Environmental Management System Plan



Prepared By:

Justin Elder

March 2013

Revision 1

Plan review 6-24-20

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EMS Blank Forms

Environmental Management Plan Form	Ι
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Attachments

Completed Environmental Aspects with Significant Environmental Aspects (SEAs)

Spill Prevention Countermeasure and Control (SPCC)*

Storm Water Pollution Prevention plan (SWPPP)*

Hazardous Waste Contingency plan

Hazardous Communication Plan (HazCom)

Hazardous Waste Management plan

Universal Waste Management plan

Used Oil plan

*<u>Note</u>

Plans are TEXT only all maps, PDFs, and checklist can be made available upon request in the Buildings and Grounds department.*

Review and Approval

Prepared By:

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Date: 10-26-20

Environmental Management Coordinator

Rich M Jourly Date: 10-22-20

Mike Townsley Director of Facilities Management

Date: 10/26/2020

Approved By:

Judy Rov Executive Vice President of Finance and Administration

Record of Revisions

Revision #	Description	Section(s)	Date of Revision
Rev. 0	Original	All	Mar-13
Rev.1	roles	2.1,	14-May
REV 2	Determination of how SEAs and goals	5.1,5.3	Apr-17

Environmental Policy

Indiana Tech commits to meet all environmental rules and regulations, and strives to lead by example in our sustainability efforts, while maintaining our Philosophy, Mission, Vision, and operational imperatives.

Indiana Tech will prevent pollution by striving to minimize waste generation and resource consumption.

Indiana Tech will establish and evaluate achievable goals to ensure continual improvement of its EMS.

W.Exy

Dr. Karl W. Einolf President, Indiana Tech

7/1/17

Our Philosophy

Indiana Tech recognizes and adheres to the following core values:

- **Respect**: Treating all stakeholders fairly and equitably
- **Commitment**: Affirming an unceasing dedication to educating the whole learner
- Honesty: Demonstrating truthful behavior in an open environment
- **Passion**: Possessing a burning desire to fulfill our purpose, mission, and vision
- Integrity: Behaving consistently with mission and core values

The university's core purpose is to provide career-focused, professional programs of higher education

Mission

Indiana Tech provides learners of all ages with career-focused professional education in the areas of business, computer studies, engineering, and other professional concentrations; prepares them for active participation in the complex, global society of the 21st century; and motivates them toward a life of significance and worth.

<u>Vision</u>

Indiana Tech is dedicated to preparing our students for professional and personal success in the real world. To that end, we are committed to the following:

- Striving for academic excellence and continuous improvement in all programs
- Strengthening and building upon Indiana Tech's commitment to relationshipbased education
- Attracting, developing, and retaining dedicated and excellent teachers, staff, and administrators who are committed to making a significant difference in the lives of our students and the community
- Integrating theory and practice through course content combined with realworld experience

- Expanding the scope of programs offered, thereby giving students more career options
- Giving each student the support and encouragement needed to stay in school to complete their education
- Emphasizing ethics and integrity in all that we do
- Fostering a life of balance among academics, social and cultural activities
- Increasing the geographic diversity of our student population
- Providing professional development and life-long learning
- Evaluating each decision by asking, "Does It Positively Impact Students?" (DIPIS)

Operational Imperatives

- Manage the university's finances in a fiscally responsible manner
- Maintain a consistent and well-planned budget process and review
- Sustain a pleasant work environment, one that fosters challenge and productivity
- Reach our goals through team relationships across all departments
- Strive to contribute to our local communities in a positive way
- Beautify the natural aesthetics of our campuses
- Ensure a drug-free and harassment-free workplace

Roles and Responsibilities

President	Dr Karl Einolf
Executive VP of Finance and Administration	Judy Roy
Director of Facilities	Mike Townsley
EMS Coordinator	Joe Myers
Sustainability Committee	Melissa Lavin Mark Hunsberger Julie Good Carrie Duke Bradley Shank Jennifer Ross Amy Shank Bonnie Wilkins
Deans of Colleges	Dave Aschliman Dotty Latuszek Jeffery Zimmerman Peter Alexander
Human Resources	Julie Hendricks
Security	Securitas
Business Office	Karen Spangler
Creative Services	Janet Schutte
Crisis Planning Committee	See Crisis Plan
Outside Entities	will be noted

I. Environmental policy

				RE	SPONSI	BLE P	OSITIC	DN			
EMS ROLES	PRESIDENT	VP FINANCE	DIRECTOR OF FACILITIES	EMS COORDINATOR	SUSTAINABILITY COMMITTEE	Deans of Colleges	Human Resources	SECURITY	DEPARTMENT HEADS	Creative Services	OUTSIDE ENTITIES
	FNV	IROM	FNTA	L POLI	CY						
1 Define Environmental Policy											
Communicate the Environmental Policy to all persons working for and on behalf of the organization											
Make the Environmental Policy available to the public											
Keep the Environmental Policy 4 up to date											

II. Environmental Aspects

					RESP	ONSI	BLE	POSIT	ION		
EMS ROLES	PRESIDENT	VP FINANCE	DIRECTOR OF FACILITIES	EMS COORDINATOR	SUSTAINABILITY COMMITTEE	Dean of colleges	Human Resources	SECURITY	Creative services	Crisis plan Committee	OUTSIDE ENTITIES
	тт	Zerrin		tal As	noata						
Identify environmental aspects and	11. 1		omen	ltal As	pects						
2 impacts											
Document the identified											
3 environmental aspects and impacts											
Keep the list of environmental											
4 aspects and impacts											
Determine the environmental											
aspects that can have a significant											
impact on the environment (i.e.											
5 significant environmental aspects)											
Keep the list of significant											
6 environmental aspects up to date											

III. Legal and Other Requirements

	III. Legal and Other Requirements e to ents ents r										
EMS ROLES	PRESIDENT	VP FINANCE	DIRECTOR OF FACILITIES	EMS COORDINATOR	SUSTAINABILITY COMMITTEE	CHEMISTRY DEPT. HEAD	CUSTODIAL MANAGER	SECURITY	DEPARTMENT HEADS	WELLNESS CENTER (ONE)	OUTSIDE ENTITIES
	gal an	d Otho	r Poqu	iromo	ntc						
Establish and maintain a procedure to	gai ani		гкеци	ireme							
1 identify legal and other requirements											
2 Identify legal and other requirements											
Document the identified legal and											
other requirements and keep the											
3 information up to date											
Determine how the legal and other											
requirements apply to the											
5 environmental aspects											
Ensure the legal and other											
requirements are considered when											
establishing, implementing and											
6 maintaining the EMS											

IV. Objectives, Targets and Programs

				RES	PONS	SIBLE	POSI	TION	J		
EMS ROLES		VP FINANCE	DIRECTOR OF FACILITIES	EMS COORDINATOR	SUSTAINABILITY COMMITTEE	CHEMISTRY DEPT. HEAD	CUSTODIAL MANAGER	SECURITY	DEPARTMENT HEADS	WELLNESS CENTER (ONE)	OUTSIDE ENTITIES
IV. Objectives, Target	s and	Prog	rams	5							
Establish and maintain a procedure to identify and											
document environmental objectives, targets and											
1 programs											
Identify objectives and targets for top management											
2 approval											
Document the objectives and targets approved by											
3 top management											
Develop and document a program for achieving the											
4 objective and target											

V. Resources, Roles Responsibility and Authority

				R	ESPO	ONS	IBLE	E PO	SITI	ON		
	EMS ROLES	PRESIDENT	VP FINANCE	DIRECTOR OF FACILITIES	EMS COORDINATOR	SUSTAINABILITY COMMITTEE	CHEMISTRY DEPT. HEAD	CUSTODIAL MANAGER	SECURITY	DEPARTMENT HEADS	WELLNESS CENTER (ONE)	OUTSIDE ENTITIES
	V Deserves Delse Deserves		. 0 . 4									
	V. Resources, Roles, Responsi	יזווט	/ & A	utho	ority I	/ 	1					
	Establish and maintain a procedure to identify EMS											
1	resources, roles, responsibility and authority											
2	Identify EMS roles, responsibility and authority											
	Document the identified EMS roles and											
3	responsibilities and keep the information up to date											
4	Communicate EMS roles and responsibilities											
5	Appoint an EMS Representative(s)											

VI. Competency, Training and Awareness

Establish and maintain a procedure to identify 1 training needs 2 Identify and document training needs 3 Develop training programs, where required 4 Provide awareness training 5 Provide competency training	RESPONSIBLE POSITION													
EMS ROLES	PRESIDENT	VP FINANCE	DIRECTOR OF FACILITIES	EMS COORDINATOR	SUSTAINABILITY COMMITTEE	Dean of Colleges	Creative Services	SECURITY	Student Life	Human Resources	IDEM			
VI. Competency, Train	ing a	and A	war	enes	SS									
Establish and maintain a procedure to identify														
1 training needs														
2 Identify and document training needs														
3 Develop training programs, where required														
4 Provide awareness training														
5 Provide competency training														
6 Provide regulatory training														
7 Maintain training documentation														

VII. Communication

Establish and maintain a procedure for internal and external EMS communications Receive and document communications received from external parties Respond to communications received from external parties			RI	ESPC	ONSI	BLE F	POSI	ΓΙΟΝ	1		
VII. Communicati Establish and maintain a procedure for internal and externa EMS communications Receive and document communications received from		VP FINANCE		EMS COORDINATOR	SUSTAINABILITY COMMITTEE	Dean of Colleges	Huma Resources	SECURITY	Creative Services	Student life	OUTSIDE ENTITIES
VII. Communication	<u>ו</u>										
Establish and maintain a procedure for internal and external											
1 EMS communications											
Receive and document communications received from											
2 external parties											
3 Respond to communications received from external parties											
Document decision on whether to communicate externally											
4 about significant environmental aspects											

VII. Documentation

Establish and maintain a procedure for EMS	RESPONSIBLE POSITION													
EMS ROLES	PRESIDENT	VP FINANCE	DIRECTOR OF FACILITIES	EMS COORDINATOR	SUSTAINABILITY COMMITTEE	Dean Of colleges	Human Resources	SECURITY	Creative Services	Student Life	OUTSIDE ENTITIES			
VIII. Documentat	ion													
Establish and maintain a procedure for EMS														
1 documentation														
2 Develop EMS documents and update as necessary														

IX. Control of Documents

				RE	SPO	NSI	BLE F	POSI	ΓΙΟΝ	J		
	EMS ROLES				EMS COORDINATOR	SUSTAINABILITY COMMITTEE	Dean of Colleges	Human Resources	SECURITY	Creative Services	Student Life	OUTSIDE ENTITIES
	IX. Control of Docume Establish and maintain a procedure for controlling EMS	ents										
1	documents											
2	Approve the use of EMS documentation before usage, including updated documents											
3	Ensure documents are legible, changes are identified, and readily identifiable											
4	Provide access to relevant versions of documents at applicable points of use											
5	Prevent the use of obsolete EMS documents											

X. Operational Control

	RESPONSIBLE POSITION											
EMS ROLES	PRESIDENT	VP FINANCE	DIRECTOR OF FACILITIES	EMS COORDINATOR	SUSTAINABILITY COMMITTEE	Deans of Colleges	Human Resources	SECURITY	Student Life	Creative Services	OUTSIDE ENTITIES	
X. Operational Control												
Establish and maintain a procedure for operational controls												
Identify, develop and document operational control procedures (including												
operating criteria) for operations associated with significant environmental												
aspects where their absence could lead to deviation from the												
environmental policy and/or objectives & targets												
Identify, develop and document operational control procedures (including												
operating criteria) for operations associated with legal & other												
requirements where their absence could lead to deviation from the												
environmental policy and/or objectives & targets												
Communicate relevant operational procedures to staff												
Communicate relevant operational control procedures to suppliers,												
including contractors												

XI. Emergency Preparedness and Response

	RESPONSIBLE POSITION											
EMS ROLES		VP FINANCE	DIRECTOR OF FACILITIES	EMS COORDINATOR	Dean of Colleges	Human Resources	Creative Services	SECURITY	Student Life	Crisis Plannining committee	OUTSIDE ENTITIES	
XI. Emergency Preparedne	ess and	l Resp	onse			1						
Establish and maintain a procedure for identifying												
1 potential emergency situations and accidents												
Identify and document potential emergency situations												
2 and accidents												
Develop relevant emergency preparedness and												
3 response procedures												
Periodically review and where necessary update												
4 emergency preparedness and response procedures												
Periodically test emergency preparedness and												
5 response procedures where practicable												

XII. Monitoring and Measurement

	RESPONSIBLE POSITION											
EMS ROLES	PRESIDENT	VP FINANCE	DIRECTOR OF FACILITIES	EMS COORDINATOR	SUSTAINABILITY COMMITTEE	Deans of Colleges	Human Resources	SECURITY	Student Life	Creative Services	OUTSIDE ENTITIES	
XII. Monitoring and Measurem	ent	1	-									
Establish and maintain a procedure for monitoring and measuring key												
characteristics of operations that can have a significant environmental												
impact and monitoring performance of operational controls and												
1 objectives & targets												
Identify and document key characteristics for operations that can have 2 a significant environmental impact												
Develop methods for monitoring and measuring key characteristics												
and monitoring performance of operational controls and objectives &												
3 targets												
Identify equipment that will be used and any required calibration												
4 methods												
5 Take measurements and document results												
7 Communicate results to affected staff												

XIII. Evaluation of Compliance

EMS ROLES EMS ROLES ULL Evaluation of Compliance Establish and maintain a procedure for evaluating compliance with applicable legal and other requirements Conduct periodic evaluations and document results Conduct periodic evaluations and document results Communicate results to affected staff		RESPONSIBLE POSITION										
Establish and maintain a procedure for evaluating compliance with applicable legal and other requirements Image: Conduct periodic evaluations and document results	EMS ROLES	PRESIDENT	VP FINANCE	OF	EMS COORDINATOR		Dean of Colleges	Human Resources	SECURITY	Student Life	Creative Services	OUTSIDE ENTITIES
Establish and maintain a procedure for evaluating compliance with applicable legal and other requirements Image: Conduct periodic evaluations and document results Conduct periodic evaluations and document results Image: Conduct periodic evaluations and document results	XIII Evaluation of Cor	nnlia	nce									
Conduct periodic evaluations and document results	Establish and maintain a procedure for evaluating											
Communicate results to affected staff												
	Communicate results to affected staff											

	RESPONSIBLE POSITION											
EMS ROLES	PRESIDENT	VP FINANCE	DIRECTOR OF FACILITIES	EMS COORDINATOR	SUSTAINABILITY COMMITTEE	Deans of Colleges	Human Resources	SECURITY	Creative Services	Student Life	OUTSIDE ENTITIES	
XIV. Non-Conformity, Corrective Actio	0.0	Irouo	ntiv	<u> </u>	tion							
Establish and maintain a procedure for identifying EMS		leve										
non-conformances and taking corrective & preventive												
1 actions												
Determine corrective actions required to mitigate												
2 environmental impact												
3 Determine root cause of the non-conformance												
4 Determine the preventive action												
Determine the effectiveness of the corrective &												
5 preventive actions												
6 Document the results of the non-conformance												

XIV. Non-Conformity, Corrective Action & Preventive Plan

XV. Control of Records

	RESPONSIBLE POSITION										
EMS ROLES	PRESIDENT	VP FINANCE	DIRECTOR OF FACILITIES	EMS COORDINATOR	SUSTAINABILITY COMMITTEE	Deans of Colleges	Human Resources	SECURITY	Student Life	Business Office	OUTSIDE ENTITIES
XV. Control of Reco	rds										
1 Establish and maintain a procedure for maintaining EMS records											
Identify the EMS records that will be maintained including their											
2 retention time and disposal method											
3 Maintain the EMS Records per the requirements of the procedure	e										

XVI. Internal Audits

	RESPONSIBLE POSITION										
EMS ROLES			DIRECTOR OF FACILITIES	EMS COORDINATOR	SUSTAINABILITY COMMITTEE	Deans of Colleges	Human Resources	SECURITY	Student Life	Creative Services	OUTSIDE ENTITIES
XVI. Internal Au	lits									r	
Establish and maintain a procedure for conducting planned											
1 internal EMS audits											
2 Determine the schedule for conducting EMS Internal audits											
3 Train or coordinate the training of internal EMS auditors											
4 Conduct and record the results of the Internal EMS audits											
5 Communicate results to affected staff											

Resource Conservation and Recovery Act (RCRA)

A. Hazardous Waste Management Program

- Maintain good records
- Complete any required reports to IDEM or the EPA
 - Annual manifest report if Small Quantity Generator status was reached any time during the year.
- Identify site waste streams
- Conduct waste stream assessments
- Maintain a formal list of waste streams
- Proper Employee Training
 - Training for all employees whom have any interaction with hazardous waste on the **Hazardous Waste Management Plan** and the **HAZCOM**
 - RCRA and DOT Training every year for anyone responsible for signing hazardous waste manifests
- Proper containment management
- Weekly inspections
- Do our best to remain Conditionally Exempt Small Quantity Generator (CESQG) and be prepared if we become Small Quantity Generator (SQG)

B. Used Oil

- Proper labeling and storage
- transported by a licensed transporter
- Proper training for all employees
 - Training annually for employees whom have interaction with oil on the Used Oil Plan
- maintain proper records

Resource Conservation and Recovery Act (RCRA)

(continued)

C. Universal Wastes

- Maintain Proper accumulation time frames
- Proper labeling and storage
- Proper training for all employees
 - Annual training for any employee who handles Universal Waste on the Universal waste management Plan
- Follow DOT Shipping Rules
- Maintain all records
 - Minimum of three years

D. Underground Storage Tanks (UST's)

- Have all been removed from campus
- Must maintain records of removal

CLEAN AIR ACT

A. Air Permits/registrations

- Follow Source Modification requirements
- Annual reports made no later than March1st
 - \circ Reports made with form provided with registration
- Updates
- Prior Approval

B. Refrigerant

- maintain records of technicians licenses that perform service on campus
- maintain records of any Freon added or removed from campus

Clean Water ACT

A. Spill Prevention Control and Countermeasures (SPCC)

- Plans and maps maintained and kept up to date
- Monthly and yearly inspections
- Proper training for all employees

B. Municipal Separate Storm Sewer Systems (MS4)

- Public education and outreach
- Public involvement
- Illicit discharge detection and elimination
- Construction site storm water run-off control
- Post construction storm water management
- Pollution prevention and good house keeping

Safe Drinking Water Act

A. Publicly Owned Treatment Works (POTW)

• Follow all discharge rules

Federal Insecticide, Fungicide, and Rodenticide, Act

(FIFRA)

A. Pest Control and Grounds Contractors

- Records of what was applied and when
- Records of all contractors licenses that apply any chemicals on campus
- Contractors follow Storm Water Prevention Plan (SWPP)

The Emergency Planning and Community Right-to-Know Act (EPCRA)

A. IDEM

- Report chemicals over threshold limits

 Hydraulic Fluid in Elevators is currently over
 Ice melt is close to exceeding
- Report found on States website

B. Local emergency planning committee (LEPC) and Local Fire Dept.

- Report chemicals over threshold limits

 Hydraulic Fluid in Elevators is currently over
 Ice melt is close to exceeding
- Report found on EPA's website Tier II copy Fire Dept.

Comprehensive Environmental Response, Compensation, and Liability Act

(CERCLA)

A. Spills

- Practice Good House Keeping
 - Follow plans set forth in **Storm water Pollution Prevention** and **Spill Prevention Control and Countermeasure**
- Report and Record Spills
 - Follow procedures set forth in **Spill Prevention Control and Countermeasure**

B. Wastes

- Use only reputable waste companies
- Retain paper work of companies and do background checks through EPA website
- Retain good records of waste records, dates and amounts

Toxic Substance Control Act (TSCA)

A. B&G, Contractors, Chemistry dept. and other labs

- Proper training for all employees
- Chemical inventories completed annually
- Proper procedures for individual chemicals and all campus plans and policies followed
- Always purchase the safest least toxic chemical if there is a proven alternative

Peer Audit Program

A. Agreement with IDEM and EPA

- Write a EMS program and have it approved at the highest level
- Annual self-audits with proper procedures taken at end of audit
- Maintain compliance with all Local, State, and Federal agencies
- Prevent Back Sliding
- Continuous Improvement

Compliance Calendar

Annual

- IDEM Annual manifest report when required
- Inventories
- Update Campus MSDS
- Audits
- Scan years receipts and invoices
- RCRA and DOT certificates
- SPCC inspection
- Training

Monthly

- Construction reports to City utilities
- SPCC inspection

Weekly

• Inspect waste collection area

Bi-Annual

• MS4 reports

<u>Goals</u>

The Goals of Indiana Tech's EMS is to;

- Stay compliant with all Federal, State, local, and municipal laws, rules and regulations.
- Prevent pollution, minimize waste, conserve natural resources
- Identify environmental aspects and impacts
- Through the Significant Environmental Assessment (SEA) determine most critical aspect and impact
- Continual improvement

Indiana Techs Program will be a continual cycle of planning, implementing, improving processes, and actions are followed to achieve these goals.



Environmental Aspects

Identification and prioritization of significant environmental aspects (SEA) is a key part of the systematic planning involved in environmental programs designed to protect public health and the environment, prevent pollution, and conserve resources. The EMS team, which consists of members from all departments on campus charged with administrating important elements of the EMS, addresses such areas as the procurement of energy efficient, water conserving, and environmentally preferable products, the development of sustainable practices that conserve natural resources and the implementation of sustainable building designs and practices.

The EMS team identifies environmental aspects resulting from Indiana Tech's operations. Environmental aspects are considered activities or services that may produce a change to the environment, whether adverse or beneficial, wholly or partly, immediately or gradually. Consideration is given activities involving pollution prevention, waste generation and recycling, emissions and discharges to the environment, material and resource use, land and development use, energy and water conservation and transportation.

A list of environmental aspects is maintained that aids the EMS team in selecting significant issues to focus on each year. Attention is given to aspects that will provide the most value toward improving Indiana Tech's environmental performance, compliance effectiveness, and sustainability practices. Additional environmental aspects are considered in subsequent years using the routine EMS goal-setting approach.

The EMS team meetings include detailed discussion of Indiana Tech's routine activities and services, such as maintenance and operations, classroom labs, and construction. An extensive list of aspects /impacts is maintained at least once a year. Federal, state, local laws and regulations are reviewed for developing Indiana Tech's aspect/impact inventory list. The worksheet is revised based on input from team members.

Environmental Aspects

From this inventory worksheet, the EMS team determines which aspects are most significant. Significant aspects are evaluated with the following four criteria;

- Severity How much the environment could be affected by the environmental impact
- **Frequency** How often the activity occurs
- **Regulatory Control** Is the environmental impact covered by a local, state, or federal regulation
- Ability to Control How much control do we have over the impact, is it practical to try and change it.

Significant Environmental Aspects

With the use of the four listed criteria the following ranking and equation will be used to determine significant environmental aspects.

Severity (S)

0	Extremely low, no potential for harm
5	Low, little potential for harm, easily corrected
10	Moderate, somewhat harmful, accumulative affect, correctable
15	High, environmental damage, difficult to correct
20	Critical, remediation required, great effort to correct

Frequency (F)

0	2 Times a Year or Less (on average)
0	2 Times a real of Less (of average)

5	Monthly to 3 Times a Year (on average)
10	Daily to Monthly
15	Continuous to Daily
20	Continuous

Regulatory Control (RC

0	Not regulated
5	Not regulated, but potential for future regulation
10	Covered by a local, state or federal regulation
15	Monitoring or reporting associated with local, state, federal regulatory program
20	Permit or license required under local, state or federal regulatory program

Ability to Control

5 Financially irresponsible10 Excessive manpower or time required	0
10 Excessive manpower or time required	5
	10
15 Possibility to fund and or use volunteers with little supervision	15
20 Easily corrected or Financially beneficial	20

Significance = S + F + RC + AC

Objectives, Targets, and Program

Objectives, Targets and Programs are established based on the analysis of significant environmental aspects. The EMS team reviews our Philosophy, mission, vision, and operational imperatives to determine if the objectives are consistent with these goals. Through the use of appropriate metrics, progress is measured toward achieving objectives and targets. The metrics are an essential piece of information used in audits, and management reviews of the EMS. The metrics serve as the basis for action and continual improvement.

All significant aspects are reviewed at least annually by the EMS team. If necessary, updated objectives and targets are established for each significant aspect. The EMS team reviews all environment, safety and health goals to see if additional objectives need to be added.

The EMS Team reviews objectives for technological, financial, operational, and business parameters. They evaluate various options for meeting objectives, taking into consideration the university's resource and mission constraints, along with goals and time periods realistic to achieve the established targets.

The Objectives and targets are designed to consider site specific goals, plus contribute toward Indiana Tech's pollution prevention and energy- efficiency goals, provided such goals are technically and financially feasible.

For each significant environmental aspect selected, the EMS team develops an <u>Environmental Management Program</u> (EMP). Each EMP will have; designated objective/targets, each individual element shall have designated responsible person or group, elements will be given an estimated due date and actual completion date, management will sign an approval and review of EMP when completed.

Periodically during the year each EMP's progress will be reviewed by the EMS team. The EMS team will monitor the progress of each EMP, make suggestions identify potential problems, and provide additional support if necessary. EMP forms completed and maintained to document EMP activities.

Competence, Training and Awareness

In Indiana Tech's EMS approach, training is targeted and graded, commensurate with the EMS activity. Four types of training are planned as follows:

- 1. General EMS awareness
- 2. Comprehensive EMS awareness
- 3. EMS implementation
- 4. EMS auditor

The General EMS awareness training includes summary of EMS's and Indiana Tech's EMS approach and were to find a copy of the EMS. All employees of Indiana Tech will receive this training.

Comprehensive EMS awareness training will be given to all management, and the EMS team. This training will detail goals, objectives/ targets, legal responsibilities, and the plan-do-act-check functions of the EMS also apply to mitigating the environmental impacts of their activities.

EMS implementation training will, be required for the EMS coordinator, shall consist of all aspects the EMS all relative environmental plans and programs.

EMS auditor training will be given to all auditors and consist of comprehensive EMS awareness training as well as expectations of auditors.

Communication

EMS communication is performed a number of ways at Indiana Tech, such as posting information on our website, preparing articles for the campus paper, yearly report of progress made, and presentations to different groups at Indiana Tech.

Indiana Tech has a section of our web site dedicated to sustainability efforts, and an employee accessed Fore-site program. These sites will contain a copy of the EMS plan, environmental plans and general information on our sustainability efforts.

Indiana Tech has its own inner-campus newspaper the Warrior Legend, distributed monthly during the academic school year. Articles will be added as needed to share information about the program and its progress.

Every year a report will be made outlining progress made and any needed updates towards goals, objectives, and targets and the program. This report will be given to upper management and added to the EMS program as an amendment.

Presentations of the annual report will be made at least once a year during faculty senate and manager meetings. After these presentations any comments and suggestions will be documented.

Documentation

Indiana Tech's EMS shall document the following Elements:

- Environmental Policy
- Planning
 - Environmental Aspects
 - Legal / Other Requirements
 - Objectives and Targets
 - o Environmental Management Programs

• Implementation & Operation

- o Structure and Responsibilities
- o Training
- Communication
- EMS documentation
- Control of Documents
- o Operational Controls
- Emergency Preparedness & Response

• Checking and Corrective Action

- Monitoring & Measurement
- Evaluation of Compliance
- Nonconformity, Corrective Action, and preventive Action
- Control of Records
- Internal Audits
- Management Review

Much of the information is available on Indiana Tech's home page and our Foresite program.

Control of Documents

This Document the EMS Plan or Manual is prepared by the EMS Coordinator, reviewed by the EMS committee, and approved by upper management. The current version of the EMS manual is posted on Indiana Tech's homepage in the about us section under the sustainability tab. This Plan was modeled after the ISO14000 model, but is not nor is it meant to be ISO certified.

These documents are reviewed and updated as necessary, based on the judgment of the EMS coordinator, EMS committee and approval of management. The EMS coordinator retains hardcopy versions of critical documentation. Electronic versions of essential and relevant are maintained in a centralized network location that is regularly backed-up for protection. As noted through-out this plan many of the key documents are kept on Indiana Tech's homepage. Documents are tracked by date and revision number to maintain control.

Operational Control

Operational control may be evaluated for those operations that are associated with significant environmental aspects in order to determine if activities are conducted in a way that will reduce the adverse impacts associated with them. Documented procedures may be where there are difficulties in achieving or maintaining environmental objectives or targets, or where the absence of such procedures may lead to deviations from Indiana Tech's environmental policy.

Operations Associated with SEAs, Objective & Targets, Regulations & Environmental Policy	Operational Control Required (Yes/No)	Operational Control Description

Emergency Preparedness and Response

Indiana Tech has established the following documents for Emergency Preparedness and Response;

- Crisis Emergency Management Plan
- Spill Prevention Control and Countermeasure (SPCC) Plan
- Storm Water Pollution Prevention Plan (SWPPP)
- Hazardous Waste Contingency Plan
- Hazardous Communication (HAZCOM) Plan
- Hazardous Waste Management Plan
- Universal Waste Management Plan
- Used Oil Management Plan

These plans are found as amendments to the EMS Manual, also on the Indiana Tech Homepage, and the employee accessed Fore-site program.

Monitoring and Measure

Indiana Tech shall use the EMS Monitoring and Measuring Form, found in form section of manual, for all Monitoring and Measuring related to the EMS Manual. Completed Monitoring and Measure forms will be attached to the EMS Manual. The Following information will be documented through the Monitoring Measure form;

- Activity
- SEA (yes/no)
- Objective
- Target
- Operational Controls
- Monitoring and Measuring Method
- Equipment Required
- Reporting Method
- Frequency
- Responsibility

Evaluation of Compliance / Audits

Evaluation of Compliance for Indiana Tech's Manual is based on Maintaining the following, Continual Improvement, Legal and other requirements, Objectives and Targets, Environmental Management Plans, and Monitoring and Measure. These Elements are evaluated through annual internal audits, through Management and the EMS committee's review.

Internal Audits are performed annually by trained employees. Audits encompass all aspects of the EMS with an emphasis on Legal and Other Requirements. Auditors inspect all physical areas of campus such as mechanical, and chemistry. Auditors also review files, manual, and permits/registrations.

EMS Committee meets quarterly to review progress of objectives and targets. During these meetings status of Legal and Other Requirements will be discussed. If it is determined that there are deficiencies in meeting goals set in Objectives and Targets or maintaining compliance of our Legal and Other and Requirements assistance will be made available or responsibilities will be reassigned.

Management is updated annually with copies of Internal Audit, EMS committee reports and suggested updates to the EMS Manual. Management reviews documents to ensure all elements of EMS are being met while still withholding to Indiana Tech's Philosophy. Management accordingly makes any changes compulsory for continual improvement.

Nonconformity, Corrective Action and Preventive Action

Nonconformities that are discovered through inspections, audits, reviews and assessments are documented using the form Corrective Action and Preventive Action found in the EMS form section of the EMS Manual. The form documents the following criteria;

- Audited Date, Auditor, Auditee
- Description of Non-Conformance- Audit criteria
- Root Cause Analysis

:

- Corrective Action- Date of Implementation
- Preventive Action- Date of Implementation
- Verification- Date of Verification
- Auditor (signed) and Date

Corrective Action and Preventive Action forms completed or being completed becomes part of the EMS manual as attachments.

The following spread sheets are used to track record management related to the EMS.

RECORD TYPE	RETENTION TIME	LOCATION	FILE NAME	CONTROLLED BY	DISPOSAL METHOD
	I. HAZ	ARDOUS WASTE F	RECORDS		
1. Hazardous Waste Manifests	Forever plus a Day	Office of EMS Coordinator - File Cabinet and M Drive	Hazardous Waste Manifest - (Add Year)	EMS Coordinator	None
2. Weekly Hazardous Waste Inspection Logs	3 years	Office of EMS Coordinator - M Drive	A Environmental Folder	EMS Coordinator	Delete
3. Hazardous Waste Determination Forms	forever	EMS Coordinator - Waste determination binder and M Drive	A Environmental Folder	EMS Coordinator	None
4. Hazardous Waste Training Logs	3 years	Office of EMS Coordinator - M Drive	A Environmental Folder	EMS Coordinator	Delete
5. SAA Inventory Logs	3 years	Zollner Chemistry Storage Room	SAA inventory Log	Chemistry Professor	Recycle

RECORD TYPE	RETENTION TIME	LOCATION	FILE NAME	CONTROLLED BY	DISPOSAL METHOD
			II. SPCC Records		
1. Monthly Inspection Logs	5 years	M Drive	A Environmental Folder	EMS Coordinator	6th year - Delete
3. Annual Training	5 years	M Drive	A Environmental Folder	EMS Coordinator	6th year - Delete
4. Annual SPCC Plan Review & Update	5 years	M Drive and current in binder at facilities	A Environmental Folder	EMS Coordinator	6th year - Delete

RECORD TYPE	RETENTION TIME	LOCATION	FILE NAME	CONTROLLED BY	DISPOSAL METHOD
		III. Air Em	nissions Records		
4. Annual Air Emissions Inventory Update & registration Calculation	3 years	M Drive	A Environmental Folder	EMS Coordinator	Delete
IV. Licenses, Registration & Other Approvals					
1. Pesticide Applicator	for employees tenure @ college	M Drive	A Environmental Folder	EMS Coordinator	Delete
2. Refrigeration, CFC Repair	for length of employees tenure	M Drive	A Environmental Folder	EMS Coordinator	Delete
4. POTW approval Letter for Specific Wastewater Discharges	forever	M Drive	A Environmental Folder	EMS Coordinator	None
6. TSCA Letter from Power Company - Transformers	forever	M Drive	A Environmental Folder	EMS Coordinator	None

RECORD TYPE	RETENTION TIME	LOCATION	FILE NAME	CONTROLLED BY	DISPOSAL METHOD
		V. EMS Relate	ed Records		
1. List of Environmental Aspects & Impacts	None - e-copy w/revision date	M Drive	A Environmental Folder	EMS Coordinator	None
2. List of Significant Environmental Aspects	3 years	M Drive	A Environmental Folder	EMS Coordinator	Delete
3. list of Objectives & Targets	3 years	M Drive	A Environmental Folder	EMS Coordinator	Delete
4. Completed Environmental Management Programs	3 years	M Drive	A Environmental Folder	EMS Coordinator	Delete
5. EMS Internal audits	forever	M Drive	A Environmental Folder	EMS Coordinator	None
6. Regulatory Evaluation Reports	forever	M Drive	A Environmental Folder	EMS Coordinator	None

TIME	LOCATION	FILE NAME	CONTROLLED BY	DISPOSAL METHOD
	V. EMS Rel	ated Records (con	t.)	
forever	EMS Office		EMS, CFO, VP-OPS	None
None - e-copy w/revision date	EMS Office			Recycle/Delete
N	orever lone - e-copy	V. EMS Rel	V. EMS Related Records (con Drever EMS Office A Environmental Folder Folder Ione - e-copy EMS Office A Environmental	V. EMS Related Records (cont.) orever EMS Office A Environmental Folder EMS, CFO, VP-OPS lone - e-copy EMS Office A Environmental EMS, VP-OPS, EMS, VP-OPS,

Management Review

Senior Management shall at the minimum review the EMS annually. The EMS coordinator shall meet with management to discuss one or more of the following topics:

- Significant Environmental Aspects
- EMP progress
- Candidate projects for addressing significant environmental aspects
- Results of internal audits and reviews
- Recommendations for continual in all areas related to the EMS

During the management review meeting the EMS management review form, blank form is found in form section of manual, is completed and signed by management. Completed forms are then attached to manual. EMS management forms document the following:

- Date of review
- Name(s) / Position(s)
- Items to review / Associated documents
- Actions to be taken / Person(s) responsible
- Conclusions
- Signed / titled / dated

INDIANATECH EMS Forms

Environmental Management Plan

		OBJECT	IVES, TARG	SETS, AND	PROGRAMS	
INDIANA TECH	ISSUED	BY:	EFFECTIVE DATE:		REV:	PAGE 1 of 2
Objective and Target:			Overall Re	sponsibili	ty/Function:	
Objective:						
Target:						
Management Approval (sign):	Env. Resp. A	pproval	(sign):	Date:		
Management Program	1					
Program Element/Item	Respons	sible	Due	Date	Actua	l Date

Environmental Management Plan

				OBJEC	TIVES, TAR	GETS, AND	PROGRAMS		
INDIA	ANA T	ECH	ISSUE	ED BY:	EFFECTI	/E DATE:	REV:	PAGE of 2	2
5									
6									
7									
									1
Tracl	king and	Close	Out	Intermedi	ate Reviev	w Require	d Yes	No	
Intermediat	e Review (date, sign)			Intermedi	ate Reviev	v (date, sign)		
Close out by	Managem	ent Review	w (date, sig	gn):	1				
	_								

Monitoring and Measuring form

ΑCTIVITY	SEA (Y/ N)	OBJECTIVE	TARGET	OPERATIONAL CONTROLS	MONITORING & MEASURING METHOD	EQUIPMENT REQUIRED	REPORTING METHOD	FREQUENCY	RESPONSIBILITY

Corrective Action Prevention Action Form

A. Audited -	
Audit Date:	Auditor(s):
Auditee(s):	
B. Description of Non-Conformance	C. Root Cause Analysis:
Audit Criteria:	
D. Corrective Action:	
Data of Implementation.	
Date of Implementation:	
E. Preventive Action:	
Date of Implementation:	
F. Verification:	
Date of Verification:	
Auditor (signed)	Date:

Management Review Form

EMS Management Review Record					
Date of Review Meeting:					
Name:	Position:				
_					
Items to Review	Associated Document(s)				
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

Management Review Form

Actions to be Taken:	Person(s) Responsibole
1	
2	
3	
4	
5	
Conclusions:	
Signed:	Signed:
Title:	Title:
Date:	Date:

Hazardous Waste Determination Form

Hazardous Waste Determination Form #:

A. WASTE DESCRIPTION:	
Generation Process:	
Generation Location:	Total Quantity and/or Estimated Generation Rate:

B. WASTE PROPERTIES, CHARACTERISTICS, and CONSTITUENTS:								
Physical State: Solid Solid w/freestanding or absorbed liquid Liquid (If liquid, indicate if the liquid is: Single-Layer Multi-Layer Gas Characteristics: PCB Content:				pH: N/A Flashpoi	int:	≤ 2 > 2 but < 12.5 ≥ 12.5 < 140 °F > 140°F but < 200 °F > 200 °F		
Characteristics:	PCB C	ontent:		Meta	I Content:			
 Corrosive Ignitable Reactive Radioactive Toxic None 			Ars	timony*	· ·	 Nicke Seler Silver Thalli 	nium r 🗌 None	
Composition (list all Constitue			iongo);		Constituent:		Volume % (rongo)	
	επ.	Volume % (r	angej:				Volume % (range):	

REMARKS (Attach all applicable documentation describing the waste (e.g. process knowledge statement, MSDS, sample analysis, etc.):

FINAL DETERMINATION:			
Hazardous Non-hazardou	s 🔲 Medical Waste 🗌 Universa	al Waste 🗌 Used Oil 🗌 F	Prohibited by POTW
COMPLETED BY:	DEPARTMENT:	CONTACT No.: DA	ATE:

Indiana Tech's Environmental Aspect with SEAs 2013 Dorms

Environmental Aspect Description	Environmental Aspect Category	Environmental Impact Category	Operational Condition	Severity	Freques	Regulatory	Ability to Control	tot.
Use of electricity to operate lights, appliances, computers, etc.	Energy Utilization	Depletion of Energy Resources	Normal	0	20	0	20	40
Use of natural gas in the boiler and dryers	Energy Utilization	Depletion of Energy Resources	Normal	5	15	0	5	25
Air emissions from the boiler and dryers	Air Emissions	Air Quality Reduction	Normal	5	15	15	5	40
Water used in bathrooms, kitchens and washing machines	Natural Resource Utilization - Water	Depletion of Energy Resources	Normal	0	20	10	15	45
Water used in janitorial operations	Natural Resource Utilization - Water	Depletion of Energy Resources	Normal	0	20	10	0	30
Use of household cleaning chemicals, paint, computer printing supplies and paper products	Raw Material Utilization	Depletion of Raw Materials	Normal	0	15	10	0	25
Use of furniture, appliances, rugs	Raw Material Utilization	Depletion of Raw Materials	Normal	0	5	0	0	5
Generation of general trash, air filters, toner cartridges	Solid Waste Generation	Land Contamination	Normal	5	20	5	15	45

Indiana Tech Environmental Aspects with SEAs 2013 Dorms Continued

Environmental Aspect Description	Environmental Aspect Category	Environmental Impact Category	Operational Condition	Selverit	Frequence	Regulatory Control	Ability to Control	total total
Generation of general trash, air filters, toner cartridges	Solid Waste Generation	Land Contamination	Normal	5	20	5	15	45
Generation of Renovation materials – concrete, sheetrock, roofing materials, etc.	Solid Waste Generation	Land Contamination	Normal	0	10	5	5	20
Water Discharges – bathrooms, washing machines, kitchen sinks & slop sinks in janitorial closets	Water Discharges - POTW	Water Contamination	Normal	0	20	10	15	45
Hydraulic Fluid use- in elevators	Raw Material Utilization	Depletion of Raw Materials	Normal	5	5	15	5	30

Indiana Tech's Environmental Aspect with SEAs

Environmental Aspect Decription	Environmental Aspect Category	Environmental Impact Category	Operational Condition	Severito	Frequence	Regulatory Come	Ability to Conce	Total
Use of electricity to operate lights, appliances, computers, etc.	Energy Utilization	Depletion of Energy Resources	Normal	10	20	0	15	45
Use of natural gas in the boiler and dryers	Energy Utilization	Depletion of Energy Resources	Normal	10	15	5	0	30
Air emissions from the boiler and dryers	Air Emissions	Air Quality Reduction	Normal	5	15	15	5	40
Water used in bathrooms, kitchens and washing machines	Natural Resource Utilization - Water	Depletion of Energy Resources	Normal	15	15	10	15	55
Water used in janitorial operations	Natural Resource Utilization - Water	Depletion of Energy Resources	Normal	0	20	10	0	30
computer printing supplies and paper products	Raw Material Utilization	Depletion of Raw Materials	Normal	10	15	10	15	50
Use of household cleaning chemicals, paint,	Raw Material Utilization	Depletion of Raw Materials	Normal	0	15	10	0	25

Indiana Tech Environmental Aspects with SEAs <u>9/2014 Classroom Buildings Continued</u>

Environmental Aspect Decription	Environmental Aspect Category	Environmental Impact Category	Operational Condition	Sevenit	Freques	Regulatory Concerning	Ability to	⁻ untrol Total
Generation of Renovation materials – concrete, sheetrock, roofing materials, etc.	Solid Waste Generation	Land Contamination	Normal	5	5	5	0	15
Water Discharges – bathrooms, washing machines, kitchen sinks & slop sinks in janitorial closets	Water Discharges - POTW	Water Contamination	Normal	5	20	10	0	35
Hydraulic Fluid use- in elevators	Raw Material Utilization	Depletion of Raw Materials	Normal	5	5	15	5	30
Use of furniture, appliances, rugs	Raw Material Utilization	Depletion of Raw Materials	Normal	5	0	0	10	15
Generation of general trash, air filters, toner cartridges	Solid Waste Generation	Land Contamination	Normal	10	20	5	10	45

Indiana Tech's Environmental Aspect with SEAs 2013 Student Life

Environmental Aspect Decription	Environmental Aspect Category	Environmental Impact Category	Operational Condition	Severie	Frequence	Regulatory Come	Ability to	I otal
Use of electricity to operate lights, appliances, computers, etc.	Energy Utilization	Depletion of Energy Resources	Normal	0	20	0	20	40
Use of natural gas in the boiler and dryers	Energy Utilization	Depletion of Energy Resources	Normal	5	15	0	5	25
Air emissions from the boiler and dryers	Air Emissions	ir Quality Reducti	Normal	5	15	15	5	40
Water used in bathrooms, kitchens and washing machines	Natural Resource Utilization - Water	Depletion of Energy Resources	Normal	0	20	10	15	45
Water used in janitorial operations	Natural Resource Utilization - Water	Depletion of Energy Resources	Normal	0	20	10	0	30
Use of household cleaning chemicals, paint, computer printing supplies and paper products	Raw Material Utilization	Depletion of Raw Materials	Normal	0	15	10	0	25
Use of furniture, appliances, rugs	Raw Material Utilization	Depletion of Raw Materials	Normal	0	5	0	0	5

Indiana Tech Environmental Aspects with SEAs 2013 Student life Continued

Environmental Aspect Decription	Environmental Aspect Category	Environmental Impact Category	Operational Condition	Seven	Freque	Regulatory Com	Ability to Concert	Tour I local
Generation of general trash, air filters, toner cartridges	Solid Waste Generation	Land Contamination	Normal	5	20	5	15	45
Generation of Renovation materials – concrete, sheetrock, roofing materials, etc.	Solid Waste Generation	Land Contamination	Normal	0	10	5	5	20
Water Discharges – bathrooms, washing machines, kitchen sinks & slop sinks in janitorial closets	Water Discharges - POTW	Water Contamination	Normal	0	20	10	15	45
Hydraulic Fluid use- in elevators	Raw Material Utilization	Depletion of Raw Materials	Normal	5	5	15	5	30

Indiana Tech's Environmental Aspect with SEAs 2013 Athletics

Environmental Aspect Decription	Environmental Aspect Category	Environmental Impact Category	Operational Condition	Severis	Preque	Regulatory Const	Ability to	I otal
Use of electricity to operate lights, appliances, computers, etc.	Energy Utilization	Depletion of Energy Resources	Normal	0	20	0	20	40
Use of natural gas in the boiler and dryers	Energy Utilization	Depletion of Energy Resources	Normal	5	15	0	5	25
Air emissions from the boiler and dryers	Air Emissions	ir Quality Reductio	Normal	5	15	15	5	40
Water used in bathrooms, kitchens and washing machines	Natural Resource Utilization - Water	Depletion of Energy Resources	Normal	0	20	10	15	45
Water used in janitorial operations	Natural Resource Utilization - Water	Depletion of Energy Resources	Normal	0	20	10	0	30
Use of household cleaning chemicals, paint, computer printing supplies and paper products	Raw Material Utilization	Depletion of Raw Materials	Normal	0	15	10	0	25
Use of furniture, appliances, rugs	Raw Material Utilization	Depletion of Raw Materials	Normal	0	5	0	0	5

Indiana Tech Environmental Aspects with SEAs 2013 Athletics Continued

Environmental Aspect Decription	Environmental Aspect Category	Environmental Impact Category	Operational Condition	Seven	Frequence.	Regulatory Conc	Ability to Concernent	Total
Generation of general trash, air filters, toner cartridges	Solid Waste Generation	Land Contamination	Normal	5	20	5	15	45
Generation of Renovation materials – concrete, sheetrock, roofing materials, etc.	Solid Waste Generation	Land Contamination	Normal	0	10	5	5	20
Water Discharges – bathrooms, washing machines, kitchen sinks & slop sinks in janitorial closets	Water Discharges - POTW	Water Contamination	Normal	0	20	10	15	45
Hydraulic Fluid use- in elevators	Raw Material Utilization	Depletion of Raw Materials	Normal	5	5	15	5	30

Indiana Tech Environmental Aspects with SEAs 2013 Athletics Continued

INDIANATECH

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN

PREPARED FOR:

INDIANA INSTITUE OF TECHNOLOGY

1600 EAST WASHINGTON BOULEVARD

FORT WAYNE, INDIANA 46803

PREPARED BY:



7811 HONEYWELL DRIVE

WWW.EAESLLC.COM

Indiana Tech Environmental Aspects with SEAs 2013 Athletics Continued

EES PROJECT NO. 19-628-10

ORIGINAL DATE OF PLAN: MARCH 2010

DATE OF LAST PLAN AMENDMENT/PE CERTIFICATION: FEBRUARY 2020

DATE OF LAST PLAN REVIEW: FEBRUARY 2020

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- L 40 CFR 112 SPCC REGULATION (REGULATION ONLY)

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M 40 CFR 112 – SPCC REGULATION (FULL TEXT)

Section 1 APPLICABILITY

112.1(b) Except as provided in paragraph (d) of this section, this part applies to any owner or operator of a non-transportation-related onshore or offshore facility engaged in drilling, producing, gathering, storing, processing, refining, transferring, distributing, using, or consuming oil and oil products, which due to its location, could reasonably be expected to discharge oil in quantities that may be harmful, as described in part 110 of this chapter, into or upon the navigable waters of the United States or adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act) that has oil in:

- (1) Any aboveground container;
- (2) Any completely buried tank as defined in 112.2;
- (3) Any container that is used for standby storage, for seasonal storage, or for temporary storage, or not otherwise "permanently closed" as defined in 112.2;
- (4) Any "bunkered tank" or "partially buried tank" as defined in 112.2, or any container in a vault, each of which is considered an aboveground storage container for purposes of this part
- 112.1(d) Except as provided in paragraph (f) of this section, this part does not apply to:
- (1) The owner or operator of any facility, equipment, or operation that is not subject to the jurisdiction of the Environmental Protection Agency (EPA) under section 311(j)(1)(C) of the CWA, as follows:
 - (i) Any onshore or offshore facility, that due to its location, could not reasonably be expected to have a discharge as described in paragraph (b) of this section. This determination must be based solely upon consideration of the geographical and location aspects of the facility (such as proximity to navigable waters or adjoining shorelines, land contour, drainage, etc.) and must exclude consideration of manmade features such as dikes, equipment or other structures, which may serve to restrain, hinder, contain, or otherwise prevent a discharge as described in paragraph (b) of this section.
- (2) Any facility which, although otherwise subject to the jurisdiction of EPA, meets both of the following requirements:
 - (i) The completely buried storage capacity of the facility is 42,000 gallons or less of oil. For purposes of this exemption, the completely buried storage capacity of a facility excludes the capacity of a completely buried tank, as defined in 112.2, and connected underground piping, underground ancillary equipment, and containment systems, that is currently subject to all of the technical requirements of part 280 of this chapter or all of the technical

requirements of a State program approved under part 281 of this chapter. The completely buried storage capacity of a facility also excludes the capacity of a container that is "permanently closed," as defined in 112.2.

(ii) The aggregate aboveground storage capacity of the facility is 1,320 gallons or less of oil. For purposes of this exemption, only containers of oil with a capacity of 55 gallons or greater are counted. The aggregate aboveground storage capacity of a facility excludes the capacity of a container that is "permanently closed," as defined in 112.2.

The Indiana Institute of Technology (Indiana Tech) campus located at 1600 East Washington Boulevard in Fort Wayne, Indiana has an aggregate aboveground oil storage capacity greater than 1,320 gallons and could reasonably be expected to discharge oil in quantities that may be harmful, as described in 40 CFR 110, into or upon the navigable waters of the United States. Therefore, Indiana Tech is subject to regulation under 40 CFR 112. This Spill Prevention Control and Countermeasure (SPCC) Plan was developed to satisfy the requirements of 40 CFR 112. Section 2 CERTIFICATIONS, APPROVALS AND CORRECTIVE ACTION

A. PROFESSIONAL ENGINEER CERTIFICATION [112.3(d)]

112.3(d) A licensed Professional Engineer must review and certify a SPCC Plan for it to be effective to satisfy the requirements of 40 CFR 112.

By means of this certification I attest that:

- (i) I am familiar with the requirements of 40 CFR 112;
- My agent or I has visited and examined the Indiana Tech campus located at 1600 East Washington Boulevard in Fort Wayne, Indiana.
- (iii) The SPCC Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of 40 CFR 112;
- (iv) Procedures for required inspections and testing, see Appendix A, have been established; and
- (v) The Plan is adequate for the facility.

Licensed Professional Engineer: Joseph L. Hendrickson, P.E.

License Number: 10100212

State of License: Indiana

Seal:

Signature:

Date:

B. PLAN AVAILABILITY [112.3(e)]

112.3(e) If you are the owner or operator of a facility for which a Plan is required under this section, you must: (1) maintain a complete copy of the Plan at the facility if the facility is normally attended at least four hours per day, or at the nearest field office if the facility is not so attended, and (2) have the Plan available to the Regional Administrator for on-site review during normal working hours.

A complete copy of the SPCC Plan is maintained at the campus in Buildings and Grounds, which is located inside the Warrior Fieldhouse. The Plan is available for on-site review during normal working hours.

C. DISCHARGE RESPONSE CRITERIA AND REPORTING [112.4(a)]

112.4(a) Notwithstanding compliance with 112.3, whenever a facility has discharged more than 1,000 U.S. gallons of oil in a single discharge as described in 112.1(b), or discharged more than 42 U.S. gallons of oil in each of two discharges as described in 112.1(b), occurring within any twelve month period, submit the following to the Regional Administrator within 60 days from the time the facility becomes subject to this section:

- (1) Name of the facility;
- (2) Your Name;
- (3) Location of the facility;
- (4) Maximum storage or handling capacity of the facility and normal daily throughput;
- (5) Corrective action and countermeasures you have taken, including a description of equipment repairs and replacement;
- (6) An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;
- (7) The cause of such discharge as described in 112.1(b), including a failure analysis of the system or subsystem in which the failure occurred;
- (8) Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence; and
- (9) Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge.
- 112.4(b) Take no action under this section until it applies to your facility (November 10, 2010).

112.4(c) Send to the appropriate agency or agencies in charge of oil pollution control activities in the State in which the facility is located a complete copy of all information you provided to the Regional Administrator under paragraph (a) of this section.

There have been no incidents that involved the discharge or release of a reportable quantity of oil within the past three years.

All discharges or releases that occur will be documented on a Discharge Response Record. A blank copy of this form is provided in Appendix B. This form is to be changed only by the Discharge Prevention Coordinator. A discharge or discharges, as described in 40 CFR 110, of oil that exceed the limits described in 40 CFR 112.4(a), after November 10, 2010, will be reported to the Regional Administrator per 40 CFR 112.4, as described in the box above. The limits are as follows:

- More than 1,000 gallons of oil in a single discharge; or
- More than 42 gallons of oil in each of two discharges occurring within any twelve (12) month period.

A log of all discharge responses will be maintained in this section of the Plan. Copies of completed Discharge Response Records and reports to the Regional Administrator will be kept in a separate file, which is maintained by the Discharge Prevention Coordinator. The EMS Coordinator is the

Discharge Prevention Coordinator for Indiana Tech. The Director of Facilities assists the EMS Coordinator, and functions as an alternate Discharge Prevention Coordinator.

DISCHARGE RESPONSE LOG

Date	NRC Incident Report #	Material Discharged/ Released	Volume	Brief Description of Response Action

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D. COMPLIANCE INSPECTION PLAN REVIEW PAGE [112.5(b)]

112.5(b) Complete a review and evaluation of the SPCC Plan a least once every five years from the date the facility becomes subject to 40 CFR 112; or if your facility was in operation on or before August 16, 2002, five years from the date your last review was required under this part. 112.5 (c) Have a Professional Engineer certify any technical amendment to your Plan in accordance with 112.3 (d).

A review and evaluation of this SPCC Plan is conducted at least once every five years. As a result of this review and evaluation, Indiana Tech will amend this SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) the technology has been field-proven at the time of review and (2) will significantly reduce the likelihood of a discharge as described in 40 CFR 112.1 (b) from the facility. Any amendment will be implemented as soon as possible, but no later than six months following preparation of any amendment. Any technical amendment to the Plan will be certified by a Professional Engineer in accordance with 40 CFR 112.3 (d). All Professional Engineer Certifications will be retained in Section 2, Part A of this Plan.

Statement of Plan Review, Evaluation and Amendment

"I have completed review and evaluation of the SPCC Plan for Indiana Tech on "<u>Review Date</u>", and "<u>Will Amend the Plan"</u> (yes or no) as a result."

				P.E.	
	Will Amend			Certification	
Review Date	<u>the Plan</u>	Reviewer	Signature	<u>Required</u>	<u>Comments</u>
Feb 2020	Y	Jenifer Aselage		Y	
		-			

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E. MANAGEMENT APPROVAL [112.7]

112.7 The Plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan.

Indiana Tech is committed to the prevention of discharges of oil to navigable waters and the environment and maintains the highest standards for spill prevention control and countermeasures through regular review, updating and implementation of this SPCC Plan for the Fort Wayne, Indiana campus.

Authorized Campus Representative

Name:

Mike Townsley

Title:

Director of Facilities

Signature:

Date:

F. CORRECTIVE ACTIONS [112.7]

112.7 If the Plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, you must discuss these items in separate paragraphs, and must explain separately the details of installation and operational start-up.

Indiana Tech will complete the following corrective actions by the date listed next to the action. Indiana Tech shall inform the Licensed Professional Engineer certifying the Plan in writing when the corrective actions are completed.

Number	Corrective Action	Date
TBD		

G. FACILITY CONFORMANCE [112.7(a)(1)]

112.7(a)(1) Include a discussion of your facility's conformance with the requirements listed in this part (40 CFR 112).

Indiana Tech is in conformance with the requirements listed in 40 CFR 112, which became effective on August 16, 2002. A discussion of conformance is included throughout this SPCC Plan.

H. DEVIATIONS [112.7(a)(2)]

112.7(a)(2) Comply with all applicable requirements listed in this part. Your Plan may deviate from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and 40 CFR 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and 40 CFR 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan, following the procedures in 40 CFR 112.4(d) and (e).

In complying with all applicable requirements listed in 40 CFR 112, Indiana Tech's SPCC Plan deviated from the following requirements:

- 112.7(e) Formal inspections will be conducted on a yearly basis of shop built containers with a capacity greater than 55 gallons, excluding drums and totes. The containers are visually inspected monthly.
- 2. 112.8(c)(6) In lieu of non-destructive testing of single use 55-gallon (drums), totes and shop-built containers up to and equal to 30,000 gallons that are not in contact with the ground or protected from the ground by a barrier, Indiana Tech will conduct periodic visual inspections of all 55-gallon drums, totes and containers subject to this regulation. Containers that are shop-built and not in contact with the ground pose a minimal risk of failure. Secondary containment and monthly visual inspections will provide equivalent environmental protection.

Section 3 FACILITY OWNER AND OPERATOR

A. FACILITY OWNER, ADDRESS AND TELEPHONE

Indiana Tech

1600 East Washington Boulevard

Fort Wayne, Indiana 46803

(260) 422-5561

B. FACILITY OPERATOR, ADDRESS AND TELEPHONE

Indiana Tech

1600 East Washington Boulevard

Fort Wayne, Indiana 46803

(260) 422-5561

Section 4

FACILITY CONTACTS

<u>NAME</u>	<u>TITLE</u>	<u>HOME</u>	<u>OFFICE</u>	<u>CELL PHONE</u>
Mike Townsley	Director of Facilities	None	x2246	(260) 740-6643
Joe Myers	EMS Coordinator	None	x3421	(260) 701-6862
Tom Dague	Coordinator of Grounds	(260) 351-3947	x2444	(260) 515-3570
Rich Burns	Maintenance Supervisor	None	399-2879	(260) 452-6978

Section 5

FACILITY DESCRIPTION

A. FACILITY OPERATIONS

In this section describe your facility's day-to-day operations, including hours of operation, personnel, and operational history. In your description include a discussion of the modes of transportation used for receiving products and raw materials (e.g., pipeline, railcar, tanker truck).

Note: This background information is not required by 40 CFR 112. However, EPA recommends that facility background information be provided. (EPA Sample Spill Prevention, Control and Countermeasure (SPCC) Plan, 1999.)

Indiana Tech is located in Fort Wayne, Indiana at 1600 East Washington Boulevard. Indiana Tech operates under North American Industry Classification System (NAICS) Code 611310 (Colleges, Universities and Professional Schools). Founded in 1930, Indiana Tech is a private, independent, nondenominational university. Originally known as 'Indiana Technical College', it began as a school for engineering and science. The Fort Wayne campus covers an area of 42 acres, just east of downtown Fort Wayne. The campus normally operates 24-hours per day, 7 days per week. There are approximately 198 full and part time employees on staff, along with 130 adjunt staff and 24 contract employees for security and custodial services.

B. DRAINAGE PATHWAY AND DISTANCE TO NAVIGABLE WATERS [112.7(a)(3)]

112.7(a)(3) Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each container. The facility diagram must include completely buried tanks that are otherwise exempted from the requirements of this part under 112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes.

Note: This section should describe the facility's proximity to bays, rivers, streams (perennial or Intermittent), creeks, ditches, flood control channels, storm drains, and other waterways. Hydrological systems should be diagramed or described. The facility diagram must include all fixed (i.e. not mobile or portable) containers which store 55 gallons or more of oil and must include information marking the contents of those containers. If you store mobile containers in a certain area (i.e. drums), you must mark that area on the diagram. You may mark the contents of each container either on diagram of the facility, or on a separate log sheet if those contents change on a frequent basis.

The site drainage plans are provided in Appendix C. Site drainage plans are provided for the campus buildings that have containers or oil-filled operational equipment subject to this regulation.

The nearest body of navigable water is the Maumee River which is less than 1/4 of a mile from the campus.

A USGS topographical map of the area is provided in Appendix D.

C. FACILITY STORAGE [112.7(a)(3)(i)]

112.7(a)(3)(i) You must also address in your Plan the type of oil in each container and its storage capacity.

Note: In this section describe the storage capacity and oil product in each container at your facility including oil products stored in above ground storage tanks (ASTs), underground storage tanks (USTs) ⁽¹⁾, oil-filled electrical equipment (e.g., circuit breakers, transformers), spill tanks, oil/water separators ⁽²⁾, vapor recovery units portable tanks, drum storage, and trucks which hold oil product and are parked on site.

- (1) Not included in the total storage capacity if it meets 112.1(d)(4), but must be marked on the facility diagram. (112.1(d)(4) Any completely buried storage tank, as defined in 112.2, and connected underground piping, underground ancillary equipment, and containment systems, at any facility, that is subject to all of the technical requirements of part 280 of this chapter or a State program approved under part 281 of this chapter, except that such a tank must be marked on the facility diagram as provided in 112.7(a)(3), if the facility is otherwise subject to this part.)
- (2) Not included in the total storage capacity if it meets 112.1(d)(6). (112.1(d)(6) Any facility or part thereof used exclusively for wastewater treatment and not used to satisfy any requirement of this part. The production, recovery, or recycling of oil is not wastewater treatment for purposes of this paragraph.)

ID / Drawing No.	Container Description	Capacity (gallons)	Contents
	Oil-Filled Operatio	onal Equipment	
1 / SPCC-3	Cunningham Elevator Unit	97	Hydraulic Oil
2 / SPCC-14	Zollner Elevator Unit	150	Hydraulic Oil
3 / SPCC-9	Pierson Elevator Unit 1	190	Hydraulic Oil
4 / SPCC-9	Pierson Elevator Unit 2	190	Hydraulic Oil
5 / SPCC-2	5 / SPCC-2 Andorfer Elevator Unit 1		Hydraulic Oil
6 / SPCC-2	Andorfer Elevator Unit 2	150	Hydraulic Oil
7 /SPCC-4	Evans Kimmell Elevator Unit	140	Hydraulic Oil
8 / SPCC-8	Oropeza Elevator Unit	100	Hydraulic Oil
9 / SPCC-13	Yergens-Rogers Elevator Unit	95	Hydraulic Oil
10 / SPCC-11	10 / SPCC-11 Wilfred Uytengsu, Sr. Center Elevator Unit		Hydraulic Oil
11 / SPCC-1	Abbott Elevator Unit	115	Hydraulic Oil

12 / SPCC-2	Andorfer Grease Trap	458 gallons of grease (1000 gal liquid capacity)	Grease
14 / SPCC-7	Keene Unit 1	100	Hydraulic Oil
15 / SPCC-7	Keene Unit 2	140	Hydraulic Oil
16 / SPCC -12	Warrior Athletic Center Unit	100	Hydraulic Oil
17 / SPCC-14	Zollner Building Generator	350	Diesel
18 / SPCC-6	Kalbfleisch Hall Unit	75	Hydraulic Oil
	Contai	ners	
13 / SPCC-15	Donald Ross Used Oil Drum	55	Used Oil
19, 20, 21 / SPCC-10	Summit Hall Grease Separator	1,250 each	Grease
22 / SPCC-15	22 / SPCC-15 Donald Ross Diesel Fuel Tank		Diesel
23 / SPCC-15 Donald Ross Gasoline Fuel Tank		300	Gasoline
24 / SPCC-15	Donald Ross Used Oil Tank	300	Used Oil
TOTAL	STORAGE CAPACITY		7947

Section 6

COUNTERMEASURES PROVIDED

112.7(a)(3) You must also address in your Plan:

- (i) The type of oil in each container and its storage capacity; (Section 5)
- (ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.); (Section 8)
- (iii) Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge; (Section 8)
- (iv) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);
- (v) Methods of disposal of recovered materials in accordance with applicable legal requirements; and
- (vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge as described in 112.1(b).

112.7(a)(4) Unless you have submitted a response plan under 112.20, provide information and procedures in your Plan to enable a person reporting a discharge as described in 112.1(b) to relate information on the exact address or location and phone number of the facility; the date and time of the discharge, the type of material discharged; estimates of the total quantity discharged; estimates of the quantity discharged as described in 112.1(b); the source of the discharge; a description of all affected media; the cause of the discharge; any damages or injuries caused by the discharge; actions being used to stop, remove, and mitigate the effects of the discharge; whether an evacuation may be needed; and, the names of individuals and/or organizations who have also been contacted.

112.7(a)(5) Unless you have submitted a response plan under 112.20, organize portions of the Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate supporting material as appendices.

This section of the Plan has been organized to also meet the requirements under 40 CFR 112.7(a)(4) and (a)(5).

A. DISCHARGE CONTINGENCY PLAN

In the event that an oil or petroleum product discharge occurs, Indiana Tech personnel must respond in a safe and effective manner. The following sections outline the procedures to be followed and the specific responsibilities of those individuals involved in the discharge discovery, response and cleanup.

1. <u>Discharge Response Procedures</u>

The following procedures will be followed when a discharge is detected (not in any specific order):

- a. Evacuate and treat any injured personnel, if it can be done safely.
- b. Identify the type of material that has discharged.
- c. Determine the cause of the discharge.
- d. Determine what safety precautions are required based on Safety Data Sheets (SDSs) or other available safety and health information.
- e. Take measures to stop or minimize additional discharge and prevent further release (e.g., shut off valves, pumps, or upright drums), <u>if it can be done safely.</u>
- f. Evacuate area, if necessary, to upwind of the source.
- g. Alert the Discharge Prevention Coordinator or alternate, the designated person accountable for discharge prevention [112.7(f)(2)].
- h. Provide the following information to the Discharge Prevention Coordinator:
 - (1) Exact location of the emergency.

- (2) Type and description of the emergency.
- (3) Extent and nature of any personal injury.
- i. Minimize or contain migration of discharged material, <u>if it can be done safely.</u> See facility site drainage plan provided in Appendix C for location of nearest open sewer.
- j. Minimize contamination of discharged material, if it can be done safely.
- k. Call for local emergency assistance as required (fire, police, hazardous materials, utilities, etc.).
- 1. Notification of the release to appropriate regulatory agencies is to be done in accordance with the reporting requirements summarized in Appendix E and only by the Discharge Prevention Coordinator or under his direction.
- 2. <u>Responsibilities of General Campus Personnel</u>
 - a. Campus personnel will be responsible for knowing what materials are used in their departments and understanding what safety procedures should be followed when using these materials.
 - b. Campus personnel will immediately contact the Discharge Prevention Coordinator or alternate in the event they discover a discharge. Campus personnel will evacuate the discharge area and will not interfere with activities of the discharge cleanup.
- 3. <u>Responsibilities of Discharge Prevention Coordinator</u>

- a. The Discharge Prevention Coordinator or alternate will be responsible for developing the discharge prevention and response procedures and ensuring that appropriate personnel are properly trained on the procedures.
- b. In the event of a discharge, the Discharge Prevention Coordinator shall be responsible for the following:
 - (1) Assess the discharge situation. In performing this assessment, the following should be determined:
 - (a) The date and time of the discharge.
 - (b) Type of material discharged.
 - (c) Estimates of the total quantity discharged.
 - (d) Estimates of the total quantity discharged as described in 112.1(b).
 - (e) The source of the discharge.
 - (f) A description of all affected media.
 - (g) The cause of the discharge.
 - (h) Any damages or injuries caused by the discharge.
 - (i) Actions being used to stop, remove and mitigate the effects of the discharge.
 - (j) Whether an evacuation may be needed.
 - (2) Evacuate the area if necessary.
 - (3) Implement the Discharge Response Procedures (Section 6, Part A (1) of this Plan).

B. NOTIFICATION OF THE DISCHARGE PREVENTION COORDINATOR

- 1. In the event of a discharge, the Discharge Prevention Coordinator shall be notified.
- 2. If the Discharge Prevention Coordinator cannot be reached, the alternate shall be notified. A list of Emergency Contacts is provided in Appendix F and in the front of the Plan.

C. REPORTABLE RELEASE DETERMINATION

- 1. The Discharge Prevention Coordinator is responsible for determining if a "reportable release" has occurred. To determine if a "reportable quantity" of material was released, follow the reporting requirements summarized in Appendix E.
- 2. There are federal, state and local requirements for responding to oil and petroleum product releases. These requirements are generally described in the following paragraphs. A detailed description of the requirements is located in Appendix E.
 - a. <u>Federal Requirements</u> If a release of oil or petroleum occurs to navigable waters, a report must be made under Section 110 of the Clean Water Act. Notification must be made to the National Response Center (NRC) as soon as possible.
 - b. <u>State Requirements</u> Notification to the Indiana Department of Environmental Management (IDEM) - Emergency Response Section must be made if a reportable release of a hazardous or extremely hazardous material occurs. The reporting thresholds include a release that causes a sheen, damages the waters of the state, exceeds 55 gallons and leaves the site or exceeds 1,000 gallons to soil.
 - c. <u>Local Requirements</u> Notification should be made to the City of Fort Wayne WPCP if the release may impact the sewer system. The Allen County Emergency Management Agency (LEPC) should be notified if a reportable quantity of oil has been released.

D. NOTIFICATION OF GOVERNMENT AGENCIES

Reporting to any agency should only be done by the Discharge Prevention Coordinator.
 A list of Emergency Contacts is provided in Appendix F and in the front of the Plan.

E. DISCHARGE CONTROL EQUIPMENT

 Discharge control equipment is available to respond to a discharge on the campus. A description of the equipment located at the facility is located in Appendix G. Locations of discharge control equipment within the campus are shown on the site drainage plans in Appendix C.

F. EMERGENCY INFORMATION

1. For emergency information regarding a discharged material, the Safety Data Sheet should be referenced. The Safety Data Sheets are kept on file in Buildings and Grounds and Insite (online).

G. DISCHARGE REVIEW AND FOLLOW-UP

- 1. All discharges will be evaluated following their occurrence to determine the cause and to take corrective action measures to prevent a reoccurrence. Corrective actions will be discussed in Section 2, Part F of this Plan. Corrective action measures may include the following:
 - a. Training (or retraining).
 - b. More frequent and thorough inspections.
 - c. Evaluation of existing equipment.

- d. Modifications or changes to this Plan, if appropriate.
- 2. The primary responsibility for conducting the review is the Discharge Prevention Coordinator's. Following each discharge, a log entry should be made to document the discharge occurrence on the Discharge Response Log in Section 2, Part C of this Plan. Copies of the completed Discharge Response Records will be maintained in a separate file at the facility for a minimum of three years.

Section 7

POTENTIAL DISCHARGE PREDICTIONS, VOLUMES, RATES & CONTROL [112.7(b)]

112.7(b) Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.

Note: Types of failures to consider include tank (aboveground and underground) overflow, rupture or leakage, pipe failure, wastewater treatment facility failure and discharges during transfer operations at the rack and/or dock or tank truck parking areas. The direction a discharge would flow can be predicted by drainage patterns, the location of storm or sewer drains, and secondary containment; these predictions should be performed or verified by a Professional Engineer. The rate of flow will depend upon the size and location of the failure and the equipment involved. The total quantity of oil that could be discharged from the facility should be based on a worst-case situation and the time it would take to respond to a discharge (e.g., shutting off a pump or closing a valve).

ID	Source	Type of Failure	Volume (gallons)	Rate (gallon/hr)	Direction of Flow per 112.1(d)(1)(i)	Containment (gallons)	Drawing No.				
	Oil-Filled Operational Equipment										
1	Cunningham Elevator Unit	rupture, leakage	97	97	Elevator equipment room floor	15	SPCC-3				
2	Zollner Elevator Unit	rupture, leakage	150	150	Elevator equipment room floor	15	SPCC-14				
3	Pierson Elevator Unit 1	rupture, leakage	190	190	Elevator equipment room floor	15	SPCC-9				
4	Pierson Elevator Unit 2	rupture, leakage	190	190	Elevator equipment room floor	15	SPCC-9				
5	Andorfer Elevator Unit 1	rupture, leakage	150	150	Elevator equipment room floor	15	SPCC-2				

6	Andorfer Elevator Unit 2	rupture, leakage	150	150	Elevator equipment room floor	15	SPCC-2		
7	Evans Kimmell Elevator Unit	rupture, leakage	140	140	Elevator equipment room floor	15	SPCC-4		
8	Oropeza Elevator Unit	rupture, leakage	100	100	Elevator equipment room floor	15	SPCC-8		
9	Yergens- Rogers Elevator Unit	rupture, leakage	95	95	Elevator equipment room floor	15	SPCC-13		
10	Wilfred Uytengsu, Sr. Center Elevator Unit	rupture, leakage	100	100	Elevator equipment room floor	15	SPCC-11		
11	Abbott Elevator Unit	rupture, leakage	115	115	Elevator equipment room floor	15	SPCC-1		
12	Andorfer Grease Trap	rupture, leakage	458	458	Sanitary sewer	-	SPCC-2		
14	Keene Unit 1	rupture, leakage	100	100	Elevator equipment room floor	15	SPCC-7		
15	Keene Unit 2	rupture, leakage	140	140	Elevator equipment room floor	15	SPCC-7		
16	Warrior Athletic Center Unit	rupture, leakage	100	100	Elevator equipment room floor	15	SPCC-12		
ID	Source	Type of Failure	Volume (gallons)	Rate (gallon/hr)	Direction of Flow	Containment (gallons)	Drawing No.		
	Oil-Filled Operational Equipment								
17	Zollner Building Generator	rupture, leakage	350	350	Elevator equipment room floor	15	SPCC-14		
18	Kalbfleisch Hall Unit	rupture, leakage	75	75	Elevator equipment room floor	15	SPCC-6		

	Containers							
13	Donald Ross Used Oil Drum	rupture, overfill, leakage	55	55	Drum skid, adjacent building floor	55	SPCC-15	
19, 20, 21	Grease Separator, Bistro	Overfill, leakage	1250	1250	Sanitary sewer	-	SPCC-10	
22	Donald Ross Diesel Fuel Tank	rupture, overfill, leakage	300	300	Within secondary containment	300	SPCC-15	
23	Donald Ross Gasoline Fuel Tank	rupture, overfill, leakage	300	300	Within secondary containment	300	SPCC-15	
24	Used Oil Tank	rupture, overfill, leakage	300	300	Within secondary containment	300	SPCC-15	

<u>Note</u>: Additional secondary containment provided by readily available absorbent material.

Section 8 PREVENTION MEASURES PROVIDED

GENERAL REQUIREMENTS

112.7(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in 112.1(b). The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. At a minimum, you must use one of the following prevention systems or its equivalent:

- (1) Onshore facilities:
 - (i) Dikes, berms or retaining walls sufficiently impervious to contain oil;
 - (ii) Curbing;
 - (iii) Culverting, gutters or other drainage systems;
 - (iv) Weirs, booms or other barriers;
 - (v) Spill diversion ponds;
 - (vi) Retention ponds; or
 - (vii) Sorbent materials.
- (2) Offshore facilities:
 - (i) Curbing or drip pans; or
 - (ii) Sumps and collection systems.

Secondary containment is currently provided for the elevator units by only the elevator equipment room floors. The used oil drum at the Donald Ross Maintenance Building is provided secondary containment by the drum skid and the building floor. The diesel generator at the Zollner building is self-contained. Additional secondary containment is provided by readily available absorbent material. Section 7 contains a list of oil-filled operations and containers subject to this regulation located at Indiana Tech. Section 2, Part F, contains a list and schedule of corrective actions recommended for Indiana Tech.

The site drainage plans are provided in Appendix C. Site drainage plans are provided for the campus buildings that have containers or oil-filled operational equipment subject to this regulation. As indicated in Section 5, Part B, the nearest body of navigable water is the Maumee River which is less than 1/4 of a mile from the campus. A USGS topographical map of the area is provided in Appendix D.

A. DEMONSTRATION OF PRACTICABILITY [112.7(d)]

112.7(d) If you determine that the installation of any of the structures or pieces of equipment listed in paragraphs (c) and (h)(1) of this section, and 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c) to prevent a discharge as described in 112.1(b) from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under 112.20, provide in your Plan the following:

An oil spill contingency plan following the provisions of part 109 of this chapter.
 A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

Indiana Tech has determined that use of secondary containment along with the use of readily available discharge control equipment to prevent discharged oil from reaching navigable water is practicable and effective. Therefore, this section is not applicable.

B. INSPECTIONS, TESTS AND RECORDS [112.7(e)]

112.7(e) Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor

or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

Note: Written inspection procedures (e.g., checklist) should be included in the SPCC Plan. Documentation of the inspections can be maintained in a separate location other than the SPCC Plan as long as their location is referenced as a part of the SPCC Plan for three years. All other records pertaining to SPCC (e.g., drainage discharges, container integrity testing, training records, etc.) must also be maintained for three years.

<u>Facility inspection procedures:</u> Formal visual inspections are conducted on a monthly basis of the oil-filled operational equipment and containers subject to this regulation. The results of these inspections are documented on a Facility Inspection Report and Checklist. Formal inspections are conducted on a yearly basis of shop-built containers with a capacity greater than 55 gallons. The results of these inspections are documented on a Container Inspection Report. Example copies of these forms can be found in Appendices H and I respectively.

<u>Length of time records kept:</u> All records associated with the implementation of this SPCC Plan, including but not limited to inspections, testing and training, are maintained for a minimum period of three years. Container integrity testing documentation will be maintained for the life of the container.

C. PERSONNEL TRAINING AND DISCHARGE PREVENTION PROCEDURES [112.7(f)]

(1) Personnel instructions:

112.7(f)(1) At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan.

Note: Describe discharge prevention and operation's training for new hires and refresher training for all oil handling personnel.

Training on the contents of the SPCC Plan is provided for all Indiana Tech employees whose job involves the handling or transfer of oil products. All new hires are trained on the contents of the SPCC Plan and facility discharge response procedures prior to being placed in a position involving

the handling or transfer of oil products. In addition, Indiana Tech has a specified number of employees who have completed 24-hour Emergency Response Training. Training records are maintained in separate files, maintained by the Discharge Prevention Coordinator.

(2) Designated person accountable for discharge prevention:

112.7(f)(2) Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.

The EMS Coordinator is the designated person accountable for discharge prevention at the Indiana Tech. The Director of Facilities assists the EMS Coordinator with this responsibility and functions as an alternate.

(3) Discharge prevention briefings:

112.7(f)(3) Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in 112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.

In addition to training, briefings on the procedures included in the SPCC Plan are held on an asneeded basis at least once a year. Records of these briefings are maintained in separate files, maintained by the Discharge Prevention Coordinator.

D. SITE SECURITY [112.7(g)]

(1) Fencing:

112.7(g)(1) Fully fence each facility handling, processing, or storing oil, and lock and/or guard entrance gates when the facility is not in production or is unattended.

The oil-filled operational equipment and used oil drum are located within locked buildings. Video cameras throughout the campus provide additional security. Contract security personnel are onsite 24 hours/day and monitor the security cameras and walk the campus for scheduled security inspections.

(2) Flow valves locked:

112.7(g)(2) Ensure that the master flow and drain valves and any other valves permitting direct outward flow of the container's contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or non-standby status.

There are no containers subject to this regulation located at Indiana Tech. Therefore, this section is not applicable.

(3) Starter controls locked:

112.7(g)(3) Lock the starter control on each oil pump in the "off" position and locate it at a site accessible only to authorized personnel when the pump is in a non-operating or non-standby status.

There are no oil transfer pumps located at Indiana Tech subject to this regulation. Therefore, this section is not applicable.

(4) Pipeline loading/unloading connections securely capped:

112.7(g)(4) Securely cap or blank-flange the loading/unloading connections of oil pipelines or facility piping when not in service or when in standby service for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining or by inert gas pressure.

There are no pipeline loading/unloading connections located at Indiana Tech subject to this regulation. Therefore, this section is not applicable.

(5) Lighting adequate to detect discharges:

112.7(g)(5) Provide facility lighting commensurate with the type and location of the facility that will assist in the:

(i) Discovery of discharges occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.); and
 (ii) Prevention of discharges occurring through acts of vandalism.

The entire campus has adequate lighting to allow for visual detection of discharges or releases at all times, and to minimize the potential for discharges occurring through acts of vandalism. Video cameras throughout the campus also provide additional security. Contract security personnel are onsite 24 hours/day and monitor the security cameras and walk the campus for scheduled security inspections.

E. FACILITY TANK CAR AND TRUCK LOADING/UNLOADING OPERATIONS [112.7(h)]

(1) Secondary containment for vehicles adequate:

112.7(h)(1) Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading and unloading areas. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.

Note: Describe the design and capacity of secondary containment for truck loading/unloading areas including transfer operations related to both aboveground containers and underground tanks.

The grease pits at Andorfer and Summit Hall are pumped out quarterly by an outside contractor. The driver and a trained Indiana Tech operator supervise the pumping process. The surrounding ground surface provides initial secondary containment. Additional secondary containment provided by readily available absorbent material.

(2) Warning or barrier system for vehicles:

112.7(h)(2) Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

There are no truck loading/unloading areas located at Indiana Tech subject to this regulation. Therefore, this section is not applicable.

(3) Vehicles examined for lowermost drainage outlets before leaving:

112.7(h)(3) Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

Prior to the departure of outside contractor that pumps out the grease pits, Indiana Tech personnel visually examine the truck drains and outlets for leakage.

F. BRITTLE FRACTURE EVALUATION [112.7(i)]

112.7(i) If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.

There are no field-constructed aboveground containers located at Indiana Tech subject to this regulation. Therefore, this section is not applicable.

G. ADDITIONAL APPLICABLE RULES, REGULATIONS AND GUIDELINES [112.7(j)]

112.7(i) In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.

To determine if a "reportable quantity" was released, Indiana Tech follows the Federal requirements (40 CFR 110.3) and the State of Indiana requirements (327 IAC 2-6.1). Other than this, there are no other prevention standards that are required to be followed, including other prevention and containment procedures listed in 40 CFR 112 or any applicable State of Indiana or local rules, regulations or guidelines.

H. QUALIFIED OIL-FILLED OPERATIONAL EQUIPMENT [112.7(k)]

112.7(k) The owner or operator of a facility with oil-filled operational equipment that meets the qualification criteria in paragraph (k)(1) of this subsection may choose to implement for this qualified oil-filled operational equipment the alternate requirements as described in paragraph (k)(2) of this sub-section in lieu of general secondary containment required in paragraph (c) of this section.

(1) Qualification Criteria—Reportable Discharge History: The owner or operator of a facility that has had no single discharge as described in § 112.1(b) from any oil-filled operational equipment exceeding 1,000 U.S. gallons or no two discharges as described in § 112.1(b) from any oil-filled operational equipment each exceeding 42 U.S. gallons within any twelve month period in the three years prior to the SPCC Plan certification date, or since becoming subject to this part if the facility has been in operation for less than three years (other than oil discharges as described in § 112.1(b) that are the result of natural

disasters, acts of war or terrorism); and (2) Alternative Requirements to General Secondary Containment. If secondary containment is not provided for qualified oil-filled operational equipment pursuant to paragraph (c) of this section, the owner or operator of a facility with qualified oil-filled operational equipment must: (i) Establish and document the facility procedures for inspections or a monitoring program to detect equipment failure and/or a discharge; and (ii) Unless you have submitted a response plan under § 112.20, provide in your Plan the following: (A) An oil spill contingency plan following the provisions of part 109 of this chapter. (B) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

Indiana Tech has a <u>Crisis Management Plan (CMP)</u>. A complete copy of the CMP is maintained by the Crisis Management Director and Crisis Management Leadership Team. The Plan is available for on-site review during normal working hours. Inspections of qualified oil-filled operational equipment will follow the procedures of section 8-B.

REQUIREMENTS FOR ONSHORE FACILITIES

112.8 If you are the owner or operator of an onshore facility (excluding a production facility), you must:

(a) meet the general requirements for the Plan listed under 40 CFR 112.7, and the specific discharge prevention and containment procedures listed in 40 CFR 112.8.

The general requirements for the Plan listed under 40 CFR 112.7 have been met for this facility.

I. FACILITY DRAINAGE [112.8(b)]

(1) Drainage from diked storage areas:

112.8(b)(1) Restrain drainage from diked storage areas by valves prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharges. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.

Note: This section should describe drainage in areas of the facility that have localized secondary containment. Localized containment is specifically designed to retain drainage in operating areas of a facility (e.g., AST farm, truck loading/unloading rack, pipeline areas.)

There are no secondary containment structures located at Indiana Tech subject to this regulation. Therefore, this section is not applicable.

(2) Valves used on diked area storage:

112.8(b)(2) Use valves of manual, open-and-close design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly

into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this section.

There are no secondary containment structures located at Indiana Tech subject to this regulation. Therefore, this section is not applicable.

(3) Plant drainage systems from undiked areas:

112.8(b)(3) Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading areas) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.

Note: This section should describe drainage in areas of the facility that do **not** have localized containment (e.g., area drains to a retention pond). Facilities must ensure that such systems are designed in accordance with good engineering practices.

There are no containers subject to this regulation located at Indiana Tech. Therefore, this section is not applicable.

(4) Final discharge of drainage:

112.8(b)(4) If facility drainage is not engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility

There are no containers subject to this regulation located at Indiana Tech. Therefore, this section is not applicable.

(5) Facility drainage systems and equipment:

112.8(b)(5) Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in 112.1(b) in case there is an equipment failure or human error at the facility.

Note: Facilities that use a wastewater treatment system (a system with two or more treatment units) for treating drainage must have a backup system in place should the system fail. In accordance with the Professional Engineer certification, the water collection and treatment system must be designed utilizing good engineering practices. The facility must describe the water collection and treatment system and its redundancies, including the use of oil/water separators.

Drainage waters at Indiana Tech do not receive any treatment. Therefore, this section is not applicable.

J. BULK STORAGE CONTAINERS/SECONDARY CONTAINMENT [112.8(c)]

(1) Container compatibility with its contents:

112.8(c)(1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.

Note: Describe in detail the construction of all aboveground storage containers and their compatibility with the liquids that they hold. Identify which standards (e.g., API standards) of construction have been followed and features of the individual containers (e.g., double bottoms, coatings).

The used oil drum is constructed of materials that are compatible with the materials that they store.

(2) Diked area construction and containment volume for storage containers:

112.8(c)(2) Construct all bulk storage container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

Note: Secondary containment is a requirement for all bulk storage facilities, large or small, manned or unmanned; and facilities that use oil filled equipment; whenever practicable. Precipitation freeboard should be based on regional rainfall patterns.

The used oil drum at the Donald Ross Maintenance Building is provided secondary containment by the drum skid and the building floor. The gasoline and diesel storage tanks at Donald Ross are provided secondary containment by double walled construction (Appendix K) and concrete containment area. Additional secondary containment provided by readily available absorbent material.

(3) Diked area, inspection and drainage of rainwater:

112.8(c)(3) Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake or pond, bypassing the facility treatment system unless you:

- (i) Normally keep the bypass valve sealed closed.
- (ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in 112.1(b).
- (iii) Open the bypass valve and reseal it following drainage under responsible supervision; and
- (iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with 112.41(j)(2) and 122.41(m)(3) of this chapter.

Note: This section should include a detailed discussion of the inspection and drainage procedures used for diked areas and how drainage discharge is documented (e.g., checklist noting the appearance of the water, time of valve opening, time of valve closing, signature of inspector, etc.). This section should also include a discussion of an alternate method of drainage to be employed if an oil sheen or oil accumulation is observed.

The used oil drum at the Donald Ross Maintenance Building is provided secondary containment by the drum skid and the building floor. Additional secondary containment provided by readily available absorbent material.

(4) Corrosion protection of completely buried metallic storage tanks:

112.8(c)(4) Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.

Note: Underground storage tanks for purposes of SPCC must be completely buried, unlike "underground storage tanks" in EPA's UST program, which may be partially buried.

There are no completely buried metallic storage tanks located at Indiana Tech subject to this regulation. Therefore, this section is not applicable.

(5) Corrosion protection of partially buried or bunkered metallic storage tanks:

112.8(c)(5) Not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.

There are no partially buried or bunkered metallic storage tanks located at Indiana Tech subject to this regulation. Therefore, this section is not applicable.

(6) Aboveground container integrity testing:

112.8(c)(6) Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skid-mounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of nondestructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

Campus personnel observe containers during operating hours. Formal visual inspections are conducted to examine the exterior of the containers. These inspections are documented using the Facility Inspection Report and Checklist in Appendix H and the Container Inspection Report form, for shop-built containers, located in Appendix I.

(7) Control of leakage through internal heating coils:

112.8(c)(7) Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

There are no tanks with internal heating coils located at Indiana Tech subject to this regulation. Therefore, this section is not applicable.

(8) Container installation fail-safe engineered:

112.8(c)(8) Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:

- (i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.
- (ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.
- (iii) Direct audible or code signal communication between the container gauger and the pumping station.
- (iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.
- (v) You must regularly test liquid level sensing devices to ensure proper operation.

The used oil drum at the Donald Ross Maintenance Building is provided secondary containment by the drum skid and the building floor. Additional secondary containment provided by readily available absorbent material. The level in the container is monitored by Indiana Tech personnel.

(9) Observation of effluent treatment facilities for system upsets:

112.8(c)(9) Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in 112.1(b).

Note: Facilities must indicate what type of backup system is used in the event of equipment malfunction.

Indiana Tech does not operate an effluent treatment facility subject to this regulation. Therefore, this section is not applicable.

(10) Visible discharge corrections from container seams and gaskets:

112.8(c)(10) Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.

Visible discharges are immediately reported to the Discharge Prevention Coordinator or alternate. For significant leaks, repairs will be completed as expeditiously as possible. To minimize the potential for a major release, the container will be emptied (if possible) until appropriate repairs have been completed. Minor leaks will be repaired as soon as practicable. Absorbent material is immediately available for minor oil leaks.

(11) Appropriate position of mobile or portable oil storage containers:

112.8(c)(11) Position or locate mobile or portable oil storage containers to prevent a discharge as described in 112.1(b). You must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.

The used oil drum at the Donald Ross Maintenance Building is provided secondary containment by the drum skid and the building floor. Additional secondary containment provided by readily available absorbent material. The container is positioned to prevent discharges as described in 112.1(b).

K. FACILITY TRANSFER OPERATIONS [112.8(d)]

(1) Buried piping installation protection and examination:

112.8(d)(1) Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a State program approved under part 281 of this chapter. If a section of buried line is

exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the damage.

There is no buried piping located at Indiana Tech that is used for the transfer of oil. Therefore, this section is not applicable.

(2) Not-in-service and standby service terminal connections:

112.8(d)(2) Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.

There are no terminal connections located at Indiana Tech subject to this regulation. Therefore, this section is not applicable.

(3) Pipe support designs:

112.8(d)(3) Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.

There is no piping located at Indiana Tech subject to this regulation. Therefore, this section is not applicable.

(4) Aboveground valve and pipeline inspection and buried piping integrity and leak testing:

112.8(d)(4) Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.

Formal inspections of all oil-filled operation equipment and containers are conducted on a monthly basis. When such inspections identify leaks or potential leaks in areas where a release would occur, immediate notification is made to the Discharge Prevention Coordinator. The results of these inspections are documented on the Facility Inspection Report and Checklist provided in Appendix H.

(5) Aboveground piping protection from vehicular traffic:

112.8(d)(5) Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.

Note: Identify how aboveground piping is protected from vehicular traffic (e.g., bumper poles or other barriers, clearance signs).

There is no aboveground piping located at Indiana Tech subject to this regulation. Therefore, this section is not applicable.

*<u>Note EMS Manual contains only updated text for SPCC plan</u>

Updated electronic and paper copies can be made available in the Building and Grounds department upon request of the entire SPCC including maps, PDFs, and checklists.

INDIANATECH Storm Water Pollution Prevention Plan

Buildings & Grounds 1600 E. Washington Blvd. Fort Wayne In 46803

Facility Contact Person(s) <u>Joe Myers</u> Phone#<u>422-5561_ext.3421</u> Cell#<u>260-701-6862</u> <u>Mike Townsley</u>Phone#<u>260-399-2829</u> Cell#<u>260-740-6643</u>

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1) Intent of manual

Storm Water pollution is a major contributor to the impairment of our water bodies. Our storm drains are designed to drain rain water and snow melt from our streets and parking lots. Pollutants are picked up in this water and enter our storm conveyance system and drain directly to a creek, stream or river without any treatment.

Many pollutants such as; oils, greases, pesticides, fertilizers, trash, and sediments that are in the storm water may come from everyday activities. Recognizing potential sources of pollution at our facilities and from our field activities is the first step in improving our storm water quality. Knowing these potential sources and implementing good housekeeping practices with best management practices will help improve the water quality of our local creeks, streams, and rivers.

This manual is designed to list Indiana Tech's responsibility as a Copermit holder with the city of Fort Wayne, and potential sources of pollution. Indiana Tech addresses these with best management practices to prevent pollutants from entering our storm drains. It also includes spill prevention, response, and clean up measures; Tech's drains with conveyance systems; and types of pollutants that may be found. This manual is a living document, as facilities and/or their daily operations change so will this manual.

2) Spill Prevention, Response and Cleanup Plan

Indiana Tech has a comprehensive Spill Prevention Control and Countermeasure (SPCC) plan which should be followed in case of a spill. In the event of a spill, the EMS Coordinator shall be notified. If the EMS Coordinator cannot be reached, the alternate shall be notified. Until the EMS Coordinator arrives the following procedures will be followed when a spill is detected (not in any specific order).

A. Discharge Response Procedures

- Evacuate and treat any injured personnel, if it can be done safely.
- Call for local emergency assistance as required (fire, police, hazardous materials, utilities, etc.).
- Identify the type of material that has discharged.
- Determine the cause of the discharge.
- Determine what safety precautions are required based on Material Safety Data Sheets (MSDSs) or other available safety and health information.
- Take measures to stop or minimize additional discharge and prevent further release (e.g., shut off valves, pumps, or upright drums), <u>if it can be done safely.</u>
- Evacuate area, to upwind of the source, if necessary.
- Alert the Discharge Prevention Coordinator or alternate, the designated person accountable for discharge prevention [112.7(f)(2)].
- Provide the following information to the Discharge Prevention Coordinator:
 - Exact location of the emergency.
 - Type and description of the emergency.

- Extent and nature of any personal injury.
- Minimize or contain migration of discharged material, <u>if it</u> <u>can be done safely</u>. See campus sewer system map provided in Appendix C for location of nearest open sewer.
- Minimize contamination of discharged material, <u>if it can be</u> <u>done safely</u>.
- Notification of the release to appropriate regulatory agencies is to be done in accordance with the reporting requirements summarized in Appendix E and only by the Discharge Prevention Coordinator or under his direction.
- B. Responsibilities of General Campus Personnel
 - Campus personnel will be responsible for knowing what materials are used in their departments and understanding what safety procedures should be followed when using these materials.
 - Campus personnel will immediately contact the EMS Coordinator or alternate in the event they discover a discharge. Campus personnel will evacuate the discharge area and will not interfere with activities of the discharge cleanup.

3) Best management practices

Secondary containment

Secondary containment is currently provided for the elevator units, by thresholds and sealant around the elevator equipment room floors. The used oil drum in Building and Grounds is provided secondary containment by the drum skid and the building floor. The grease bin is double wall construction. Additional secondary containment is provided by readily available absorbent material.

Visual Inspections

Formal visual inspections are conducted on a monthly basis of the oil-filled operational equipment. The results of these inspections are documented on a Facility Inspection Report and Checklist.

Training

Training on the contents of the SPCC and SWPP Plans are provided for all Indiana Tech employees whose job involves the handling or transfer of oil products. All new hires are trained on the contents of the SPCC and SWPP Plans and campus discharge response procedures prior to being placed in a position involving the handling or transfer of oil products.

Discharge prevention briefings

In addition to training, briefings on the procedures included in the SPCC Plan are held on an as-needed basis at least once a year.

> Designated person accountable for discharge prevention

The EMS Coordinator is the designated person accountable for discharge prevention at Indiana Tech. The Director of Facilities assists the EMS Coordinator with this responsibility and functions as an alternate.

Security

The oil-filled operational equipment and used oil drum are located within locked buildings. The grease bin is locked, and monitored via security camera to prevent unauthorized access. Video cameras throughout the campus also provide additional security. Contract security personnel are onsite 24 hours/day and monitor the security cameras and walk the campus for scheduled security inspections.

Lighting

The entire campus has adequate lighting to allow for visual detection of discharges or releases at all times, and to minimize the potential for discharges occurring through acts of vandalism.

Grease Bin

The grease bin is picked up by an outside contractor. The driver and a trained Indiana Tech operator supervise the grease bin pick-up. The surrounding ground surface provides initial secondary containment. Additional secondary containment is provided by readily available absorbent material.

> Dumpsters

Dumpsters are checked on a regular basis to assure, lids are closed, and no sign of leaks or damage are visible.

Vehicles and Equipment

Perform Vehicle and equipment repairs indoors if possible.

- Do not pour materials/fluids down storm drains or hose down work areas into storm drains; use dry sweeping.
- Use non-toxic chemicals when possible.
- Drain and replace oil, coolant and other fluids only in Maintenance shop.
- Do not top off fuel tank.
- Wash vehicles in the designated area.
- Use biodegradable, phosphate free detergents for washing vehicles.

Good Housekeeping

- Clean sediment traps when needed and keep records of when they are cleaned.
- Sweep parking lots when needed and keep records of when they are done and how much debris is removed.
- Check and remove trash from ground and drains daily.

Landscaping

- Collect yard, garden, and tree waste and compost or dispose of in landfill. Never wash or dump into storm inlets or waterways. Continue mulching grass back into ground. This reduces waste and puts valuable nutrients back into the lawn.
- Use pesticides and fertilizers in accordance with package directions. Never over apply. Never apply before rain event unless package directs.
- Do not apply pesticides or fertilizers near water bodies. Always maintain a buffer strip.

- Reduce the use of high nitrogen fertilizers that produce excessive growth requiring more frequent mowing and trimming.
- Do not mow before predicted significant rain events.
- Apply mulch to prevent erosion and retain soil moisture.
- Do not over water. Do not let sprinklers cover impervious surfaces. This excess water will drain into the storm outlets carrying pollutants.
- Blow or sweep grass clippings on impervious surfaces back into lawn.

4) Illicit Discharge response procedures

Tech employees may run across an illicit discharge or illegal dumping during their normal work operations. An illicit discharge could be any one of the following:

- A pipe running into a storm drain; or
- Paint or other stains on a storm drain; or
- Water flowing in a storm drain; or
- Anything suspicious entering a storm drain.

If you see an illicit discharge please do the following:

- Call campus security and the Discharge Prevention Coordinator.
- Call 311. 311 will report incident and investigator will be dispatched.
- If discharge is hazardous waste call emergency response first! i.e. Fire department.
- If incident is a dumping occurrence, immediately attempt to stop the dumping. Inform individual(s)/company that it is an illegal action. Get as much information as you can. If problems occur do not put yourself in danger!
- Give dispatch as much information as possible.
- If possible, stay on site until investigator arrives.

APPENDIX A SITE MAP

APPENDIX B DRAINAGE MAP

APPENIX C EMERGENCY CONTACTS

National Response Center:	(800) 424-8802 (24 hr.)
USEPA – Region 5:	(312) 353-2318 (24 hr.)
Indiana Department of	
Environmental Management	(888) 233-7745 (toll-free)
Emergency Response Section:	(317) 233-7745 (international)
DNR:	(765) 473-9722
Allen County Emergency	
Management Agency (LEPC):	(260) 449-7684
Joe Myers, EMS Coordinator:	
(Discharge Prevention	Work:x3421
Coordinator)	Cell: (260) 701-****
Mike Townsley,	
Director of Facilities:	
(Alternate Discharge	Work:x2246
Prevention Coordinator)	Cell: (260) 740-****
Action Environmental	
(Discharge Response Contractor):	(260) 471-1168 (24 hr.)
(<u>Note</u> : After 5:00 p.m. Please Leave Cell F	Phone Call Back Number.)
ERS (Discharge Response Contractor):	(260) 489-7062 or (260) 460-4863
City of Fort Wayne Fire Department:	911
City of Fort Wayne Police Department:	911
City of Fort Wayne WPCP:	(260) 427-1243

In order to reduce hazards to employees and property in the event there is an incident involving hazardous waste materials on campus, the University has developed the following contingency plan.

Scope of the Plan

This plan will be implemented if a fire, explosion, or release of hazardous waste which threatens public health or the environment occurs at Indiana Tech.

Emergency Response Actions Facility Personnel Will Take

Spill Procedures

The following procedures should be followed in the event of a hazardous materials spill:

1. If possible, shut off any sources of ignition and/or the source of the spill without endangering yourself.

2. Evacuate the immediate area, closing the doors behind you.

- 3. If building evacuation is necessary, pull the fire alarm.
- 4. Call the Emergency Phone Number, 911.

Be prepared to provide the following information: Your name, the specific location of the spill, the name of the substance spilled, and the quantity spilled.

5. Wait outdoors for Police Services and/or the Indiana Tech Security or representative to arrive, and identify yourself to them.

Fire/Explosion Procedures

The following procedures should be followed in the event of a fire or explosion:

- 1. Pull fire alarm.
- 2. Call 911.
- 3. Proceed to the nearest available exit by following exit signs.
- 4. Close doors (unless there is a natural gas leak) as you leave.

5. Do not smoke or use elevators while exiting.

6. Do not return for any reason once you are clear of the building.

7. Assemble with other building occupants at the designated area.

8. Once the building or area is considered safe the Indiana Tech representative in charge will announce re-entry is permitted.

Emergency Coordinator Responsibilities

Hazardous materials emergency coordinators are members of the crisis management team. When an emergency has been identified involving hazardous materials, they should be contacted immediately for evaluation of the situation.

Emergency Coordinator Duties

The following is a listing of the emergency coordinator's duties during a fire, explosion, or chemical spill involving hazardous waste:

1. Available 24 hours a day to respond to an emergency within a short period of time.

2. Responsible for coordinating all emergency response measures.

- 3. Familiar with:
- all aspects of the facility's contingency plan.
- All facility operations and activities.
- Locations and characteristics of wastes handled.
- Location of all hazardous waste records within the facility.
- Facility layout.

4. Authority to commit the resources needed to carry out the contingency plan.

Emergency Coordinator Procedure

The emergency procedures which the emergency coordinator will follow in the case of a fire, explosion, or chemical spill:

1. Activate internal facility alarms and communications systems.

2. If needed, notify Fort Wayne Fire Department, Rescue, and Police Services through at 911. If a release has occurred, identify the source, character, amount and extent of any released materials by record review or chemical analysis.

4. Assess the hazards to human health and the environment, considering all direct and indirect effects.

5. If it is determined that the facility has had a fire, explosion or release which could threaten human health or the environment outside the facility:

a) Determine if local evacuation may be necessary, and if so, notify the appropriate local authorities and be available to assist local authorities with evacuation measures;

b) notify the National Response Center (800-424-8802) with following information:

- Emergency Coordinator's name and telephone number;
- Facility name and address;
- Time and type of incident;
- Quantity of material(s) involved to the extent known;
- Extent of any injuries;
- Possible hazards to human health and the environment outside the facility;

6. Take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures will include, where applicable, stopping processes and operations, collecting and containing released waste and removing or isolating containers;

7. If the facility stops operations in response to a fire, explosion, or chemical release, the emergency coordinator will monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate;

8. Immediately after the emergency, the emergency coordinator will provide for treating, storing, or disposing of recovered waste, contaminated soils, or surface water, or any other material that results from a release, fire, or explosion at the facility; and

9. Ensure that in the affected areas of the facility, no waste that may be incompatible with the released material is stored until the cleanup procedures are completed and all emergency equipment is cleaned and restored to a usable condition.

Post Emergency Procedures

After the Emergency Coordinator has evaluated the situation and determined that an adequate cleanup of the affected areas is complete, she/he must do the following:

1. Notify IDEM

2. Maintain on file with the contingency plan the time, date, and details of any incident that requires implementing the contingency plan; and

3. Within 15 days after the incident, submit a written report on the incident to the IDEM. The report must include:

- Name, address, and telephone number of the owner;
- Name address and telephone number of the facility;
- Date, time, and type of incident;
- Name and quantity of material(s) involved;
- Extent of injuries, if any;

- Assessment of actual or potential hazards to human health or the environment, where this is applicable; and

- Estimated quantity and disposition of the recovered material that resulted from the incident.

Recordkeeping

A record of all reported hazardous waste emergencies is kept on file at the office of buildings and grounds. This includes the date, name of staff or faculty member reporting the incident, the name and amount of material involved, and what action was taken.

The contingency plan will be reviewed and if necessary amended whenever:

- 1. Applicable regulations are revised;
- 2. The plan fails in an emergency;

3. The facility changes in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency; or

4. The list of emergency coordinators or equipment changes. Contingency Plan Revisions

Scope

The Hazard Communication (HAZCOM) Plan is required by the Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard (29 CFR 1910.1200). The General HAZCOM Plan covers all Indiana Tech employees, students, and non-employee affiliates that work with chemicals and may be exposed to the effects of those chemicals. Department-specific detailed HAZCOM Plans are or will be attached hereto in the Appendices.

Purpose

The purpose of the HAZCOM Plan is to ensure that personnel who handle, use or store chemicals in the workplace are knowledgeable of the hazards associated with the chemicals in their workplace and the methods that may be used to reduce the risk of an accident or illness resulting from the use of these chemicals. This information shall be communicated to all personnel by means of:

- A site specific written HAZCOM Plan for each workplace.
- An accurate chemical inventory of all chemicals in each workplace.
- Adherence to chemical labeling requirements.
- Availability of and familiarity with Material Safety Data Sheets (MSDS).
- Employee training regarding the General HAZCOM Plan, Department-specific HAZCOM Plans, chemical hazards, protective measures, and emergency procedures.

Responsibilities

The Environmental Management System (EMS) Coordinator is responsible for reviewing and overseeing the implementation of the HAZCOM plan. This includes but is not limited to coordinating any compliance actions, acting as a consultant for the departments within the college regarding implementation and enforcement, evaluating work practices and use of personal protective equipment, providing program materials, tracking of training and recommending environmental and medical monitoring.

Academic Deans and Department Directors are ultimately responsible for compliance with the HAZCOM plan and coordination with the EMS Coordinator, within their individual departments. Responsibility for compliance with the HAZCOM plan *cannot be delegated*.

Supervisors and Managers are responsible for ensuring that all requirements of the HAZCOM plan that apply to their individual work areas are carried out properly. Responsibility for implementation of the HAZCOM plan *cannot be delegated*.

Academic Deans, Department Directors, supervisors will ensure that all appropriate personal protective equipment (PPE) is available, review safe work practices with all involved employees and, if necessary, post signage around specific areas to indicate the hazard and limit access.

Each work area will have a responsible party designated to:

- Ensure that the HAZCOM plan is followed in the work area.
- Conduct the initial chemical inventory and update the chemical inventory as needed.
- Acquire and organize MSDS information for chemicals in the inventory.
- Review and update the site specific HAZCOM annually.
- Provide site specific HAZCOM training.
- Ensure all employees under their supervision have access to MSDSs for all chemicals covered by the HAZCOM plan during the employees' normal working hours.

Outside Contractors

Contractors conducting any work on the premises of Indiana Tech and its satellite facilities will provide the individual with originating the contract with an inventory and MSDS(s) of chemicals and/or hazardous materials being brought on the campus or its satellite facilities. Upon completion of its work, the Contractor will be responsible for removal of any chemicals and/or hazardous materials brought on campus. This requirement will be part of all contracts. The Contractor will provide a copy of their HAZCOM Plan to the individual with originating the contract prior to starting work.

The individual originating the contract will provide the necessary information on the chemicals and/or hazardous materials to which the Contractor or their employees may be exposed while working in areas of the college where chemicals and/or hazardous material may be stored or used. A copy of the Indiana Tech Hazard Communication Plan will be provided to all Contractors

Hazard Communication Plan

A. Chemical Inventory

- 1. All work areas will keep a current and up-to-date chemical inventory of chemicals used or stored.
- 2. Inventories will be updated annually, at a minimum, or more frequently if quantities or operational uses change significantly.
- 3. The information will include: The name of the chemical (as it appears on the MSDS); quantity on hand; and if the MSDS is on file. Use the inventory form in Appendix A.
- 4. A copy of the current inventory from each work area will be given to the Indiana Tech EMS Coordinator for incorporation into the Campus-wide chemical inventory.

B. Container Labels

- 1. All chemicals will be stored in original containers with the manufacturer's label attached.
- 2. Small quantities intended for immediate use may be placed in a container without a label, provided the individual using the unmarked container keeps it in their possession and the

product is used up during the work shift or properly disposed of at the end of the work shift.

- 3. Manufacturers' labels are to be maintained on all containers. In the event a label becomes damaged, removed, or unreadable, the container will be labeled immediately with the contents of the container, the manufacturer's name and address, and a statement of health effect of overexposure. The MSDS will be used to aid in correct and complete labeling.
- 4. Unmarked containers will be brought to the attention of the EMS Coordinator, and may not be used.

C. Material Safety Data Sheets

- 1. MSDS will be available to all employees during their normal working hours in their work areas and copies are available on insite's link to MSDSonline or at the buildings and grounds center
- 2. Whenever chemicals are ordered, whether for restocking or new procurement, the MSDS will be requested on the purchase order.
- 3. The MSDS of restocked chemicals will be reviewed against MSDS on file for any information change. If there is a change in information, the most current MSDS will be copied, filed as required, and the outdated MSDS removed and archived.
- 4. Incidental purchases will include a request for the MSDS and copies will be provided, when received, to the work area, and EMS Coordinator.

D. Employee Training

- 1. Employee training will be conducted annually.
- 2. New hires will be given HAZCOM training as part of their orientation and indoctrination.
- 3. Employee training will consist of but not be limited to:
 - o Goals of the Right-to-Know/Hazard Communication Standard
 - Definition of a hazardous substance.
 - Identifying hazardous substances.
 - What is a chemical inventory list?
 - How to read a Material Safety Data Sheet.
 - Appropriate work practices.
 - Emergency procedures.

Non-routine Tasks

Supervisors will inform employees of any special tasks, which may involve hazardous chemicals. The supervisor and employees will review the MSDS and follow all recommended procedures to minimize any exposure.

Supervisors will ensure that all appropriate personal protective equipment (PPE) is available, review safe work practices with all involved employees and, if necessary, post signage around the area to indicate the hazard and limit access.

Emergency Procedure

In the event of a spill or release:

- Report any spill or release to Campus Security (x 2230), Work Area Supervisor and director of Facilities (x 2246).
- Evacuate the immediate area.
- Avoid contact with the spill, unless appropriate PPE is available and used.
- Control the spill to the level of your training. If untrained, do not expose yourself to the chemical/substance. Isolate the spill and leave it for qualified personnel.

In the event of a suspected exposure to a hazardous substance:

- Seek medical attention.
- Make a written report to your supervisor.
- Supervisors are to notify and copy human resources.
- All reports of exposure to chemical/hazardous substances must be kept on file for at least 30 years and made available to the employee.

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Appendix A Indiana Tech Chemical Inventory						
Page of		Date				
Department	Building	Room				
Name of Responsib	le Party/Supervisor					
Signature						

Hazardous Communication Plan

				Frequency of Use
Product Name	Manufacturer	Quantity on Hand	MSDS	(D, W, M, Y)

Appendix B

INDIANA TECH

Hazard Communication Plan

Employee Training Record for_____

(To be kept in workplace)

Date:		
Name:		
Position:		
Department:	Workgroup:	
Supervisor:		

I have received training on the General Hazard Communication (HAZCOM) Plan for Indiana Tech and site specific Hazard Communication training for my work area.

I understand the following;

1. I must be trained regarding hazardous chemicals in my work area, upon my initial assignment to the work area, whenever work procedures are changed concerning the hazardous chemicals in the work area, or a new chemical is introduced to work area.

2. It is my responsibility to understand the characteristics and physical and health hazards associated with the hazardous chemicals in the work area.

3. I understand that Material Safety Data Sheets will be made available to me, upon request, for each chemical to which I may be exposed in the work area.

4. I understand that I will have access to the Indiana Tech Hazard Communication Plan for my work area.

I have received instruction on the General HAZCOM Plan and the site-specific HAZCOM plan with attached chemical inventory for Room(s) ______, Building ______. I acknowledge that I have been instructed in the following areas concerning the inventoried hazardous chemicals to which I may be exposed.

- 1. The chemical and common name of the inventoried hazardous chemical.
- 2. The location and operation, in the work area, involving hazardous chemicals.
- 3. The location of the HAZCOM plan, MSDS book, and chemical inventory.
- 4. The proper and safe handling procedures for the inventoried hazardous chemicals.
- 5. The physical and health hazards of the inventoried chemicals in the work area.
- 6. Methods to protect myself and co-workers from exposure to hazardous chemicals
- 7. Emergency procedures for the work area.
- 8. An explanation of the chemical labeling system.
- 9. How to obtain and use hazard information.

Signature of Employee

Signature of Supervisor

Date

I. Introduction

Safe and environmentally sound management of hazardous waste is an integral part of Indiana Tech's mission. Indiana Tech is committed to meeting the stringent federal, state, and local regulations pertaining to the management of hazardous waste. Responsibility for compliance with hazardous waste regulations begins with those generating waste material and continues through the complicated disposal and delivery process. Escalating concern for environmental quality and regulatory compliance underscores the importance of waste generators to ensure that the hazardous waste they generate is properly managed. Failure to comply with regulatory requirements has resulted in significant fines and liability, increased costs, and adverse publicity. For these reasons, Indiana Tech has developed a **Hazardous Waste Management Plan** designed to communicate the methods INDIANA TECH will use to properly manage hazardous waste and has committed the resources necessary to ensure compliance with this program and applicable regulations.

The Building and grounds department is responsible for directing Indiana Tech's Hazardous Waste Management activities. These responsibilities include managing the collection, processing, and disposal of chemical waste and providing resources for other hazardous waste and environmental compliance responsibilities. For the purposes of this program, the term "waste" refers to **chemical material that is unusable or unwanted by the person controlling the material**. Trained personnel, under the direction of Indiana Tech's Environmental Management systems Coordinator, will make determinations of whether a material is hazardous waste, reusable material, recyclable material, or any one of several regulatory defined materials or processes.

The purpose of this program is to provide information and guidance on hazardous waste generation, storage, packaging, record development/maintenance and general management of hazardous and non-hazardous chemical wastes. To assist Indiana Tech in providing a safe and environmentally sound operation, each department is expected to review, understand and follow the information and guidance provided in this Hazardous Waste Management Plan. Questions regarding hazardous waste management at Indiana Tech should be directed to the Director of facilities management.

II. Regulatory Authority

The Indiana Department of Environmental Management (IDEM) and the United States Environmental Protection Agency (USEPA) regulates the management of hazardous waste. The respective regulations can be found at www.idem.IN.gov/4087.htm. The State of Indiana is an authorized state, meaning the IDEM has been given authority by the USEPA to administer hazardous waste regulations. IDEM regulations meet the requirements set out by the USEPA, and the IDEM regulations are at the least, as stringent as the federal requirements. Therefore, this plan will refer to the IDEM regulations only, given that they either meet or exceed the federal requirements for hazardous waste management in Indiana. In cases where there are no IDEM regulations or where the IDEM regulations refer to USEPA regulations, USEPA regulations will be cited.

III. Roles and Responsibilities

A. Deans, Directors, Department Chairs, and Administrators

1. Require faculty, staff, and students to adhere to the requirements listed in this plan.

2. Require faculty, staff, and students who handle or generate hazardous waste to receive Hazardous Waste Management Training.

3. Require inspections of all locations where hazardous waste is stored to ensure it is being managed properly.

4. Designate a Safety Committee Representative to help resolve problems that may arise due to the improper storage, use, labeling, and disposal of hazardous waste.

B. Hazardous Waste Handlers

1. Read and understand the Hazardous Waste Management Plan.

2. Inspect locations where hazardous waste is stored to ensure it is being managed properly.

3. Properly label, store, use, and dispose of hazardous waste as described in this plan.

C. Coordinator of Hazardous Waste

1. Maintain appropriate and current hazardous waste certifications.

2. Maintain applicable and relevant Hazardous Waste Management Training content.

3. Audit the Hazardous Waste Management Plan at least annually.

4. Inspect the Central Hazardous Waste Accumulation as required by law.

5. Review laws and regulations for changes impacting hazardous waste.

6. Ensure proper reporting to the Environmental Protection Agency and the Indiana Department of Environmental Management.

IV. Hazardous Waste Management Plan Organization

The Hazardous Waste Management Plan (HWMP) provides guidance for the safe and compliant management of hazardous waste by Indiana Tech. Additional guidance is provided from the Coordinator of Hazardous Waste. Reviewing the HWMP is the first step in understanding methods to minimize potential liabilities associated with the handling of hazardous waste and for ensuring compliance with applicable hazardous waste regulations. Additional information and guidance is provided through training and access to internal and contract resources.

V. Hazardous Waste Determination

The first step in the management of hazardous waste is to determine whether a material is a waste and if it is hazardous. Subsequent steps are used to properly classify the waste and determine the action necessary for proper management of the waste. Materials are usually considered "waste" when the generator has determined that the material has no further use and will be discarded. **Hazardous waste regulations apply to any material that will be discarded, or is likely to be discarded**. The latter point is important because materials that have no further use and will eventually be discarded may be considered hazardous waste by regulatory agencies even though there are no current plans to discard the material. Therefore, it is imperative that EMS Coordinator of Hazardous Waste be consulted if materials will be stored for long periods without use or if the use of a material is not anticipated for extended periods. Waste materials can be solid, liquid, semi-solid or compressed gas. All such materials must be evaluated to determine if the hazardous waste regulations apply.

A. Determination Process

Simply defined, a hazardous waste is a material with properties that make it dangerous or capable of harming humans or the environment if not properly managed. Making the determination of whether a waste is hazardous is complicated and requires an extensive understanding of such information as the waste constituents, how it was generated, the material's chemical and physical characteristics, understanding of USEPA and IDEM's regulations and experience classifying waste products. Basically, the regulatory requirements for determining whether a waste is a hazardous waste are made by answering the following questions:

- Is the material excluded from the definition of solid or hazardous waste?
- Is the material exempted from regulation?
- Is the waste listed as a hazardous waste in the USEPA Tables?
- Does the waste exhibit one or more of the four hazardous characteristics: ignitability, corrosivity, reactivity or toxicity?
- Is the material a state regulated waste?

Indiana Tech Hazardous Waste Management Plan

A material is considered to be a hazardous waste if the USEPA or the State of Indiana specifically lists it as a hazardous waste or if it exhibits a hazardous characteristic. Two methods can be used to determine if the waste exhibits hazardous characteristics: testing or applying generator knowledge. Testing must be done following strict regulatory protocols established by the IDEM and USEPA. Generator knowledge involves applying an understanding of the hazardous nature or characteristics of the waste based on the materials or processes used to generate the waste.

The Coordinator of Hazardous Waste or a Hazardous Waste Specialist will make the determination as to whether a waste is hazardous or non-hazardous.

B. Non-Hazardous Waste

If a waste is not listed as a USEPA or NHDES hazardous waste or does not exhibit any of the hazardous waste characteristics, it is a non-regulated (non-hazardous) waste. It is important to note that non-regulated and non-hazardous by USEPA and NHDES does not mean that a waste does not exhibit any characteristics that could be harmful to human health or environment. Therefore, it cannot be assumed that these wastes can be disposed via the sanitary sewer, or with other solid wastes. Contact the EMS Coordinator or a Hazardous Waste Specialist for guidance in disposal of non-hazardous chemical wastes.

C. Universal Waste

Universal waste is a category of hazardous waste that poses less of a risk to human health and the environment. Universal wastes include lamps, batteries, intact mercury containing devices, cathode ray tubes, some pesticides, and antifreeze. As the name suggests, these types of waste are universally generated, in nearly every type of business or industry, in schools, and in private homes.

Universal wastes are managed in accordance with the IDEM Requirements for Universal Waste. The **Universal Waste Management Plan** has been developed that outlines the procedures the University will take to properly manage universal wastes.

VI. Generator Status

Concurrent with determining whether a regulated hazardous waste is being generated, the generator classification must be determined. Each generator category has specific generation, accumulation and storage requirements and corresponding time limits. Knowledge of the generator category enables Indiana Tech to ensure that the quantity of waste generated, how the waste is accumulated and storage time limits, etc., comply with IDEM requirements.

Indiana Tech is currently a conditionally Exempt Small Quantity Generator (CESQG)

A. Conditionally Exempt Small Quantity Generator (CESQG)

Generation: A CESQG generates less than to the following quantities:

• 100 kg/month (220 pounds) of hazardous waste in any single month; or

• 100 kg/month (220 pounds) of spill cleanup material contaminated with acutely hazardous waste in any single month; or

• 1 kg/month (2.2 pounds) of acutely hazardous waste in any single month.

VII. USEPA Identification Numbers

USEPA requires all hazardous waste generators to register their generator status by obtaining a USEPA Identification Number. This number is used to track waste from generation to ultimate disposal, and beyond. Indiana Tech must obtain a USEPA ID number before treating, storing, disposing, recycling, or transporting (or offering for transport) hazardous waste. USEPA ID numbers are site-specific numbers assigned to generators, transporters, and treatment, storage, disposal or recycling facilities, and need only be obtained once. Indiana Tech requested and obtained USEPA ID number. They are: INR000126714

VIII. Storage Requirements

Proper storage of hazardous waste is critical to ensuring personnel safety and regulatory compliance. Accumulation quantity limits, accumulation time limits, storage and handling methods, etc., are factors that affect safety and regulatory compliance.

A. Full Quantity Generator Storage

1. Central Accumulation Area (CAA)

a. Requirements

Once the waste storage containers in the SAA are filled, the Responsible Person must immediately arrange for transport to the CAA for subsequent storage and eventual removal from Indiana Tech.

• All hazardous waste will be placed in appropriate containers or tanks and must remain closed at all times except when adding or removing waste

• All hazardous waste will be stored on impervious surfaces;

• Hazardous waste will not be stored in areas with functional floor drains or in or near a sink with a functional drain present unless adequate secondary containment is provided;

• Generators must provide a means to control entry;

b. CAA Location

Indiana Tech has established one CAA in the Warrior Fieldhouse Warehouse.

c. CAA Inspections

The CAA is inspected weekly by the B&G Staff.

2. Satellite Accumulation Area (SAA) Locations – Temporary Storage

a. Requirements

Both IDEM and USEPA regulations permit temporary storage of hazardous waste, termed "accumulation", but with differing requirements. By complying with the more stringent IDEM requirements for satellite storage, the requirements of USEPA are also being met. Temporary storage of hazardous waste that is maintained at or near the point of generation is known as satellite storage. The area where this occurs is known as a SAA. Temporary accumulation permits storage of waste adjacent to the point of generation for the purpose of minimizing handling and risk, increasing disposal efficiency

and controlling costs. Trained staff members in B&G move full or unneeded waste containers from SAAs to the central accumulation facility.

• Containers are under the control of a Responsible Person for the process generating the waste; the Responsible Person has been trained.

• Waste is properly labeled;

IX. Waste Packaging

Proper packaging of hazardous waste is necessary to ensure safe transportation from point of origin to ultimate disposal. The selection of appropriate containers helps prevent leaks and spills that may result in human exposure or environmental release during material handling, storage and transport. Routine handling occurs on the campus, in transit to the disposal facility or during the disposal process. The selection of appropriate containers is only to be completed by the EMS Coordinator or a Hazardous Waste Specialist.

X. Labeling

To ensure that required information concerning the contents and hazards of the container are documented and communicated, waste containers must be properly labeled.

A. SAA Locations

The following label information must appear on all containers located in SAAs:

- The words "Hazardous Waste;"
- Words that identify the contents of the container (No symbols or abbreviations).

B. CAA Locations

The following label information must appear on all containers stored in the CAA:

- The words "Hazardous Waste;"
- Words that identify the contents of the container (No symbols or abbreviations).
- USEPA and/or IDEM hazardous waste codes; and
- Date waste began accumulating in the container.

XI. Transportation and Disposal Management

A. Introduction

Transport of hazardous waste is the process used to move waste containers between the following

Locations:

- SAA locations and the CAA;
- CAA and the off-site TSDRF;

The disposal process involves the following items and is discussed below.

- Scheduling waste pickup and relocation from the SAA to the CAA;
- Scheduling waste pickup from the CAA and shipment to the TSDRF;
- Evaluation of the waste transporter and TSDRF;
- Completion and maintenance of paperwork and records; and
- Management of certificates of disposal/destruction obtained.

B. SAA

Once waste containers stored in the SAA are full or are no longer needed they must be relocated to the CAA. Contact the EMS Coordinator or a Hazardous Waste Specialist to schedule a pick-up of the filled container(s).

C. CAA

During weekly inspection, the Hazardous Waste Coordinator or Hazardous Waste Specialist evaluates the status and amount of containers stored in the CAA. The EMS Coordinator of Hazardous Waste or a Hazardous Waste Specialist will arrange for a waste pick-up by a Licensed Hazardous Waste Transporter if any of the following conditions are met:

- There are a sufficient number of containers in the CAA for economic disposal of the waste;
- Containers are approaching the 1 year storage limit; or
- The CAA area is approaching capacity.

E. Disposal Facility

Indiana Tech EMS has evaluated and approved each TSDRF. Reports manifest documents, and land disposal restriction forms will be completed, and signed by either the EMS Coordinator.

G. Disposal Transportation, Reporting and Recordkeeping

Indian Tech approves and utilizes numerous permitted Hazardous Waste Transporters to transport shipments of waste to a permitted TSDRF. INDIANA TECH has determined that each transporter possesses a valid IN hazardous waste transporter permit and a valid USEPA Identification Number. Indiana Tech will also assure that each vehicle transporting University generated waste is placarded with appropriate warnings in compliance with rules adopted by the Indiana Department of Transportation and the US Department of Transportation.

XII. Waste Minimization

In support of the University's ongoing efforts to minimize costs, control liability, and maintain a sound environmental program, every effort will be made by Indiana Tech to minimize the generation of hazardous waste. To accomplish this objective, Indiana Tech has developed a Waste Minimization Strategy designed to identify and develop opportunities to control chemical use and reduce waste generation. Various methods have been identified and implemented. These include such actions as:

• **Purchasing Control:** Review of chemical purchases to ensure that appropriate materials and quantities are purchased. This helps to prevent purchasing too much of a material or material of the wrong type that could become a regulated waste.

• **Periodic Inventory Evaluation:** Evaluation of laboratory reagents for current use, transfer to virtual stockroom or disposal.

As new strategies are identified, evaluated and implemented, this section will be updated to reflect methods currently available and in use. Contact the ENS Coordinator to provide ideas or obtain information on waste minimization strategies.

XIII. Training

A. Introduction

Appropriate training is provided to ensure that individuals involved in hazardous waste generation and disposal understand regulatory requirements and methods to minimize hazards and risks associated with the management of hazardous waste. This training may include instruction in USEPA, IDEM, OSHA and USDOT requirements. All individuals disposing, handling, manipulating, storing, labeling, etc. hazardous wastes must receive the Indiana Tech Hazardous Waste Management Training before working with these materials and then every three years.

B. Training Requirements – General

As a conditionally exempt small quantity generator of hazardous waste, Indiana Tech is not required to provide training programs to ensure that hazardous waste is effectively and safely managed. Indiana Tech conducts or makes available training programs to comply with the appropriate aspects of the following regulations in case of status change:

• USEPA's Resource Conservation and Recovery Act (RCRA)

• United States Department of Transportation (USDOT) Hazardous Material Transportation Act (HMTA) HM 181/126 F

C. Hazardous Waste Training – Resource Conservation and Recovery Act (RCRA)

1. Introduction

The USEPA and IDEM hazardous waste regulations state that employees who handle hazardous waste must be familiar with proper waste handling and emergency procedures (including contingency plan implementation) relevant to their responsibilities. As part of the Indiana Tech's Hazardous Waste Management Plan, individuals involved with handling hazardous waste will receive appropriate training to ensure compliance with RCRA requirements. Individuals with the following responsibilities will be included in the

RCRA training program:

• The EMS Coordinator

In addition, other individuals who may benefit from this training will also receive appropriate training. The EMS Coordinator will direct the training program.

2. RCRA Training Program Content

a. Full Quantity Generators/Small Quantity Generators

In 2009, Indiana Tech started having at least one person certified by RCRA which instructs you in the following:

- Hazardous Waste Determinations
- Classification
- Storage
- Inspection and Training
- Reporting and Information
- Contingency Plans/Preparedness and Prevention
- Hazardous Waste Permits
- Used Oil
- Universal Waste

3. RCRA Training Records

Training records are retained for a **minimum of three (3) years** after an employee leaves the position. These records include:

• The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job.

• A written job description for each job title. This description must include the requisite skill, education, and/or other qualifications, and the duties of the personnel assigned to each position.

• A written description for the type and amount of both introductory and continuing training that will be given to each person filling a position.

D. US Department of Transportation

The US Department of Transportation requires that any individual offering hazardous materials for shipment must receive instruction to permit them to comply with USDOT regulations. USDOT's training requirements (49 CFR 172, Subpart 4) apply to individuals involved with hazardous materials transportation processes, as defined by the USDOT. (The definition includes hazardous waste.) This training is required for those individuals responsible for pre-transportation packaging, loading, transporting, unloading, paperwork completion, etc. of hazardous waste and hazardous materials. Indiana Tech has identified those involved with transportation of hazardous materials and has trained each in their specific job function. For the purpose of hazardous waste management at Indiana Tech, any individual who packages waste for disposal (from the CAA), selects containers or prepares a manifest will receive USDOT Training. USDOT also requires that certain shippers/carriers of hazardous waste prior to shipment.

1. USEPA Regulations Overlap

USEPA's RCRA defines a hazardous waste transporter as any person engaged in the off-site movement of hazardous waste by air, railway, highway, or water (40 CFR 260.10). Therefore, hazardous waste transporters must follow both USEPA and USDOT regulations. While USEPA regulations focus on hazardous waste and the manifest system, USDOT regulations and training govern how hazardous materials are packaged, marked, and labeled in the transportation process and emergency response procedures during transportation.

XIV. Recordkeeping and Reporting

A. Introduction

Hazardous waste generators are required to create, provide and maintain records that track waste from generation to ultimate disposal. The purpose of obtaining, maintaining and preserving these documents is to ensure that waste is properly managed and regulatory compliance requirements are met. The information and documentation is also useful in determining and potentially avoiding liability if the waste becomes involved in Superfund action through the transporter or disposal facility. Contrary to minimum regulatory requirements, maintaining the required record keeping and documentation permanently, is a prudent management practice.

Both USEPA and IDEM specify record keeping requirements. Their requirements include:

• USEPA requires generators of hazardous waste to comply with the record keeping and reporting requirements set forth in 40 CFR 262.40 and 268.7(a)(8).

• IDEM requires that generators of hazardous waste comply with record keeping and reporting requirements.

B. Records Administration and Storage

The EMS Coordinator maintains the required records and profiles. The record keeping system is organized in the following manner:

• The individuals authorized by the University to **sign manifests** will sign the manifest(s) prior to shipment, transferring the waste to the transporter;

• The EMS Coordinator of Hazardous Waste or Hazardous Waste Specialist will **distribute signed manifests** to the appropriate agencies.

•The EMS Coordinator will scan a copy for Electronic Filing when transporter signs and when destination facility copy is returned.

• Manifests, Land Disposal Restrictions, and Packing lists are organized chronologically;

• Manifest documents are reviewed within 30 days from manifested shipments to ensure receipt of disposal facility copies of the manifests. Indiana Tech's policy is to not pay invoices for hazardous waste shipments until return copies of manifests are received;

- Quarterly, Annual, and Biennial Hazardous Waste Activities Reports are organized chronologically; and
- Waste profiles are organized chronologically.

C. Records

1. Hazardous Waste Manifests

When a hazardous waste manifest is used, an authorized University Representative will sign it by hand and maintain a copy for the University's records. The individual authorized by Indiana Tech to sign manifests is the EMS Coordinator. A manifest from the Destination State, the location where the waste will ultimately reside, issued for each of the hazardous waste shipments. If that state does not require its use, then the Indiana State manifest will be used. Once the shipment has left the Campus, the University must mail a copy of each manifest to the destination and generation state's environmental agency (if the state requires it) within five (5) days, unless Specialist delivers manifest with waste. The University must receive a signed copy from the receiving TSDRF within 45 days from the date the (initial) transporter received the waste. If after 30 days the University has not received the signed TSDRF copy, they will contact the TSDRF to determine the status of the shipment. If the signed copy is not received within 45 days, the University must submit an **Exception Report** to IDEM. Indiana Tech must keep manifest copies for three years by law (but should be kept indefinitely) from the date the waste was accepted by the initial transporter. Manifests should be kept with the applicable **Land Disposal Notification/Certification** forms.

Manifest Distribution Procedure

The following is the Manifest Distribution Procedure. The manifest must be distributed as indicated below. The EMS Coordinator will ensure that Indiana Tech obtains and provides the manifest copies as indicated. Distribution of Copies 1 and 2 by the TSDRF is state specific and therefore will vary. Please see the TSDRF state's manifest for distribution information. Manifest copies will be distributed as follows:

- **Copy 1:** TSDRF mails to destination state environmental agency.
- Copy 2: TSDRF mails to generator state environmental agency.

• **Copy 3:** TSDRF mails to generator within 14 days of receipt. (See **Exception Reports**, below if this copy is not received within 45 days of Transporter Pick-up.)

- Copy 4: TSDRF retains.
- Copy 5: Transporter retains.

• **Copy 6:** Generator mails unless delivered by specialist, to destination state agency within 5 days of pick-up, if Applicable.

- Copy 7: Is not needed instead an annual manifest report will be filed.
- Copy 8: Generator retains for records after pick-up.

In some instances, the destination state does not want to receive a copy of the manifest from the generator (Copy 6). In these cases, Copy 6 will be retained with Copy 8.

Record Retention

Hazardous Waste Manifests must be kept for three years from the signature date of the report. A prudent management practice is to maintain the manifest permanently but separately for manifests older than the prior three years.

2. Land Disposal Notification/Certifications

Each waste stream must have a onetime written notice/certification sent to each treatment, storage, disposal or recycling facility with the initial shipment of that waste stream, indicating whether the waste does or does not meet the requirements of 40 CFR 268.40 or 268.45. These forms are kept with the signed manifest copy.

Record Retention of LDRs

Land Disposal Notifications must be kept for three years from the date of the report. These reports should be kept with the manifest copies.

3. Exception Reports

Indiana Tech will contact the TSDRF to determine the status of the waste if a signed copy of the manifest is not received within 30 days. Indiana Tech will submit an exception report to the IDEM and USEPA if a signed copy of the manifest is not received from the receiving (TSDRF) facility within 45 days from the date the waste was accepted by the initial transporter. The exception report consists of the following:

- A legible copy of the manifest for which the generator does not have confirmed delivery.
- A letter indicating that the University hasn't received the TSDRF facility's signed manifest, and

• A cover letter, signed by the generator explaining the efforts taken to locate the hazardous waste and the results of those efforts.

Record Retention of Exception Reports

Exception Reports must be kept for three years from the due date of the report. These reports should be kept with a copy of the manifest in question.

4. Profiles/Waste Analyses Results

Each waste stream must be evaluated to determine if it is a hazardous waste as defined by 40 CFR 261 and Env-Wm 502 and to determine the proper waste code. This can be done by either testing the waste or by applying generator knowledge of the hazardous nature or characteristics of the waste based on the materials and process(s) used to generate the waste. The waste code is determined by understanding how the waste is generated. A waste analysis form or waste profile (developed by the disposal facility) is used to document the hazardous waste determination.

Profile/Waste Analysis Results Record Retention

Test results, waste analyses, profiles, or other determinations must be kept for at least three years from the date that the waste was last sent to a TSDRF. These records should be kept separate from the Land Disposal Notification/Certifications and Manifests.

5. CAA Inspections

Indiana Tech will inspect their CAA weekly. For leaks spills, and accumulation.

D. Reporting

6. Exception Reports

Exception Reports must be kept for **three years** from the due date of the report. These reports should be kept with a copy of the manifest in question.

XV. Emergency Preparedness and Response / Contingency Plan

A. Introduction

Risks associated with the handling of hazardous chemicals include spills, leaks, releases, etc. and are referred to as events. The Hazardous Waste Management Plan is designed to institute methods to prevent hazardous material events. This section outlines the steps to take to ensure that events are effectively and expeditiously managed and risks are controlled. Indiana Tech has developed and implemented an **Emergency Crisis Management Plan** and a **Hazardous Waste Contingency Plan**. These provide information on the actions University personnel will take to minimize hazards to human health and the environment from releases of hazardous waste and identify actions and designate personnel who will respond to emergencies including hazardous material spills. Trained and specially equipped response personnel are available on the campus or are on-call 24 hours per day and can be contacted through the Director of Facilities. A list of emergency contacts and phone numbers is contained near CAA area.

B. Emergency Coordinators

In case of a catastrophic emergency or the need to evacuate, University Fire/Police dispatch must be called. They can be reached by dialing **911**. There is no need to dial "9" from an outside line. Simply dial 911 from any campus phone. Outdoor Emergency Phones communicate directly with Indiana Tech Dispatch. The Director of Facilities or his designee serves as the overall **Disaster/Emergency Coordinator** for all responses to emergency situations. The Emergency Coordinator is responsible for the following:

- Being on the premises or on call at all times (or designee);
- Being available to respond to an emergency by reaching the site of generation or accumulation within a short period of time;
- Developing or coordinating the emergency response plans, site operations and activities;
- Being familiar with location and characteristics of waste handled by the University, location of records, and layout of waste generation sites; and
- Having the authority to commit resources to hazardous waste cleanup and response.

C. Emergency Equipment

Indiana Tech provides the following equipment to control emergencies at or near the CAA:

• An alarmed room with limited access.

• A device, such as a telephone (immediately available) or a cellular telephone, capable of summoning emergency assistance from the police departments, fire departments, or state or local emergency response teams;

• Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and;

• Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems. Indiana Tech has available the listed materials and trains appropriate personnel on the use of the equipment.

D. Posted Emergency Action Information

The following information is posted at the nearest telephone to the CAA:

• Emergency action steps; and

• Emergency phone numbers for: - Emergency coordinator(s) (cell) - Support services (e.g., fire, police, hospital,

- Fire extinguisher location;
- Spill control materials location; and
- Fire and internal emergency alarm locations (if present.)

E. Emergency Procedures

Specific emergency procedures can be found in the **Emergency Crisis Management Plan** and the **Hazardous Waste Contingency Plan**. These plans describe the Actions University personnel will take to minimize hazards to human health and the environment from fires, explosions, or unplanned releases of hazardous waste, and how they will respond to these events.

F. Notification and Reporting

1. Notification

In the event Indiana Tech activates any emergency measures related to hazardous waste the following action will be taken:

• Indiana Tech will notify the USEPA Regional Administrator, and appropriate State and local authorities, that the facility has taken the following action before operations are resumed in the affected area of the facility:

1. That no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

2. All emergency equipment listed in the contingency plan is cleaned and ready for use before operations are resumed.

• Indiana Tech will record the time, date, and details of any incident that requires implementing the contingency plan.

2. Reporting

Indiana Tech will submit a written report of the incident to the Regional Administrator within 15 days after the incident. The report will include the following information:

- Indiana Tech's name, address, and telephone number;
- The date, time, and type of incident (e.g., fire, explosion);
- The name and quantity of material(s) involved;
- The extent of injuries, if any;
- An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- Estimated quantity and disposition of recovered material that resulted from the incident.

Appendix A: CAA Inspection Form

1. Is each drum or container: Answer each question yes or no (y/n)

Closed

In good condition, non-leaking

Labeled and DOT marked

Dated

Logged

2. Are the following available?

Open head drums/closed head drums

Spill response equipment, over pack drum

Hazardous waste drum and accumulation labels

DOT hazard class/division labels

3. Are accumulation drums logged?

- 4. Are lights and exhaust fans working properly?
- 5. Unrestricted access to outside doors?
- 6. Unrestricted access to fire extinguisher?
- 7. Unrestricted access to alarm and telephone?
- 8. Unrestricted access to shower and eyewash?
- 9. Containers stored to prevent release?
- **10.** Is incompatible waste segregated?
- Inspector's initials:

Date:

Time:

Comments:

1. Program Description

The Indiana Tech Universal Waste Management Program (UWMP) provides cost-effective universal waste management programs to assure compliance with all Federal, State and local regulations.

The goals of the Indiana Tech UWMP are to:

1.1 Develop an operational strategy for managing universal wastes generated in teaching laboratories, research laboratories, facilities maintenance, construction operations, and all other organizations within Indiana Tech that will:

1.1.1 Establish consensus for procedures that are practical to carry out, efficient, and cost-effective.1.1.2 Promote excellence in environmental stewardship among students, laboratory employees and other workers, scientists and academic leaders.

1.2 Promote cooperation, understanding, and mutual respect between environmental protection agencies, and academic institutions.

1.3 Develop a plan for implementing procedures for managing universal wastes.

2. Scope

This program applies to all students, staff, and faculty who in the course of their job duties, generate, accumulate, store, or handle universal waste within Indiana Tech.

3. Definitions

EPA - Environmental Protection Agency. RCRA - Resource Conservation and Recovery Act.

4. Responsibilities and Specific Program Components

4.1 Lab personnel and other Indiana Tech staff

4.1.1 Have general knowledge of universal waste.

4.1.2 Be able to identify unusual characteristics.

4.1.3 Identification of universal waste for subsequent handling.

4.1.4 Participate in training programs in order to gain the necessary skills and knowledge from a safety and health perspective.

4.1.5 Follow procedures.

4.2 P.I./Lab manager

- 4.2.1 Convey importance of UWMP.
- 4.2.2 Monitor performance and make corrections.
- 4.2.3 Responsible for day-to-day training, or oversee day-to-day training.
- 4.2.4 Responsible for lab personnel getting proper training and following procedures.
- 4.2.5 Follow-up on audit findings.

4.3 Department Chairs/Dean

4.4 EMS

- 4.4.1 Handle material safely after taking possession from labs, and facilities, until final disposition.
- 4.4.2 Recycle/reuse as appropriate.
- 4.4.3 Manage regulatory compliance and internal finances for waste disposition.
- 4.4.4 Provide program framework for labs.
- 4.4.5 Provide training resources/consultative services.
- 4.4.6 Obtaining and maintaining an EPA identification number.
- 4.4.7 Universal waste manifesting.
- 4.4.8 Manage off-site universal waste transportation requirements.
- 4.4.9 Recordkeeping of the types and amounts of universal wastes generated.
- 4.4.10 Provide spill cleanup and incident mitigation services.

5. Reporting requirements

Universal waste regulations have streamlined hazardous waste management standards for the federal and state universal wastes including: **batteries, mercury thermostats, consumer electronic devices, cathode ray tubes, and lamps**. The regulations govern the collection and management of these widely generated wastes. This facilitates the environmentally sound collection and increases the proper recycling or treatment of the universal wastes mentioned above.

Universal waste regulations also ease the regulatory burden on generators of these wastes. In addition, they also facilitate programs developed to reduce the quantity of these wastes going to municipal solid waste landfills or incinerators. It also assures that the wastes subject to these regulations will go to appropriate treatment or recycling facilities pursuant to the full hazardous waste regulatory controls.

Indiana Tech is a Small Quantity Handler (SQH) of universal waste. The universal waste regulations impose a number of requirements on SQH's of universal waste including:

5.1 Storage time limits

5.1.1 Labs and other areas within Indiana Tech that generate universal waste must follow the quantity and accumulation time limits for universal waste.

5.2 Universal waste labeling

5.3 Closed containers

5.4.1 All universal waste must be appropriately labeled upon the start of accumulation.

6. Information references

6.1

7. External references

Laws and Regulations on Universal Waste Management

Federal Laws

Resource Conservation and Recovery Act (RCRA)	42 USC § 6901-6987
Standards For Universal Waste Management	40 CFR §273

State Regulations

Universal Waste Rule

329 IAC 3.1-16, incorporating 40 CFR 273

Introduction

Properly managing used oil is important for four main reasons:

To protect the environment.

To protect human health.

To protect against liability for environmental damages.

To reuse, rather than waste, a valuable resource.

Used oil, even when not classified as a hazardous waste under RCRA, can have harmful effects if it is released into the environment. In addition, people's health can be affected if used oil is handled improperly.

Superfund regulations allow the federal government to hold any party that created or contributed to the creation of a hazardous waste site (including some used oil) financially responsible for cleanup costs.

Used oil is a valuable resource because it has lubrication value and heat value. When treated to remove contaminants, used oil can be used as a base stock to produce new lubricating oil. Because used oil has heat value it can be burned as fuel. Properly burning the used oil keeps its heat value from being wasted and saves the virgin heating oil that would be burned instead.

Purpose

This plan provides one source of written documentation for used oil records for Indiana Tech. In addition, this plan will inform interested persons, including College and contractor employees, of our compliance with Environmental Protection Agency (EPA) requirements (found at 40 CFR 279) for used oil generators.

This plan provides a written description of used oil management procedures, disposal methods, and transportation requirements. We encourage any suggestions that our employees have for improving our written plan for used oil management, as we are committed to developing and maintaining an effective protocol. We strive for clear understanding, environmentally sound practices, and involvement in the plan from every level of the College.

A copy of Indiana Tech's used oil management plan may be reviewed by employees. It is located in the office of Building and grounds.

Used Oil Defined

The EPA defines used oil as "any oil that has been refined from crude oil or any synthetic oil that has been used and as a result of such use is contaminated by physical or chemical impurities." Used oil can be generated during "do-it-yourself" projects, from automotive sources, or during industrial operations. This includes oils that are used as hydraulic fluid as well as oils that are used to lubricate automobiles and other machinery, cool engines, or suspend materials in industrial processes. Oils used for these purposes can become contaminated with physical materials (such as metal particles from engine wear) or chemical contaminants (such as gasoline combustion products, like toluene).

Used Oil Management

At this facility, we generate used oil from routine maintenance of motor vehicle, snow blowers and lawn mowers. Since we do not mix engine lubrications oil with other wastes it does not contain any contaminants that would preclude it from being recycled.

The University Of Indiana Tech adheres to the following practices. We:

Never dump or dispose of used oil in the trash, in sewers, or on the ground.

Make sure our collection and storage set-up is leak proof, spill proof, and that tanks have lids or are covered to prevent water from entering.

Maintain our collection containers regularly, comply with local fire and safety regulations, and avoid leaks and spills.

Label storage drums "Used Oil." In addition, each drum must have a label with the following information written on it: Waste Oil, Combustible Liquid.

Clean up any used oil spills or leaks. This includes providing soak-up material (e.g., sawdust, kitty litter, or a commercial product) for minor spills. It keeps the area clean and helps prevent personal injury.

Keep records of used oil removed by outside vendors.

Storing Used Oil

Our facility stores used oil in fifty-five gallon drums. We opted for drum storage of our used oil because we accumulate a relatively small amount of used oil each month. This facility follows these storage practices. We:

Never mix used oil with any other material. This facility keeps gasoline, solvents, degreasers, paints, and so on, from making the used oil a hazardous waste and increasing collection costs.

Carefully record the amount of used oil placed into and removed from storage devices. Have constructed secondary containment around our drum so that any spilled oil may be recollected and removed.

Equip storage containers with wide-mouth, long-necked funnels to reduce spills during filling.

Keep sorbent materials such as kitty litter and sawdust to clean up any spills that occur.

Keep the area near the storage devices neat and clean.

Recycling Used Oil

Recycling used oil cashes in on either its lubricating value or heat value. We use this method of management whenever possible because is easier to do and more cost effective than properly disposing of used oil.

At this facility, we recycle our used oil from vehicle maintenance. It is pumped out and taken away by a licensed recycling company because we consider it the most environmentally safe method.

Responding to Releases of Used Oil

Even though all steps have been taken to prevent leaks or spills from occurring, this company is also prepared to respond to spills of used oil. We instruct workers to use the following protocol to manage spills of used oil and provide any necessary equipment:

> Stop the release. This action will vary depending on why the release is occurring. For example, if the spill occurs because a 55-gallon

drum has been knocked over, the drum should be righted to stop more used oil from being released.

If the spill occurs because a valve on a storage device has been left open, the valve should be closed. If a leak is a result of a puncture in the tank or drum, rags or similar materials should be used to plug the leak.

Contain the release. We strive to prevent the used oil that has been released from spreading. For example, a sorbent, such as kitty litter or sawdust, should be spread over the spilled used oil. Clean up the release. Depending on the extent of the release, cleaning up the used oil can be a simple or a complicated task. For small spills on the ground, the soil can be dug up and removed by a licensed cleanup company. (The soil must be tested to determine if it exhibits hazardous characteristics.) For larger spills where puddles of used oil have formed, vacuum-type machinery can be used to collect the used oil before the soil is dug up for disposal. Because releases that contaminate a great deal of soil or ground or surface water are very difficult to clean up, the College maintains a list of professional cleanup vendors to conduct the cleanup operation.

Properly manage the used oil that has been cleaned up. Any leaked or spilled used oil is managed like a hazardous waste under 40 CFR 279.

Properly manage the solid materials generated during the cleanup. We place solid materials used to clean up a spill of used oil into a leak proof storage device. Materials contaminated with used oil are managed in the same manner as hazardous waste.

Contaminated materials that will not be burned for energy are tested to determine if they exhibit hazardous waste characteristics. If they do not test hazardous, they are disposed of in a RCRA subtitle D facility. If they are hazardous, they are disposed of in a RCRA subtitle C facility.

Remove the storage device from service and repair or replace it.

Managing and Disposing of Used Oil Filters

Whenever a mechanic changes the oil in a fleet vehicle, the oil filter is also changed to keep the solid contaminants of the old oil from immediately contaminating the new oil. Used oil filters can contain 10 to 16 ounces of used oil; therefore proper management of this source of used oil is a concern of the University. Used oil filters are not considered a hazardous waste under RCRA if they have been properly drained of oil.

When used oil filters are removed from a warm engine, the mechanic uses the gravity draining method to drain the filter.

We store our drained used oil filters in a covered, rainproof container to prevent used oil from being washed from the filters to the surrounding environment. Our used oil filters are properly disposed of.

Shipping/Transporting Used Oil

The used oil management standards define a used oil transporter as "any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities". The University of Indiana Tech has chosen Action Environmental to transport used oil. Our transporter has an EPA ID number and complies with all relevant used oil regulations, including keeping tracking records of where the used oil is collected and where it will be transported to. When working with our transporter, we:

Know that the hauler has an EPA ID number.

Check our used oil hauler's qualifications to make sure the hauler takes the oil to a reputable recycling operation.

Measure the level of oil in a tank before and after the hauler collects it to be certain the oil collected matches the amount the hauler reports collecting.

Make sure a company representative signs and dates the hauler's tracking sheet.

Ask for a receipt from the transporter that states how much used oil was collected from our facility and where the used oil will be taken. (These records are not required under the used oil management standards, but may be useful should a problem arise.) Make sure that the hauler maintains storage tanks/containers; labels containers "Used Oil"; stores used oil over oil-impervious surfaces; has secondary containment structures in place; stores used oil for no more than 35 days; tests waste in out-of-service tanks; closes out-ofservice tanks containing hazardous waste according to EPA standards.

Employee Training

Although training is not strictly required under the regulations, we have designated Director of Facilities Management to train personnel who will handle used oil. Direct any questions concerning used oil training to the Director of Facilities Management.

Under this plan, employees are informed of used oil management procedures relevant to the positions in which they work. This training occurs on the job.

Recordkeeping

The Building and grounds Department is responsible for keeping and maintaining copies of the Waste Oil forms.

Maintaining the Plan

The Chemical Safety Coordinator is responsible for:

Conducting periodic site audits. Keeping records of all inspections and reports. Updating the plan as needed by incorporating any necessary changes resulting from major changes in our facility's operation or maintenance.