

05-19

UWvel Appr 9/20/05

Senate Info 5/2/06

Undergraduate Distance Education Review Form

(Required for all courses taught by distance education for more than one-third of teaching contact hours.)

Existing and Special Topics Course

Course: SAFE 441/541 Accident Investigation

Instructor(s) of Record: Mr. Philip Rivers

Phone: 357-3019

Email: privers@iup.edu

Step One: Proposer

A. Provide a brief narrative rationale for each of the items, A1- A5.

1. How is/are the instructor(s) qualified in the distance education delivery method as well as the discipline?
2. How will each objective in the course be met using distance education technologies?
3. How will instructor-student and student-student, if applicable, interaction take place?
4. How will student achievement be evaluated?
5. How will academic honesty for tests and assignments be addressed?

B. Submit to the department or its curriculum committee the responses to items A1-A5, the current official syllabus of record, along with the instructor developed online version of the syllabus, and the sample lesson. This lesson should clearly demonstrate how the distance education instructional format adequately assists students to meet a course objective(s) using online or distance technology. It should relate to one concrete topic area indicated on the syllabus.

Step Two: Departmental/Dean Approval

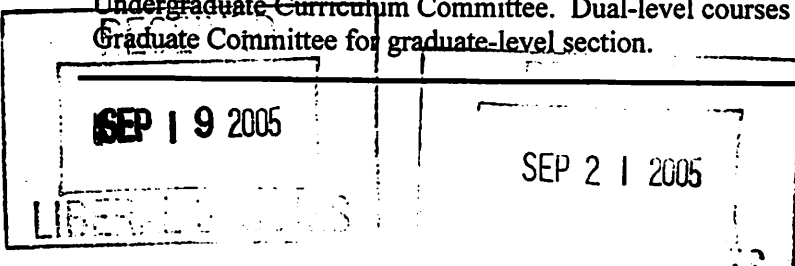
Recommendation: Positive (The objectives of this course can be met via distance education)

Negative

Lois H. Ferguson 9/15/05
 Signature of Department Designee Date

Endorsed: *Parleen C. Zoni* 9-15-05
 Signature of College Dean Date

Forward form and supporting materials to Liberal Studies Office for consideration by the University-wide Undergraduate Curriculum Committee. Dual-level courses also require review by the University-wide Graduate Committee for graduate-level section.



Step Three: University-wide Undergraduate Curriculum Committee Approval

Recommendation: Positive (The objectives of this course can be met via distance education)

Negative

Gail S. Sechrist Sept. 20, 2005
Signature of Committee Co-Chair Date

Forward form and supporting materials to the Provost within 30 calendar days after received by committee.

Step Four: Provost Approval

Approved as distance education course

Rejected as distance education course

Mark Puzos 10/18/05
Signature of Provost Date

Forward form and supporting materials to Associate Provost.

A. Provide a brief narrative rationale for each of the items, A1- A5.

1. How is/are the instructor(s) qualified in the distance education delivery method as well as the discipline?

Mr. Philip Rivers will be an instructor for this class. Mr. Rivers is an Associate Professor with over 28 years of teaching experience in the Safety Sciences Department at IUP. Prior to IUP, Mr. Rivers spent a number of years as a safety manager with Westinghouse. Mr. Rivers has taught numerous distance education courses at IUP.

2. How will each objective in the course be met using distance education technologies?

The online course will consist of course material presented on-line through WebCT, on-line quizzes, required readings and assignments, and required weekly Chat Room participation also through the use of WebCT.

1. Develop a model of loss incident causation that will account for basic (immediate) and root or underlying causes of loss incidents know as Management System Deficiencies (MSDs).

Students will be presented with various loss incident causation models in the on-line course contents, readings, and assignments. Students will be required to assimilate the various accident causes into one model that accounts for root causes related to management system deficiencies.

2. Investigate a loss incident to find the MSDs of loss incidents

Students will be provided with case study information pertaining to various loss incidents throughout the semester. They will be required to apply the techniques presented in the on-line course contents, readings, and assignments to determine the MSDs pertaining to the accidents.

3. Develop causal maps of loss incidents.

Students will be provided with techniques used to develop causal maps of loss incidents. When provided with case study information pertaining to various loss incidents, students will be required to apply the techniques presented in the on-line course contents, readings, and assignments and develop causal maps for various accidents.

4. Develop loss incident reports that contain recommendations of specific preventive actions to specific managers.

Students will be provided with techniques used to develop professional accident loss incident reports. When provided with case study information pertaining to various loss incidents, students will be required to apply the techniques presented in the on-line course contents, readings, and assignments and develop the professional reports and appropriate recommendations to prevent the accidents from occurring in the future.

5. Develop a loss incident scenario for a fictitious company and enter the investigative data onto the Loss Management Information System (LoMIS).

Students will be able to access the Loss Management Information System (LoMIS) accident investigation software through their Web browser while in the online course. With this software, students will be able to enter data and analyze it .

6. Use a rubric to rate supervisors on how well they investigate a loss incident and complete a Loss Incident Source Document (LISD).

Students will be provided with techniques used to develop rating tools designed to evaluate those responsible for conducting accident investigations in the workplace. Students will be required to apply the techniques presented in the on-line course contents, readings, and assignments to develop an appropriate supervisory rating tool.

3. How will instructor-student and student-student, if applicable, interaction take place?

Students will be required to actively participate in on-line discussions. There will be questions embedded in the notes as well as weekly postings by the instructor. Students will critique each other's work and the professor will manage the discussion. Students will participate in live chat room discussions within groups assigned to work on collaborative projects. Instructor will be available at regular times for contact via telephone, email, or chat room.

4. How will student achievement be evaluated?

Multiple assessment techniques will be used to evaluate student achievement. They will include at a minimum the following:

- Timed tests using WebCT with password protection
- Weekly assignments posted to the bulletin board
- Comprehensive collaborative projects
- Individual projects assigned to students and submitted via email
- Chat room contributions by students
- Chapter summaries and synthesizing of content, posted to the database

5. How will academic honesty for tests and assignments be addressed?

On-line quizzes will be administered through WebCT. The quizzes will be designed in a manner such that items will be randomly selected from a pool of quiz items so that no two quizzes will be identical.

Students will be required to submit assignments via email and hard copy to the instructor. In the weekly chat rooms, students will be required to converse with the instructor as to the status of their projects and assignments.

Graduate Distance Education Review Form

(Required for all courses taught by distance education for more than one-third of teaching contact hours)

Existing and Special Topics Course

TITLE of PROPOSAL: SAFE 441/541: Accident Investigation

DEPARTMENT: Safety Sciences

PERSON: Dr. Chris Janicak (cjanicak@iup.edu)

Step One: Department or its Curriculum Committee

The committee has reviewed the proposal to offer the above course using distance education technology, and responds to the CBA criteria as follows:

1. Will an instructor who is qualified in the distance education delivery method as well as the discipline teach the course? X Yes No
2. Will the technology serve as a suitable substitute for the traditional classroom? X Yes No
3. Are there suitable opportunities for interaction between the instructor and student? X Yes No
4. a. Will there be suitable methods used to evaluate student achievement? X Yes No
b. Have reasonable efforts been made to insure the integrity of evaluation methods (academic honesty) X Yes No
5. Recommendation:
 X Positive (The objectives of the course can be met via distance education.)
 Negative



signature of department designee

9/15/05

date

If positive recommendation, immediately forward copies of this form and attached materials to Provost and Graduate Committee. Dual-level courses also require review by UWUCC for undergraduate-level offering. Send information copies to 1) dean of the college, 2) Dean of Continuing Education and 3) Dean of Graduate School and Research. Forward this form to the Provost within 24 calendar days after receipt by committee.

Step Two: GRADUATE COMMITTEE

Positive recommendation

Negative recommendation

10/18/05
date


signature of committee chair

Forward this form to the Provost within 24 calendar days after review by committee.

Step Three: Provost

Approved as distance education course

Rejected as distance education course

date

signature of Provost

Step Four:

Forward materials to Dean of the School of Continuing Education, who will inform appropriate offices.

05-19

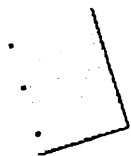
Follow these instructions to post your ideas and respond to your classmates' postings.

Instructions for using the Discussions tool

Overview: The **Discussions** tool allows students and instructors to send, and search for messages. Discussions are divided into various topics your instructor has created based upon discussion groups or around particular subjects. Topics can be public or private. Everyone in your course can access public topics, while private topics are available only to the set of students instructor chooses. While in the **Discussions** tool it is often helpful to click **Help** link located in the top right corner of your course window to access additional directions on using the **Discussions** tool. Please carefully read steps below to access individual topics, view messages and attached documents and reply to messages. Feel free to print this page.

1.

Discussions



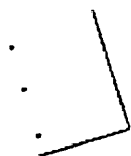
Instructions for using the Discussions tool



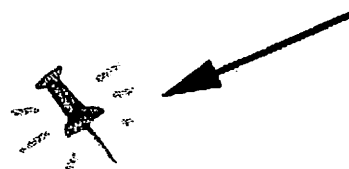
Discussions

Click on the **Discussions** icon.

Discussions



Instructions for using the Discussions tool



Discussions

Please note: If you receive a new discussion message your Discussions

will appear like the one above.

2.

Discussions

Compose message | **Search** | **Topic settings**

Click on a topic name to see its messages.

Topic	Unread	Total	Status
Main	0	0	public, unlocked
Notes	0	0	public, unlocked
Chat Room Postings	1	1	public, unlocked
Subsystem Signup	0	0	public, unlocked
Audit Device Evaluation Questions	0	0	public, unlocked
All	1	1	---

Click on a topic title.

3.

Discussion Messages: Chat Room Postings

Compose message | **Update listing** | **Search** | **Mark all as read** | Message op

1. → **Display:** All Unread | Threaded Unthreaded

2. → **Select topic:** Chat Room Postings

3. → **Status** **Subject** **Author**

1/1 **August 29 Chat Room Discu...**

August 29 Chat Room Discu... **Philip Rivers (SA623FA01PR)**

5. →

A discussion topic is best viewed when **ALL** the messages are displayed as **THREADED**. Follow the numbered steps above to set the optimal display to access a message. When replying to your instructor posting, click the message link for **Philip Rivers**. After you reply to a message click the **U listing** button (Step 4.) to update the entire topic list.

4.

Subject: Re: Corporate Culture (Exhibit 3-2, Text Page 52)

Message no. 9 [Reply of: no. 3]





Author: Stephanie Crane (F16)

Date: Wednesday, July 13, 2005 3:46pm

I couldn't just copy and paste my paper out of word so I sent it as an attach

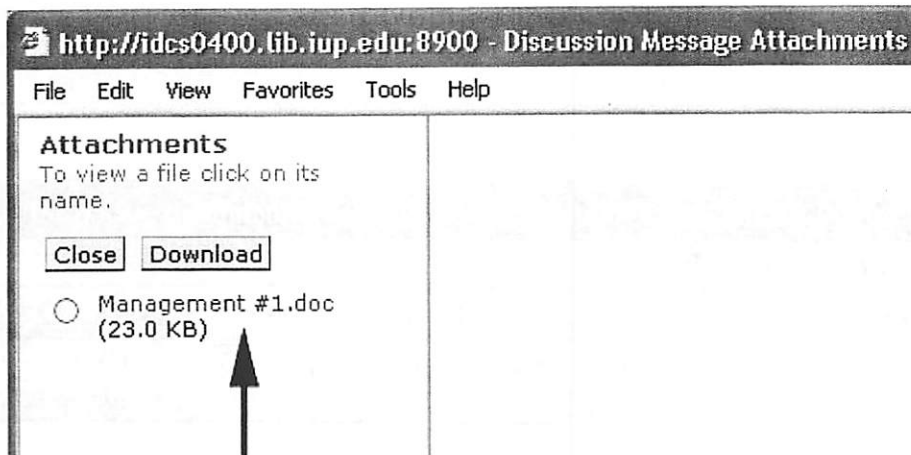
 [See Attached](#)

[Reply](#) [Reply privately](#) [Quote](#) [Download](#) [Close](#)

Click the **See Attached** link. Please note: Not all messages will have an attached file associated with it. If you do not see a link indicating an attached file exists disregard this step and proceed to the **Reply** directions below.

5.



The screenshot shows a web browser window with the address bar containing "http://idcs0400.lib.iup.edu:8900 - Discussion Message Attachments". The browser has a menu bar with "File", "Edit", "View", "Favorites", "Tools", and "Help". Below the menu bar is a section titled "Attachments" with the instruction "To view a file click on its name." There are two buttons: "Close" and "Download". Below these buttons is a list of attachments, with one entry: "Management #1.doc (23.0 KB)". A black arrow points upwards to the file name.

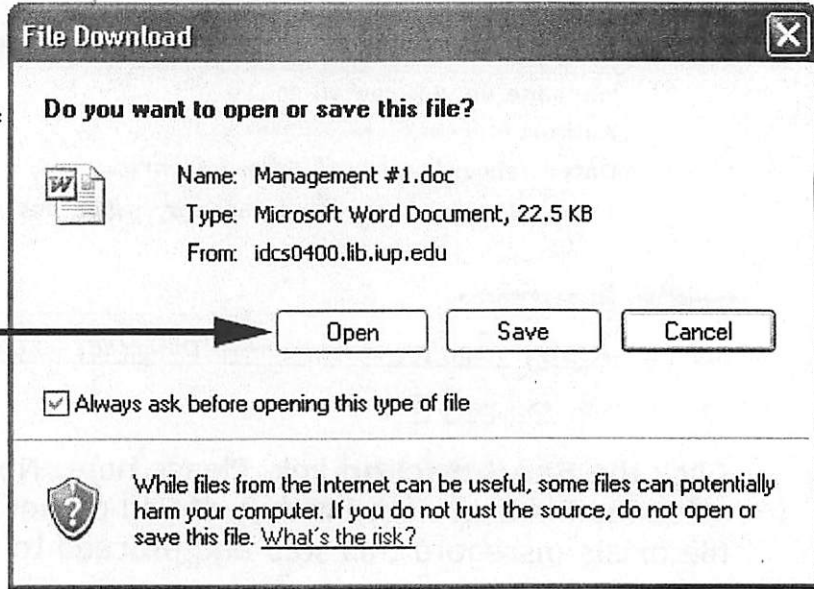
Click on the file name.

6.

Attachments

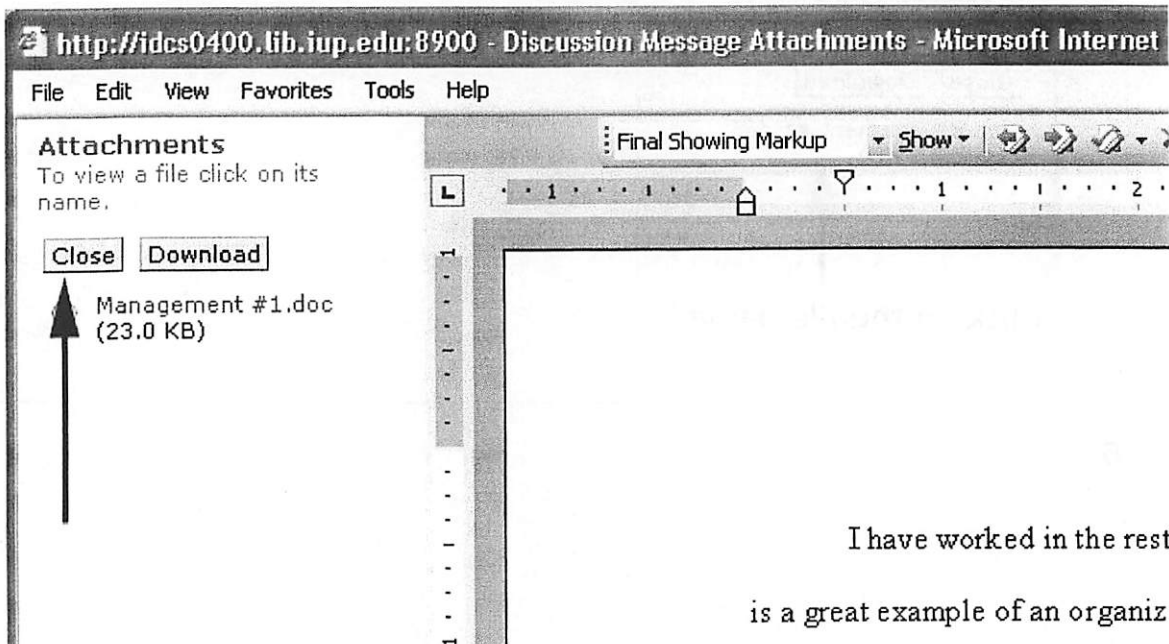
To view a file click on its name.

Management #1.doc
(23.0 KB)



If the attached file is a Microsoft Word document a File Download window appear. Click the **Open** button. If the attached file is an HTML document automatically appear in the right window pane.

7.



The document will appear in the right window pane. After viewing the att file click the **Close** button.

8.

Subject: Re: Corporate Culture (Exhibit 3-2, Text Page 52)

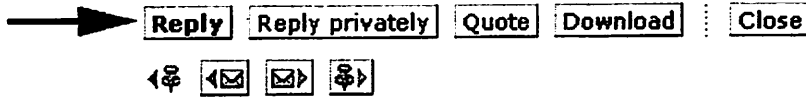
Message no. 9 [Reply of: no. 3]

Author: [Name]

Date: Wednesday, July 13, 2005 3:46pm

I couldn't just copy and paste my paper out of word so I sent it as an attac

See Attached



After viewing the message click the **Reply** button.

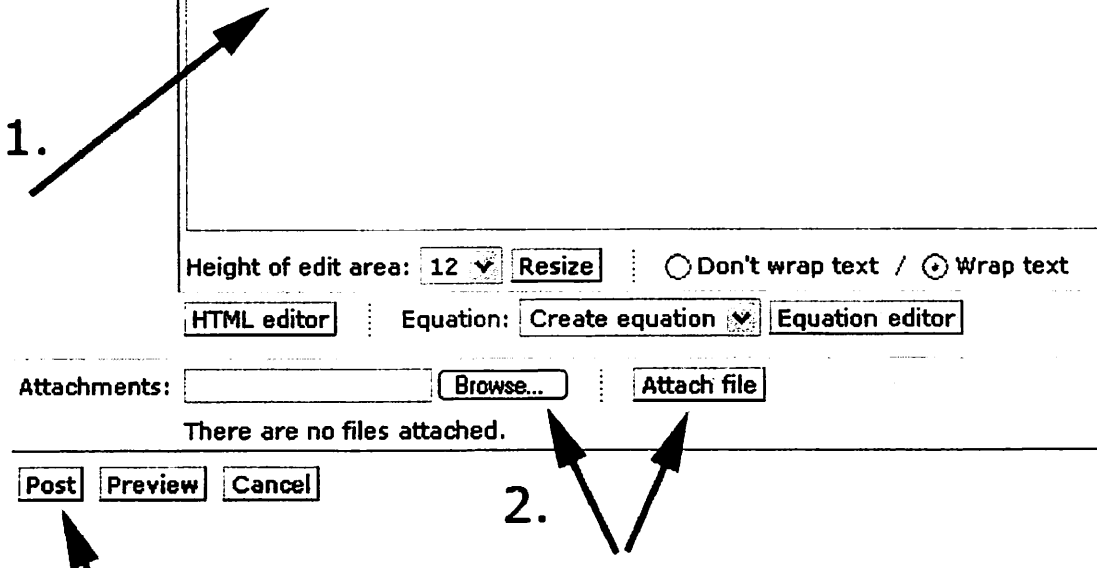
9.

Reply to Message: 9

Topic: Assignment 1 Chapters 1 - 3

Subject: Re: Corporate Culture (Exhibit 3-2, Text Page 52)

Message:



Enter your reply in the reply message area, attach a file (if necessary) at the **Post** button. Please note: It is often helpful (and beneficial) to first type your response messages in Microsoft Word (because it has a good spell checker) then copy/paste your message into the reply message area and the **Post** button.

10.

Discussion Messages: Chat Room Postings

[Compose message](#)[Update listing](#)[Search](#)[Mark all as read](#)

Message options

Display:	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> Unread	<input checked="" type="checkbox"/> Threaded	<input checked="" type="checkbox"/> Unthreaded
Select topic:	Chat Room Postings			<input type="button" value="Go"/>
Status	<input type="checkbox"/>	Subject	Author	Date
▼ 1/1	<input type="checkbox"/>	<input checked="" type="checkbox"/> August 29 Chat Room Discu...		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	August 29 Chat Room Discu...	Philip Rivers (SA623FA01PR)	Augi

Click the **Update Listing** button to update the topic view. Repeat steps as necessary.

safety or industrial accident prevention certainly the word accident and its definition must be addressed first. William C. Pope in his book, *Managing for Performance Perfection: The Changing Emphasis*, discussed the problems associated with using the word accident in the business world (Pope: 106-108). The word accident has three common meanings, all of which do not fit, in the business world.

Unplanned and Unexpected Event

First, many define accident as an unplanned, unexpected event that may or may not result in injury or property damage (Bird 1966: 23) (Grimaldi: 10) (Marshall: 6) (Strasser: 4). Using this definition is misleading because when a manager is asked to take action to prevent accidents, he is left wondering, "How can I prevent something that is unexpected and unplanned?" In reality if a manager does not plan to prevent accidents, he or she is planning to have accidents occur. For example, if a manager decides to save money by providing only 30 foot-candles of light in a machine shop, she or he is planning to have accidents due to the poor lighting levels and should expect them. If an employer wishes to save money by not providing guards on equipment, this employer is planning to have injuries from nip points and should expect them. Such accidents are planned and should be expected.

Event without Causes

A second common definition is an occurrence that had no cause, used as; "It was an accident," meaning that it happened by chance. A manager holding this definition continues to feel

helpless when asked to prevent accidents. The question he must be asking himself is, "How can I prevent something that happens by chance?"

Someone Is at Fault

A third common meaning is an event that someone caused by 'being at fault.' This is usually used in legal matters such as, "The other driver was at fault. That is why I'm taking him to court." When the manager holding this definition is asked to prevent accidents, she will believe that her employees are at fault. When asked to prevent accidents, she will ask, "How can I stop employees from injuring themselves? I can't control the behavior of employees who don't care about their own safety."

New Term Needed

We must remember that to take a word like accident with three common meanings, none of which fit in the world of business that is only concerned about profit and loss, is to begin with a handicap. Trying to re-educate managers that accident causes go well beyond the actions of the injured person can prove difficult at best and impossible at worst. Giving the word accident a new meaning is a doomed effort, because people hold within themselves the meaning of words. When they hear the word accident, they will have the common meaning of the word arise in their minds regardless of how many times we try to have them think of our new definition.

Therefore, those of us interested in reducing events that are costly to our employers must substitute a term that does not have the baggage of meanings that runs contrary to the goal of business enterprises. The term we choose must contain in its meaning the truth that these events have causes that can be controlled. Finally, this term must conjure up in the minds of managers that the events named by this term produce financial losses detrimental to the financial health of the organization.

Loss Incident

Frank Bird in his book, *Management Guide to Loss Control* uses the term downgrading incident (Bird 1974: 18). Using the word incident instead of accident removes the negative connotation of an event occurring by chance or by someone being at fault.

Profits and Losses

Rather than using the word downgrading to describe incident, a better word to use is loss because all enterprises, both for-profit and not-for-profit, do not want losses. Transferring this meaning to business is a good fit. Businesses want profits. Non-profit organizations want to remain financially solvent. One way to increase profits in the former or to preserve capital to meet the goal of the latter is to decrease losses. Therefore, as any organization leader would conclude, in order to increase profits or to remain financially solvent, she or he must reduce the number of loss incidents that occur.

Release of Energy

Now we must give the term loss incident a definition that has managers believe that they possess the authority and the ability to prevent loss incidents. Michael Zabetakis uses a term

"Unplanned release of energy" as the cause of accidents (Heinrich: 32). When the event that causes injuries and damage is studied, we can see that it is an uncontrolled release of energy that causes the injury or damage, not the accident. Therefore, it is the release of energy that is the event (accident) itself, not the cause of the event. For example, a wrench falling from above contains kinetic energy. The falling wrench is the loss incident, because the falling wrench is uncontrolled kinetic energy. The injury results at the moment of contact when the wrench strikes someone on the head.

Unplanned versus Uncontrolled

Zabetakis uses the word "unplanned" instead of "uncontrolled" release of energy. This is a big difference. Unplanned seems to imply something happening by chance; whereas, uncontrolled implies something that occurs because we did not exercise proper control. It is this latter meaning that we want managers to hold. By using the word uncontrolled in the definition, managers need only take the small step to believe, "If I control my energy sources, I will prevent loss incidents."

Therefore loss incident is defined as, "An uncontrolled release of energy."

Placing Results in Definition

Perhaps we should include within the definition something about what can result from the uncontrolled release of energy. Bird defines accident as a "... contact with a source of energy (i.e.: kinetic, electrical, chemical, thermal, etc.) above the threshold limit of the body or structure." (Bird, 1974:15). To expand on the latter part of his definition, "above the threshold limit of the body or structure," to include environmental pollution, the following is suggested. A loss incident is an uncontrolled release of energy, the amount of which exceeds the person's, property's, or environment's ability to absorb the energy and immediately return to his/her/its original state."

This definition describes what the event is, an uncontrolled release of energy. It also states what can result; an injury, an illness, property loss, or environmental pollution if the amount of energy contacting a person, property or the environment exceeds that entity's ability to absorb the energy and return immediately to its original state. And most importantly, the definition says that the event is uncontrolled energy and, therefore, it follows that in order to prevent the loss incidents, managers must control their energy sources.

I will not dwell on the latter part of this definition, "... the amount of which exceeds that person's, property's, or environment's ability to absorb the energy and immediately return to his/her/its original state." I'll leave this up to trauma specialists, toxicologists, engineers and ecologists to do so. Rather, I want to take us in the direction of what causes energy to be released uncontrollably so that we can identify and prevent the causes of loss incidents from occurring and thus prevent the loss incidents themselves from ever occurring. I will, however, talk about the types of energy that can be released uncontrollably. In order for managers to control their energy sources, they need to understand the energy types that, if released uncontrollably, will result in injuries, illnesses, property loss and environmental pollution. Any of these results will cost the organization money, thus the reason for including the word loss in loss incident.

Types of Energy

Thirteen types of energy can be released uncontrollably that may downgrade the condition of whomever or whatever the energy contacts. Figure 1-1 shows these energy types. It could be argued that some of the definitions and examples of energy types overlap. It can also be argued that the last energy type, theft/vandalism/terrorist energy, is not really a type of energy. That's Ok! I'm not trying to be scientifically accurate. I want, instead to let you know all the possible energy releases that can cause financial losses in a business setting.

Kinetic Energy is the energy contained in an object that is moving. Examples of such moving objects are industrial trucks, a projectile from a grinding wheel, and a wrench falling from an overhead crane. Obviously, as the energy from let's say a moving forklift truck is transferred to a person being struck, the seriousness of the resulting injury will be determined by how much energy the object transfers to the person at the moment of impact, the angle of the impact, where on the body the contact is made plus other variables.

Chemical Energy is the power of a chemical to react with the chemicals making up the object with which the chemical contacts. Obviously, certain acids and caustics can react strongly with various parts of a human being as well as machines, equipment, and the environment. Toxic materials entering the body via absorption, ingestion, or inhalation acutely or chronically can harm the person systemically or locally.

Thermal Energy or heat can cause heat stroke or can manifest itself in the form of fire, which can destroy people, property and the environment.

Electrical Energy can cause the heart to fibrillate or can convert itself into heat energy and severely burn a person

Mechanical Energy is really kinetic energy contained within moving parts of machines such as gears, pulleys, and rotating shafts.

Ionizing Radiation Energy is made up of alpha and beta particles and gamma rays given off by radioactive material and x-rays given off by cathode ray tubes.

Non-ionizing Radiation Energy includes electromagnetic waves within the frequency known as laser light and microwaves.

Meteorological Energy is the energy contained in the various ways that weather is created. This energy category is kinetic energy. The kinetic energy is carried in moving air in the form of wind, carried in moving water in the form of waves and rushing rivers, and in the earth's crusts in the form of earthquakes.

Types of Energy Involved in Loss Incidents

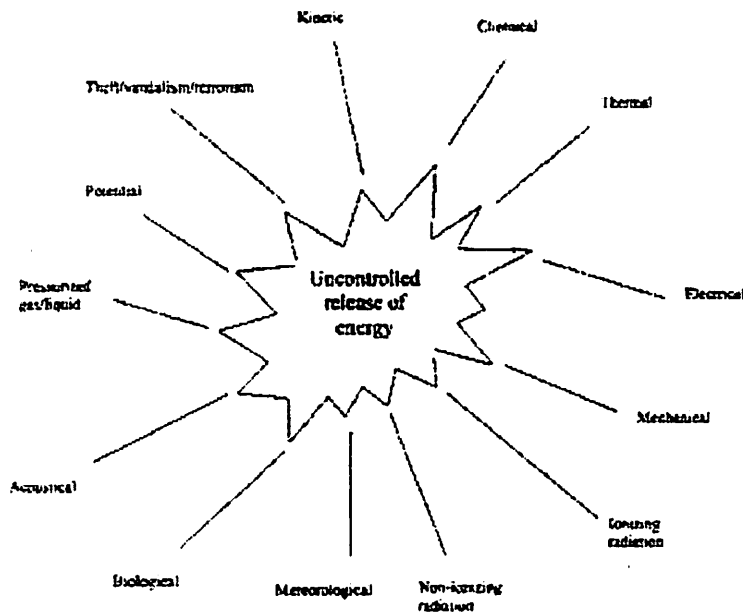


Figure 1-1

Biological Energy is made up of the destructive power of bacteria and viruses. OSHA has recognized these deleterious effects by promulgating the bloodborne pathogens standard.

Acoustical Energy is noise energy, which in sufficient duration and intensity can damage the hearing function. This could be carried further to include vibration energy that could affect a person's muscular-skeletal structure.

Pressurized Energy in the forms of pressurized gases and liquids. One only has to witness a compressed gas cylinder that has had its valve severed from the cylinder moving as a missile through concrete walls to understand the power in this energy type. Of course the impact of the moving cylinder is considered kinetic energy and the energy stored in the gas or liquid is considered potential energy. Since we're trying to have managers be able to identify loss incidents as uncontrolled releases of energy, it is worthwhile to categorize compressed gases and liquids as a separate energy type.

Potential Energy is the energy within an object at rest as opposed to kinetic energy, which is the energy within a moving object. Potential energy from a loss incident standpoint is found in objects that people try to lift (back injuries) or in a flywheel that could cycle when the machine is shut off causing crushing injuries.

Theft/vandalism/terrorist Energy is the energy expended by employees and non-employees to steal or destroy company resources. This latter energy type is included because it is necessary to address if we want to take a total-loss-incident-prevention approach.

Results of Loss Incidents

After having defined the types of energy that make up loss incidents, it is logical to look at the types of losses that can result from loss incidents. From a financial liability standpoint, an uncontrolled release of energy can result in injury, illness, property loss, and environmental pollution.

Immediate Results

When a loss incident occurs and someone is injured, we can call this loss incident an injury incident. Likewise, a loss incident resulting in an employee illness would be called an illness incident, a loss incident resulting in property loss would be a property loss incident and one resulting in environmental pollution would be a pollution incident.

We can also have the situation where energy is released uncontrollably and no one or no property is nearby or the release is contained before it can negatively affect the environment. For the lack of a better term, we can use Bird's term and call these situations near-loss incidents (Bird 1974, 18). One problem exists with calling them near-loss incidents. The term implies that no money is lost, which may not be the case. An example of a near-loss incident resulting in a financial loss is a piece of scrap lumber falling from an overhead crane walkway, nearly striking an employee. No one was hurt, no property was damaged, and the environment was not polluted. Yet, employees who witnessed the incident will shut off their machines and come over to discuss the incident, thus resulting in equipment downtime and productive work lost. Two costs incidentally that we can measure.

Financial Losses

Many authors in the field talk about the insured/uninsured cost ratio. That is to say for every dollar of insured costs of loss incidents a certain number of uninsured or hidden costs are incurred as well. This text will discuss only those costs that can be documented and measured. Only those costs that can be used to motivate management action to take action to control energy sources will be covered. These cost categories are: workers compensation, government fines, litigation costs, material and equipment rental and replacement, contractor and maintenance labor-to-repair, product damage, productive work lost, overtime, and production downtime.

Partial Loss Incident Sequence

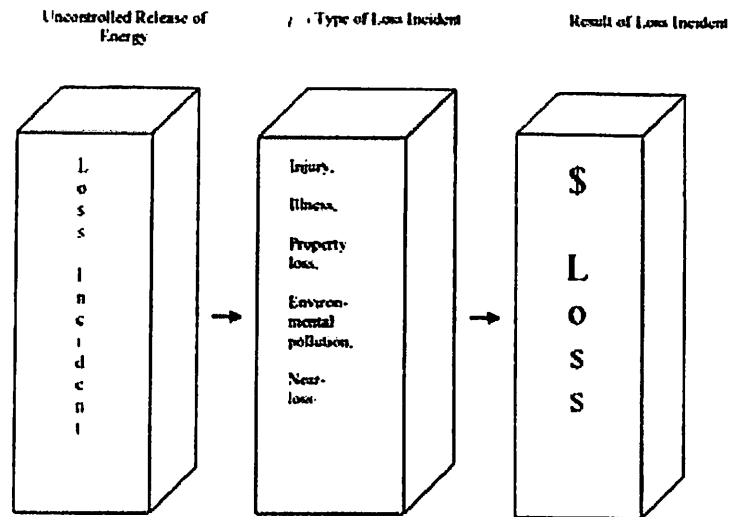


Figure 1-2

Let's put the ideas and definitions that we've just discussed thus far into a partial loss incident sequence. The sequence in Figure 1-2 shows that the loss incident can result in an injury, an illness, property loss, environmental pollution, or a near-loss. All of these results end up costing the organization money. When we begin discussing the causes of loss incidents, the remainder of the sequence will be given.



Introduction to Activity 2

What Do We Call Ourselves?

Now that we've looked at the need to rid ourselves of using the word accident and, instead, use the term loss incident to describe the event where energy is released uncontrollably. We need to look at the word safety that is commonly used to name the activities that are designed to prevent loss incidents.

Safety

In the discussion of not using safety to describe the activities used to preserve the human, material and financial resources of our employers, Pope gives convincing arguments for dropping the use of safety (Pope: 103-06). Bird gives reasons to call the effort loss control (Bird 1985:8). The reader can refer to these texts for Pope's and Bird's arguments. I will

present my own arguments for dropping the word safety.

Let's play the Sesame Street game of which one doesn't belong. Looking at a manufacturing setting and stating which one doesn't belong: production, productivity improvement, product quality, and safety, it's pretty clear that safety doesn't belong. When we're thinking about production, productivity improvement, and product quality, safety is not a business term. Sure, there's OSHA, but so what? That is a government agency mandating safety. If safety were truly part of business, it wouldn't have to be forced down the throat of businesses. After all, there is no Occupational Quality Assurance Act, no Occupational Productivity Improvement Act, and no Occupational Production Act mandating that businesses comply with the standards promulgated under these fictitious laws. Why not? Because managers understand the value of production, productivity improvement, and quality in turning a profit. They see safety as a necessary cost of doing business, not an effort that pays financial dividends.

Have you ever asked yourself why so many companies have their safety person report to the human resources manager? I worked for the human resources managers for two of my three employers. I had nothing in common with my HR colleagues. I asked one of my HR bosses, "Why is safety in the HR department?" His response was, "We hired a consultant who conducted an attitude survey of our work force. The employees said that management didn't care about their safety. You were hired to keep our guys safe and to show our workforce that management cares about them." I was in the HR departments because this fortune 500 company saw safety as an employee benefit! As long as we're seen as providing an employee benefit, like medical coverage, we're doomed to be the administrators of a safety program to benefit our employees, rather than administrators of a function that helps managers turn a profit.

Activity 2

Post on the **Discussion** tool what better term we should use to describe what we do: a term that fits with an enterprise that is trying to make a profit. Explain your rationale. You can also respond to your classmates' postings.

Answer to Activity 2

Loss Prevention

Frank Bird, Jr. quotes Louis Allen, the author of *The Management Profession*, "Minimizing loss is as much improvement as maximizing of profit." (Bird 1985:8) We must pull ourselves out from under the yolk of being viewed as an employee benefit. If we are to move our function to its rightful place along side of production, productivity, and product quality, we, first of all, must drop the very limiting and ambiguous word *safety* and adopt a term that fits business. I submit that the term should be loss prevention. Our charge is clear. Meeting Allen's charge, we manage a function that prevents losses that detract from our employer achieving a profit. Our charge is to guide management on ways to preserve the human, material and financial resources of our employer. In the game of which one doesn't belong, let's pick the effort, which does not help our employer make a profit: production, productivity improvement, product quality, and loss prevention. The answer is that they all belong.

Introduction to Activity 3

What is the Scope of Our Prevention Efforts?

Many times what we do is stated in terms of the "safety program." Saying that we administer a program makes it sound like what we do is very small and unimportant. Even if we say we administer the loss prevention program, it still doesn't do justice to the magnitude and importance of our job of preserving the human, monetary, and material resources of our employer. In reality we administer many programs that make up the loss prevention function. Your task is to define the scope of the loss prevention function by naming individual programs that are designed to prevent losses. There are five general program areas: injury prevention programs, illness prevention programs, property loss prevention programs, environmental protection programs, and a catchall called general programs. This latter program area contains those procedures that cut across two or more of the previously mentioned programs. For example, the loss incident investigation procedure would fall within this last program area, because this procedure would be used if an injury, illness, property loss, environmental pollution or near-loss incident resulted.

Activity 3

Post on the Discussion tool the names all the programs that fit into each of the five general program areas stated below and the name of one procedure that would be in each of your programs.

Scope

Injury Prevention Programs . The program titles within this scope area are based upon the category of people that we want to protect. When we think of all possible injuries from a liability standpoint, we see that we must have six distinct injury prevention programs.

Illness Prevention Programs. We title our illness prevention programs by the agents we need to control so that our employees are not made ill by being exposed.

Property Loss Prevention Programs. The names of these programs depend on the type of property we want to protect or the agent that could damage the property. A Fire Protection Program is an example of the latter.

Environmental Protection Programs. Some of these programs are named for the environmental media we want to protect or for the pollutant we need to control.

General Programs. The programs in this subdivision contain procedures that overlap with two or more program areas stated above.

Answers to Activity 3

Injury Prevention Programs . The program titles within this scope area are based upon the
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category of people that we want to protect. When we think of all possible injuries from a liability standpoint, we see that we must have six distinct injury prevention programs. Obviously, since we want to prevent losses to our human resources, we need to have an On-the-Job Injury Prevention Program. Because we provide medical coverage to our employees and their immediate families, we should have an Off-the-Job Employee and Immediate Family Injury Prevention Program. Because we are not protected from lawsuits from visitors and contractor employees, we need two further programs: Visitor Injury Prevention and Contractor Injury Prevention. If we produce a product that a consumer can buy and if the consumer could be injured or made ill from our product, we need a Consumer Protection Program or also called Product Liability Protection Program. And finally, if members of the public could be injured by our operations, we need a Public Injury Prevention Program. An example of this latter area is a program that I was involved in developing when I worked for a company that used tremendous amounts of chlorine gas. The plant was located in a river valley. We had to work with other industries and the local county government, city officials and emergency rescue organizations to develop procedures of what to do if chlorine gas were discharged into the atmosphere.

Illness Prevention Programs. We title our illness prevention programs by the agents we need to control so that our employees are not made ill by being exposed. The most involved program for most employers is the Toxic Materials Control Program to protect our employees from chemical energy. We must have a Hearing Conservation Program to protect our employees from noise energy. An Infection Control Program will protect our employees from viruses and bacteria. This program is common in hospitals. Having Ionizing Radiation Protection Programs and Non-ionizing Radiation Protection Programs are essential to protect our employees from radiation energy. A Heat Stress Prevention Program protects our employees from heat energy.

Property Loss Prevention Programs. The names of these programs depend on the type of property we want to protect or the agent that could damage the property. A Fire Protection Program is an example of the latter. A Product Damage Prevention Program protects our product from being damaged during and after the production process. Equipment and Facility Damage Prevention Program, a Fleet Damage Prevention Program and a Disaster Preparedness Program are designed to protect property from non-fire related causes. A Theft, Vandalism and Terrorist Prevention Program rounds out the Property Loss Prevention Programs needed to protect against incurring property loss costs.

Environmental Protection Programs. Some of these programs are named for the environmental media we want to protect such as the Air Pollution Prevention Program and the Water Pollution Prevention Program. Other environmental protection programs are named for the agent that could be a pollutant, such as the Radioactive Materials Control Program, the Hazardous Materials Control Program, and the Noise Pollution Prevention Program. This last program is to prevent noise produced from our operations that might disturb members of the nearby community.

General Programs. The programs in this subdivision contain procedures that overlap with two or more program areas. Examples are the Accountability Measurement Program and the Loss Incident Investigation Program. I've placed the Ergonomics Program here as well. Although ergonomics is the science of preventing injuries from repetitive motion, I think it deserves to be considered a separate program, because the injuries result from minor traumas over a long period of time and exposure to vibration which is tied to noise.

Program Procedures

As mentioned earlier, a program is made up of various procedures all designed to meet the objectives of the program. Each of the programs is listed with some procedure titles given as examples of the procedures that would naturally fall within the program. The following procedures would be interdepartmental procedures because they need personnel from two or more departments to meet the procedures' objectives. Intradepartmental procedure examples follow the program procedure examples below.

Injury Prevention Programs

On-the-Job Injury Prevention Program

Lock Out Procedure

Confined Space Entry Procedure

Obtaining Prescription Safety Glasses Procedure

Employee-empowered Behavior Reinforcement

Off-the Job Employee and Immediate Family Injury Prevention Program

Purchasing Fire Extinguishers Procedure

Defensive Driver Training Course

Obtaining Prescription Safety Glasses for Family Immediate Family Members

Contractor Injury Prevention Program

Specifying the Loss Prevention Job Requirements during the Project Meeting

Project Superintendent Loss Prevention Orientation Procedure

Determining Compliance to Loss Prevention Specifications

Visitor Injury Prevention Program

Visitor Sign in and Orientation

Accounting for Visitors during a Plant Evacuation

Public Injury Prevention Program

Determining Wind Direction and Discharge Amount

Notification of the Public Officials of a Chlorine Gas Leak

Consumer Protection Program

Product Defect Notification

Product Recall

Occupational Illness Prevention Programs

Toxic Materials Control Program

Hazard Communication Procedure

Respirator Fit Testing Procedure

Hearing Conservation Program

Audiometric Testing Procedure

Purchasing Equipment with Noise Reduction Design Procedure

Infection Control Program

Bloodborne Pathogens Procedure

Universal Precautions for Handling Body Fluids

Ionizing Radiation Protection

TLD Monitoring Procedure

Compiling Exposure Records for Employees Working in Radiation Areas

Non-ionizing Radiation Protection Program

Determining Microwave Leakage

Obtaining Eye Protection for Laser Beams

Heat Stress Prevention Program

Acclimatization Procedure

Taking WBGT Readings Procedures

Property Loss Prevention Programs

Fire Protection Program

Assembling the Fire Brigade Procedure

Fighting a Site Fire during the Daylight Shift Procedure

Product Damage Prevention Program

Determining Product Damage Incidents Procedure

Collecting Costs of Product Damage

Equipment and Facility Damage Prevention Program,

Determining E & F Damage Incidents Procedure

Collecting Costs of E & F Damage

Fleet Damage Prevention Program

Pre-Trip Inspection Procedure

Defensive Driver Recertification Procedure

Disaster Preparedness Program

Dealing with a Flood Procedure

Plant Evacuation Procedure

Vandalism and Theft Prevention Program

Key Issuing Procedure

Dealing with an Unauthorized Entry Procedure

Environmental Protection Programs

Air Pollution Prevention Program

Stack Scrubber Maintenance Procedure

Water Pollution Prevention Program

Waste Water Heat Control Procedure

Radioactive Materials Control Program

Collecting and Storage for Disposal Procedure

Hazardous Materials Control Program

Hazardous Waste Disposal Procedure

Noise Pollution Prevention Program.

Muffler Inspection Procedure

General Programs

Accountability Measurement Program

Measuring Line Managers' Performance

Measuring Supervisors' Performance

Loss Incident Investigation Program

Data Collection Procedure

Taking Corrective Action Procedure

Ergonomics Program

Ergonomics Committee Charter

Purchasing Ergonomically Sound Hand Tools Procedure

Introduction to Activity 4

What is the Scope of Our Prevention Efforts - Part 2?

The programs outlined in Activity 3 state the obvious scope of the loss prevention function. Less obvious and just as important are the intradepartmental procedures that must be in place. These are the procedures that each department should - I would say "must"- have in place to prevent loss incidents. In fact, when departments don't have these intradepartmental procedures in place, the lack of these procedures end up being the causes of loss incidents.

Activity 4

Post on the Discussion tool the name of one intradepartmental procedure each of the following departments should have in place to prevent loss incidents. I want each of you to post a procedure title for each department.

Human Resources

Process Engineering (This is the engineering group responsible for designing the

manufacturing process.

Facilities Engineering (Responsible the building design)

Maintenance

Purchasing

Legal

Accounting

Scheduling

Quality Control or Assurance

Sales and Marketing

Answers to Activity 4

Intradepartmental Loss Prevention Procedures

The intradepartmental procedures are organized by the departments that should have each example procedure in place.

Human Resources Department

Employee Annual Physical Examinations Procedure

New Employee Orientation Procedure

Process Engineering Department

Specifying Guarding on All Newly Purchased Equipment Procedure

Procedure for Writing Standard Operating Procedures

Facilities Engineering Department

Specifying Fire Suppression Systems in New Buildings Procedure

Designing Floor Loading Rates Procedure

Maintenance Department

Fire Extinguisher Inspection Procedure

Ventilation Systems Inspection Procedure

Purchasing Department

Determining the Freight on Board, F.O.B, of Hazardous Materials Procedure

Securing a Material Safety Data Sheet for Each Chemical Purchased Procedure

Legal Department

Seeking Retribution from Manufacturer of Faulty Equipment Procedure

Procedure for Reviewing Quality Control Procedures

Accounting Department Procedure

Determining the Labor-to-repair Costs of Loss Incidents Procedure

Determining the Production Downtime Costs of Loss Incidents

Scheduling Department

Material Ordering Procedure for Just-in-time Delivery

Determining Preventive Maintenance Schedule

Quality Assurance

Random Inspection of Incoming Materials

Periodic Inspection of Hydraulic Valves

Sales and Marketing

Procedure for Determining a Realistic Product Delivery Date

Procedure for Maintaining Sales Log for Product Recall

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