accidental or slug discharge, EHSRM will immediately notify The City of San Marcos (CoSM) Water Quality Manager. These procedures include:

- A verbal notification within 24 hours of the slug discharge – (512) 393-8038 or (512) 393-8010 during business hours and (512) 393-8313 during non-business hours.
- Follow up written notification submitted within five days of the slug discharge to CoSM.

PROCEDURES TO PREVENT ADVERSE IMPACT FROM ANY ACCIDENTAL OR SLUG DISCHARGE

Due to the diverse nature of laboratory, shop and facility operations that use, store and handle chemicals, this Slug Control Plan does not contain specific prevention practices for all campus operations. General best management practices (BMPs) for spill prevention applicable to all chemical use, handling and storage operations that Texas State personnel may implement, based on their operations, are presented in this plan. Many of the BMPs outlined below are incorporated into other plans and documents implemented by EHSRM, such as the Campus Chemical Hygiene Plan, the Spill Prevention Control and Countermeasures Plan (SPCC), and the RCRA Spill Contingency Plan. Spill prevention measures are also incorporated in standard operating procedures for chemical use operations in laboratories.

All hazardous chemical users must implement Best Management Practices for slug discharge prevention.

Best Management Practices for containing toxic organic and inorganic pollutants, including solvents, from laboratories, shops and facilities operations:

- Avoid open container use of chemicals near sinks and floor drains
- Where open container use of chemicals near sinks and floor drains is unavoidable, cap or plug sinks and drains during chemical use or use plastic dish tubs as secondary containment for pouring or filling
- Store chemicals in tubs, cabinets, bermed or diked areas or in other secondary containment
- Avoid storing excess quantities of chemicals – order only what you need and dispose of unwanted or expired chemicals through EHSRM
- Secure storage cabinets and shelves to prevent tipping or falling
- Use proper container restraints
- Maintain spill containment and clean-up materials nearby
- Follow good housekeeping practices – never use sinks to store chemicals
- Maintain and regularly inspect machinery and equipment to prevent leaks and potential failures

Inspection and maintenance of storage areas

All chemical use and storage areas are inspected by EHSRM routinely. The implementation of the best management practices described above are part of those inspections.

Monthly SPCC inspections are conducted on bulk chemical storage areas, electrical transformers and switches, and bulk oil storage locations to determine the integrity of the storage and dispensing system. The inspections also include observations to ensure that floor drains are blocked or bermed near chemical storage areas. Any findings are immediately reported to the EHSRM office and relayed to the Utilities Operations supervisor for further inspection. The contractors that service these locations are contacted for repairs as needed by Utilities Operations.

EHSRM inspects the Hazardous Waste Management 90-day storage areas weekly. Any potential leaks or spills are addressed during the inspections. These units do not have any drains to the sanitary sewer. Quarterly inspections of Satellite Accumulation Areas in laboratories and shops are conducted to ensure compliance with hazardous waste regulations. These inspections include a review of secondary containment for waste containers, container condition, and housekeeping. Any findings are reported to the Principal Investigator for immediate correction.

EHSRM conducts quarterly inspections of all laboratories on campus. The inspections include a review of housekeeping, chemical inventories, storage, and labeling. Any findings are reported to the Principal Investigator for immediate correction.

Handling and Transfer of Materials

When chemicals are transferred within buildings or between buildings, chemicals are placed in secondary containers, which can contain over 100% of the chemical, if the primary container breaks. The use of protective bottle boots, plastic carriers or original shipping cartons reduces the likelihood of breakage during transport.

Loading and Unloading Operations

Most exterior loading and unloading locations (loading docks) drain to the storm drain system and storm water pollution prevention BMPs are followed per the Texas State Stormwater Management Plan. Where locations drain to the sanitary sewer, floor drains should be plugged, blocked, or bermed at all times, except when floor drains are needed (for example, when floors are mopped).

When bulk chemicals are off-loaded by truck to bulk chemical tanks on campus, the vendors must be supervised by Texas State personnel. Prior to the chemical offload or transfer, the supervising Texas State personnel must ensure that the floor drains in the areas where chemical transfer will occur are plugged, blocked, or bermed. In addition, supervising personnel should request that the vender check hoses for leaks and ensure that all valving and locks are properly set.

Worker Training

All personnel involved with hazardous materials are trained in the procedures of how to properly dispose of chemicals and notify EHSRM of any potential accidental or slug discharges. Personnel are trained upon hire and have routine refresher training. All personnel engaging in operations that could cause a slug discharge are trained in the contents of this plan through the Texas State Environmental Permits training, the Lab Safety Officer Training, or the Hazardous Waste Disposal training.

Measures and Equipment for Emergency Response

EHSRM and the Facilities Department both have equipment to respond to an accidental or slug discharge. In the case of a large accidental or slug discharge, contractors are kept on retainer to provide emergency response services. EHSRM routinely stocks spill response materials in strategic locations on campus.

All buildings with laboratories that store hazardous chemicals are equipped with Emergency Spill Kits which are located in the hallways in bright yellow containers. Individual labs also keep small spill kits near their Satellite Accumulation Areas. Additional spill response materials are kept on Facilities Department operation and maintenance trucks, at all thermal plants, and at the Hazardous Waste 90-day storage facility. A list of the Spill Kit locations which EHSRM stocks can be found in Appendix C.

Spill containment and control equipment include, but are not limited to: spill clean-up instructions, absorbent booms, berms, spilled material storage containers, and personal protective equipment.

The EHSRM Office has a trained spill response team that can respond to accidental or slug discharges. EHSRM also maintains equipment that can be used to test for the presence of toxic gases or oxygen deficiency.

CONTACTS FOR MORE INFORMATION

Questions regarding this plan or methods to prevent spills and slug discharges should be directed the Environmental Health, Safety and Risk Management Office by phone at (512) 245-3616 or email at ehs@txstate.edu.

Appendix A

Table 1-1
Facility Primary Contact Information with 24 Hour Phone Numbers
Texas State University

Department	Office Telephone	Address/Building	Plan Location
Facilities	512-245-2820 512-245-2518 512-245-2145	601 University Drive San Marcos, TX 78666 Physical Plant	Physical Plant (multiple offices)
Utilities Operations	512-245-2108 (24/7)	601 University Drive San Marcos, TX 78666 Central Plant	Central Plant South Plant East Plant West Plant
EHSRM	512-245-3616	601 University Drive San Marcos, TX 78666 Smith House	Smith House
Auxiliary Services	512-245-2585	601 University Drive San Marcos, TX 78666 LBJ Student Center	LBJ Student Center Room 3-2-5
DHRL	512-245-4680	601 University Drive San Marcos, TX 78666 DHRL	DHRL Building Maintenance Shops
Meadows Center	512-245-7530	211 San Marcos Springs Drive San Marcos, TX 78666	Coordinator Spring Lake Operations

After hours and on weekends, the Control Room Operator (512-245-2108) can be contacted for on call mechanics, electricians, and shop support for the main campus.

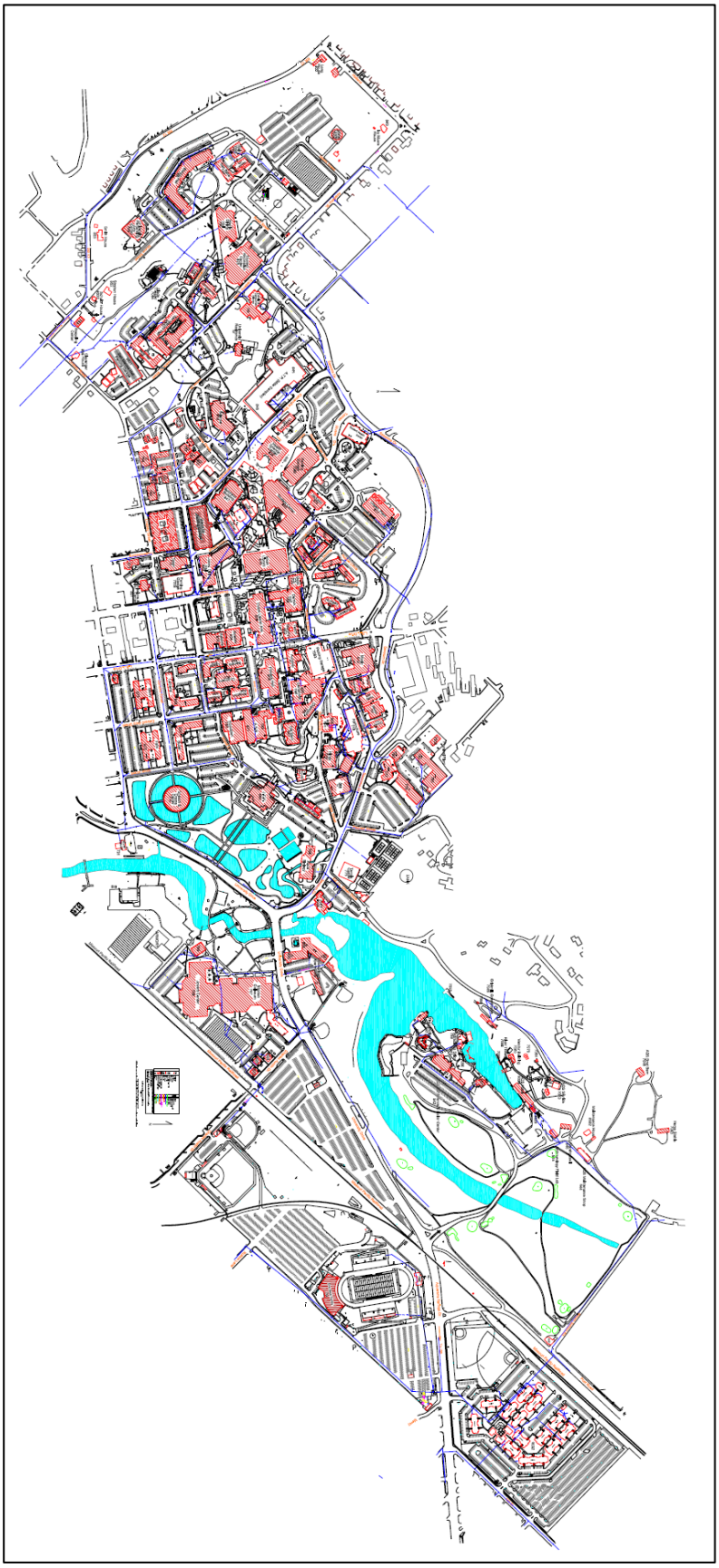
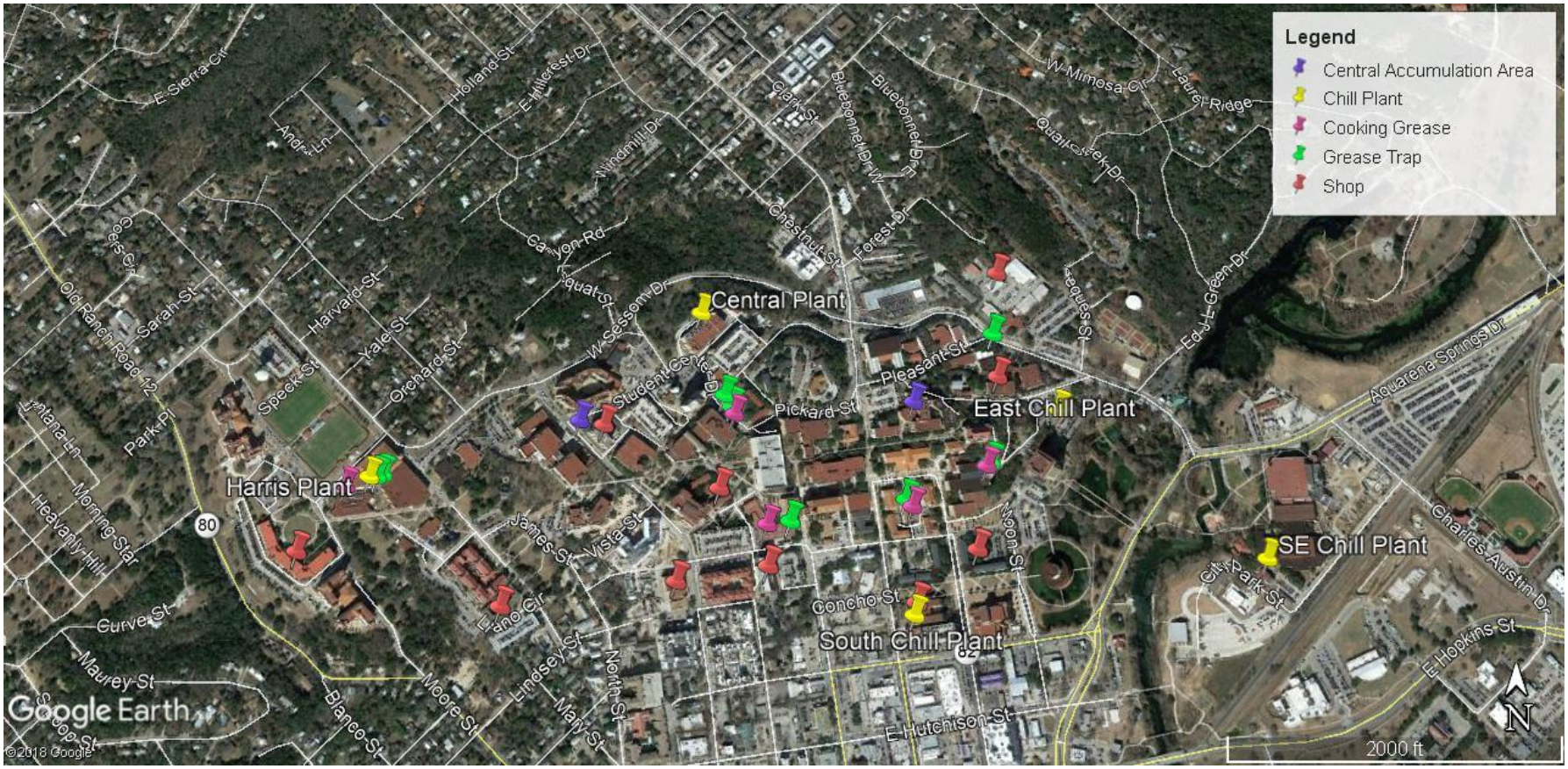


Figure 1-1

This figure displays the organized collection system that runs throughout Texas State University campus.

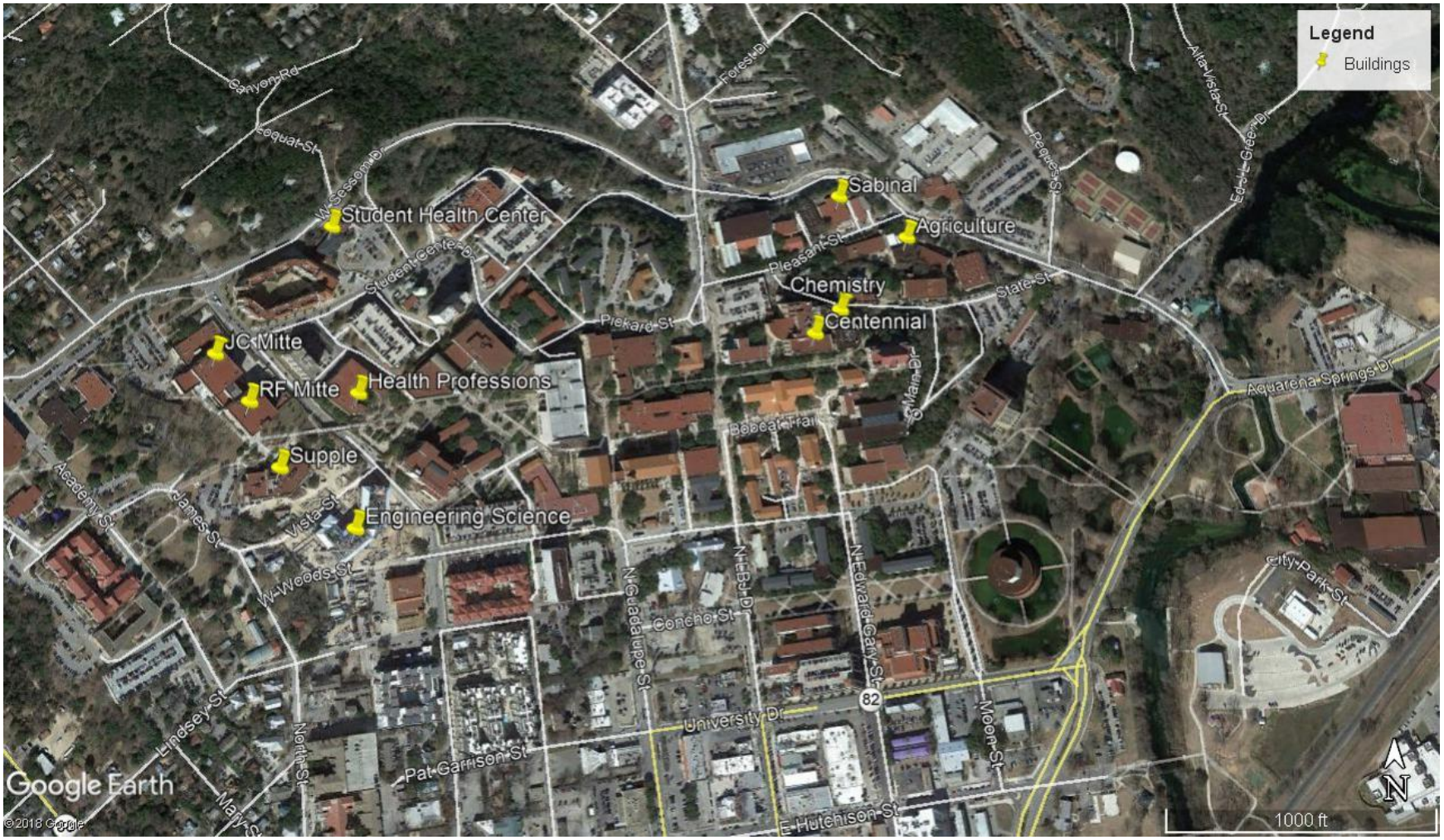
(This map needs to be updated to include the Moore Street Housing)

Figure 1-2



Figures 1-2 displays the locations of the thermal plants, hazardous waste 90-day storage area, the food establishments and the facilities shops, warehouses, and garages at the University.

Figure 1-3



Figures 1-3 displays the locations of the buildings that store hazardous chemicals at the University.

Appendix B

Bulk Chemical Storage Tank Locations								
Texas State University- San Marcos								
Location	Product No.	Application	CAS#	Hazardous Substances	%	Tank Serial #	Container Size (gallons)	Tank Type
Central Plant 817-CT-01	NALCO 356.33	Corrosion Inhibitor	110-91-8	Morpholine	5.0-10.0	40733	200	Stainless
			108-91-8	Cyclohexylamine	10.0-30.0			
Central Plant 817-CT-02	NALCO 8735.91	Alkalinity Source	310-73-2	Sodium Hydroxide	30.0-60.0	910667	100	Plastic
			310-58-3	Potassium Hydroxide	10.0-30.0			
Central Plant 817-CT-03	NALCO 1720.91	Oxygen Scavenger	7631-90-5	Sodium Bisulfite	10.0-30.0	909645	110	Plastic
			7773-03-7	Potassium Bisulfite	1.0-5.0			
Central Plant 817-CT-04	NALCO 22341.91	Boiler Water Internal Treatment	7758-29-4	Sodium Tripolyphosphate	Non-Haz	912516	110	Plastic
Central Plant 817-CT-05	NALCO 3D Trasar 3DT128.91	Cooling Water Treatment	Proprietary	Substituted Aromatic Amine	1.0-5.0	34970	400	Stainless Steel
			7664-38-2	Phosphoric Acid	5.0-10.0			
			7664-93-9	Sulfuric Acid	1.0-5.0			
Central Plant 817-CT-06	NALCO ACTI-BROM 1338.36	Cl2 Enhancer, Biodispersant	7647-15-6	Sodium Bromide	30.0-60.0	909662	100	Plastic
Central Plant 817-CT-07	NALCO 73551.36	Deposit Cleaner	Proprietary	Polyalkylimide Glycol	Non-Haz	909646	110	Plastic
Central Plant 817-CT-08	NALCO Trac107 Plus 33	Closed Loop Treatment	1330-43-4	Sodium Tetraborate	1.0-5.0	44763	200	Stainless steel
			1310-73-4	Sodium Hydroxide	0.1-1.0			
Central Plant 817-CT-10	WRICO Sodium Hypochlorite	Wricochlor/ Bleach	7681-52-9	Sodium Hypochlorite	12.5	N/A	330	Plastic
			7647-14-5	Sodium Chloride	9.0-10.0			
			1310-73-2	Sodium Hydroxide	0.5-2.0			
Central Plant 817-CT-13	Sulfuric Acid	Acid Tank	7664-93-9	93% Sulfuric Acid	93	N/A	550	Plastic
East Plant 733-CT-01	NALCO 3D Trasar 3DT128	Cooling Water Treatment	Proprietary	Substituted Aromatic Amine	1.0-5.0	909661	100	Plastic
			7664-38-2	Phosphoric Acid	5.0-10.0			
			7664-93-9	Sulfuric Acid	1.0-5.0			
East Plant 733-CT-02	NALCO 73551.36	Deposit Cleaner	Proprietary	Polyalkylene Glycol	Non-Haz	909647	100	Plastic
East Plant 733-CT-03	NALCO ACTI-BROM 1338.36	Chlorine Enhancer, Biodispersant	7647-15-6	Sodium Bromide	30.0 - 60.0	912955	75	Stainless
East Plant 733-CT-04	Sulfuric Acid	Acid Tank	7664-93-9	93% Sulfuric Acid	93	75265	330	Plastic

Bulk Chemical Storage Tank Locations								
Texas State University- San Marcos								
Location	Product No.	Application		Chemical Composition	%	Tank Serial #	Container Size (gallons)	Tank Type
East Plant 733-CT-05	Sodium Hypochlorite	Wricochlor	7681-52-9	Sodium Hypochlorite	12.5	N/A	220	Plastic
			7647-14-5	Sodium Chloride	9.0-10.0			
			1310-73-2	Sodium Hydroxide	0.5-2.0			
East Plant 733-CT-06	Trac107 Plus 3.3	Closed Loop Treatment	1330-43-4	Sodium Tetraborate	1.0-5.0	910705	100	Plastic
			1310-73-4	Sodium Hydroxide	0.1-1.0			
South Plant 861-CT-01	ChemCal SA100	Sulfuric Acid	7664-93-9	93% Sulfuric Acid	93	106622	220	Plastic
South Plant 861-CT-02	ChemCal 1512	Fungicide	7681-52-9	Sodium Hypochlorite	11.5 - 13	106621	220	Plastic
South Plant 861-CT-03	ChemCal HS 44830	Cooling Water Treatment	1310-58-3	Potassium Hydroxide	<2	106907	165	Plastic
South Plant 861-CT-04	ChemCal 1560	Microbicide	2682-20-4	2-Methyl-4-isothiazolin-3-one	0.35	N/A	65	Plastic
South Plant 861-CT-06	ChemCal 1560	Microbicide	26172-55-4	5-chloro-2-methyl-4-isothiazolin-3-one	1.15	N/A	65	Plastic
South Plant 861-CT-05	ChemCal 1447	Biocide	1310-73-2	Sodium Hydroxide	0.1-1.0	106908	165	Plastic
West Plant 790-CT-01	NALCO 356.36	Corrosion Inhibitor	110-91-8	Morpholine	5.0-10.0	173790	105	Stainless Steel
			108-91-8	Cyclohexylamine	10.0-30.0			
West Plant 790-CT-02	NALCO 8735.38	pH Stabilizer	1310-73-2	Sodium Hydroxide	30.0-60.0	909408	110	Plastic
			1310-58-3	Potassium Hydroxide	10.0-30.0			
West Plant 790-CT-03	NALCO 1720.11	Oxygen Scavenger	1310-73-2	Sodium Hydroxide	30.0-60.0	910665	100	Plastic
			1310-58-3	Potassium Hydroxide	10.0-30.0			
West Plant 790-CT-04	NALCO 22341.11	Boiler Water Internal Treatment	7758-29-4	Sodium Tripolyphosphate	5.0-10.0	910664	100	Plastic
			Proprietary	Anionic Polymer	1.0-5.0			
West Plant 790-CT-05	NALCO 3D Trasar 3DT128.91	Cooling Water Treatment	Proprietary	Substituted Aromatic Amine	1.0-5.0	910661	100	Plastic
			7664-38-2	Phosphoric Acid	5.0-10.0			
			7664-93-9	Sulfuric Acid	1.0-5.0			
West Plant 790-CT-06	1338.36	Chlorine Enhancer, Biodispersant	7647-15-6	Sodium Bromide	30.0-60.0	910666	100	Plastic
West Plant 790-CT-07	NALCO 73551.36	Deposit Penetrant	Proprietary	Polyalkylene Glycol	Non-Haz	910660	100	Plastic
West Plant 790-CT-08	Trac107 Plus.11	Closed System Treatment	Proprietary	Inorganic Salt (sodium tetraborate)	1.0-5.0	104974	75	Stainless Steel
			1310-73-2	Sodium Hydroxide	0.1-1.0			
West Plant 790-CT-09	Sulfuric Acid	Acid Tank	7664-93-9	Sulfuric Acid	93%	N/A	330	Plastic

Bulk Chemical Storage Tank Locations								
Texas State University- San Marcos								
Location	Product No.	Application		Chemical Composition	%	Tank Serial #	Container Size (gallons)	Tank Type
West Plant 790-CT-10	WRICO Sodium Hypochlorite	Wricochlor/ Bleach	7681-52-9	Sodium Hypochlorite	12.5	N/A	220	Plastic
			7647-14-5	Sodium Chloride	9.0-10.0			
			1310-73-2	Sodium Hydroxide	0.5-2.0			
West Plant 790-CT-12	NALCO 7408.36	Chlorine Scavenger	7631-90-5	Sodium bisulfate	30.0-60.0	909687	110	Plastic
Jackson Water Well 675-CT-01	NALCO 3D TRASAR 3DT186	Corrosion Inhibitor	7664-38-2	Phosphoric Acid	30-60%	171844	110	Stainless Steel
Student Rec Center 825-CT-01	NALCO 1:1 Hydrochloric Acid	Pool Treatment	7647-01-0	Hydrochloric Acid	10.0-30.0	N/A	15g drums (2 - 5)	Plastic
Aqua Sports 712-CT-01	NALCO 1:1 Hydrochloric Acid	Pool Treatment	7647-01-0	Hydrochloric Acid	10.0-30.0	N/A	15-gallon drum	Plastic
Jowers Boiler Room 930-CT-01	NalPrep 8349	Cooling Water Treatment	7632-00-0	Inorganic Salt (sodium nitrate) Acrylic Polymer	1.0-5.0	N/A	15-gal	Plastic
S/East Chill Plant 1004-CT-01	NALCO 3D Trasar 3DT128	Cooling Water Treatment	Proprietary	Substituted Aromatic Amine	1.0-5.0	910661	100	Plastic
			7664-38-2	Phosphoric Acid	5.0-10.0			
			7664-93-9	Sulfuric Acid	1.0-5.0			
S/East Chill Plant 1004-CT-02	NALCO 73551.36	Deposit Cleaner	Proprietary	Polyalkylene Glycol	Non-Haz	909647	100	Plastic
S/ East Chill Plant 1004-CT-03	NALCO ACTI-BROM 1338.36	Chlorine Enhancer, Biodispersant	7647-15-6	Sodium Bromide	30.0 - 60.0	912955	75	Stainless
S/ East Chill Plant 1004-CT-04	Sulfuric Acid	Acid Tank	7664-93-9	93% Sulfuric Acid	93	75265	330	Plastic
S/ East Chill Plant 1004-CT-05	Sodium Hypochlorite	Wricochlor	7681-52-9	Sodium Hypochlorite	12.5	N/A	220	Plastic
			7647-14-5	Sodium Chloride	9.0-10.0			
			1310-73-2	Sodium Hydroxide	0.5-2.0			
S/ East Chill Plant 1004-CT-06	Trac107 Plus 3.3	Closed Loop Treatment	1330-43-4	Sodium Tetraborate	1.0-5.0	910705	100	Plastic
			1310-73-4	Sodium Hydroxide	0.1-1.0			

Appendix C

	A	B	C	D	E
1					
2		**TXST Spill Kit Locations and Montly Inspection List**			
3	Zone Location	Building Location Name	LocNum	Specific Location	
4	1	Fam & Con Sciences Annex	756-A2-SK1	Corridor by Room #294A	
5	1	Harris Dining Hall	790-1-SK1	In front of room #106	
6	1	Harris Dining Hall	790-1-SK2	near TRAC 107.56	
7	1	Harris Dining Hall	790-1-SK3	Near NALCO 356.36	
8	1	Harris Dining Hall	790-1-SK4	Near boilder water treatment	
9	1	Supple Science	818-1-SK1	Near Soda Machines	
10	1	Supple Science	818-3-SK1	Inside Biology Supply Room #331A	
11	1	Supple Science	818-4-SK1	Corridor near room #404	
12	1	Roy F Mitte	845-1-SK1	In hallway near storage room #1229	
13	1	Roy F Mitte	845-1-SK2	Inside hallway near lab #1236	
14	1	Joann Cole Mitte Art	846-1-SK1	Hallway outside of Room #1124	
15	1	Joann Cole Mitte Art	846-2-SK1	By Room #2131	
16	1	Joann Cole Mitte Art	846-4-SK1	Room #4105 to left of door	
17	0	STAR One	942-1-SK1	In main hallway	
18	0	STAR One	942-1-SK2	In main hallway	
19	0	STAR One	942-1-SK3	In main hallway	
20	2	Central Plant	817-1-SK1	Near boiler treatment	
21	2	Central Plant	817-1-SK2	Near cooling tower treatment	
22	2	Central Plant	817-1-SK3	Outside of cooling tower treatment room	
23	2	Central Plant	817-1-SK4	Outside soda ash room	
24	2	Central Plant	817-1-SK5	Toats storage area	
25	2	Central Plant	817-1-SK6	Closed Loop Treatment Trac 107 Plus 33	
26	3	Centennial Hall	505-3-SK1	Corridor by Room #342	
27	3	Centennial Hall	505-4-SK1	Corridor outside Room #419	
28	3	East Chill Plant	733-1-SK1	South entrance to left of door	
29	3	East Chill Plant	733-1-SK2	Near TRAC 107.56	
30	3	Freeman Aquatic	768-1-SK1	Corridor between Room #136A and elevator	
31	3	Freeman Aquatic	768-2-SK1	Corridor by Room #262	
32	3	Chemistry	783-1-SK1	Corridor outside of Room #100	
33	3	Chemistry	783-2-SK1	Corridor outside of Room #219	
34	3	Chemistry	783-2-SK2	Room #249 Container Accumulation Area	
35	3	Chemistry	783-3-SK1	Corridor outside of Room #319	
36	3	Chemistry	783-G-SK1	Loading dock by cylinders	
37	3	South Chill Plant	861-1-SK1	Chiller plant near double door entrance	
38	4	Jowers Center	738-1-SK1	Boiler room	
39	4	S/ East Chill Plant	1004-1-SK1	Near Main Entrance	
40	1	DHRL	941-1-SK1	Loading Dock	
41	1	Student Rec Center	825-1-SK1	Just outside of chlorine and acid rooms	
42	1	Bobcat Village (Do Not Inspect)	9002-1-SK1	Baseball Field Shed	
43	1	West Campus (Do Not Inspect)	984-1-SK1	Soccer Field Shed	
44	1	Freeman Ranch (Do Not Inspect)	788-1-SK1	Main Shed	
45	2	Freeman Ranch (Do Not Inspect)	788-1-SK2	Fuel Station	
46	1	Texas State Golf Course (Do Not Inspect)	8028-1-SK1	Maintenance Shed	
47	1	Bobcat Baseball Field (Do Not Inspect)	923-1-SK1	Maintenance Shed	
48					
49					
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