



WORKING ALONE SAFELY

CPPI Guidance Document

August 2005

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Working Alone Safely

CPPI - Guidance Document

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1. INTRODUCTION

Most provinces and territories have regulations or guidelines that impact employees who work or drive alone. This Guide is intended to assist employers to comply with provincial and territorial requirements. It covers employees of the oil industry's Retail and Bulk Plant Operations and those oil company employees who may "drive alone" as a condition of their employment.

The safety requirements require employers to have responsibilities for minimizing and eliminating risks associated with employees who work alone. This Guide outlines employers' obligations and how those employers can meet those requirements. In most jurisdictions, employers are required to assess their workplace and take preventative measures that eliminate or minimize risks when their employees work alone. They are also required to ensure employees working alone have some way of communicating with individuals who can respond immediately to any emergency situation.

To help employers develop effective health and safety programs in their workplaces, this document provides a practical guide that describes general "best practices" recognized and followed by businesses with effective programs in place to make their workplaces safe.

2. LEGISLATION

The responsibilities of employers, with respect to employees who work alone, are found in the Safety & Health Acts and Regulations in most provinces and territories. The requirements vary from jurisdiction to jurisdiction and as such, it is recommended that CPPI members become familiar with the specific requirements of each jurisdiction.

Regulatory Overview

In general, the requirements follow a similar approach. The employer must:

(1) Conduct a Hazard Assessment

Employers must examine and identify existing or potential safety hazards in the workplace. The assessment must be in writing and communicated to all affected staff. Where practicable, employers must also involve affected employees in conducting the hazard assessment, and in the elimination, reduction or control of the identified hazards.

(2) Eliminate or Reduce the Risks

Employers must take practical steps to eliminate the hazards identified in the hazard assessment. If it is not practicable to do so, employers must implement procedures to reduce or control the hazards.

(3) Establish an Effective Means of Communication

Employers must have a communication system for employees to contact other people who can respond to the employees' need. The system must be appropriate to the hazards involved.

(4) Ensure Employees are Trained & Educated

Employers must ensure their employees are trained and educated so they can perform their jobs safely. Employees must be made aware of the hazards of working alone and the preventative steps that can be taken to reduce or eliminate potential risks.

These rules take into account a wide variety of situations where employees work alone.

Their intent is to require employers to consider the hazards specific to their work sites and to adopt safety measures that address these hazards.

3. WORKING ALONE SITUATIONS

Employees who work alone can be grouped into three broad categories:

- (1) Employees who handle cash. This includes convenience store clerks, service station and food outlet employees.
- (2) Employees who travel away from a base office to meet clients. This includes retail & wholesale Territory Managers/Sales Representatives and bulk fuel & fertilizer/chemical delivery drivers.
- (3) Employees who do hazardous work but have no routine interaction with customers and co-workers. This category refers primarily to tasks done on site at bulk plants.

Each of these situations has different hazards and ways to control them.

This Guide contains recommended strategies and generic checklists. See Appendices 1, 2, 3, and 4, to assist employers to mitigate risk in three categories of working alone situations.

Employers should refer to the category and checklist appropriate to their operation for the review of the practices on hazard assessment, hazard prevention, training and education. Employers are invited to add additional items to the checklist.

4. HOW TO GET STARTED

To help employers make workplaces safer for employees, the first task is to complete a hazard assessment appropriate to the type of business. To assist employers to do a hazard assessment, this Guide contains a generic risk/hazard assessment and checklists that may be helpful during a workplace site inspection and analysis:

Appendix 1 - “Retail Facility Self-Assessment”

Appendix 2 - “Bulk Plant Facility Self-Assessment”

Appendix 3 - “Driving Alone Self-Assessment” and,

Appendix 4 - “Generic Risk/Hazard Assessment”

Hazard Assessment

A work site hazard assessment is a common sense look at the workplace to find existing hazards for employees working alone.

Employers need to:

- review records and past experiences, and
- identify measures or actions needed to correct any hazards.

Completing these two initial steps is important in the success of any health and safety prevention program. Many regulations also require employers to involve their staff in this process. Even in provinces where it is not mandatory to involve employees in the hazard assessment, it is strongly recommended this be done.

If employers have limited experience in this area, or are unsure of what measures they can take, they may wish to contact outside experts such as a health and safety consultant.

For retail businesses, employers may wish to contact the Crime Prevention Unit at their local police service.

Review of Records & Past Incidents

When identifying workplace hazards, employers should talk to their employees and review the experience of the business over the previous two or three years. This involves collecting and examining the history of past events that may reveal the risk of workplace violence and injury. Consider what happened before and during the incident and note the relevant details of the situation and its outcome. Employers should check with similar businesses if they do not have personal experience of past incidents.

Employers should also see if there are apparent trends in injuries or incidents relating to a particular work site, job title, activity, or time of day or week. Employers should identify specific tasks that may be associated with increased risk.

Some good sources to check include injury and illness records resulting from “working alone” incidents, employees’ compensation claims, and police robbery reports that identify specific incidents related to working alone.

Inspect & Analyze The Work Site

After reviewing records or past incidents, employers need to carefully examine the workplace, day-to-day management practices and other situations that may put employees at risk. This will help employers to develop and put in place specific preventative measures to address these problems.

An employer’s review should look at:

- all factors that may make the risk of violence more likely, such as physical features of the building and environment, lighting deficiencies, lack of telephones and other communication devices, areas of unsecured access, and areas with known security problems (eg. parking lots).
- factors that make the risk of occupational injury more likely or severe, such as high hazard work (eg. climbing price signs, storage tanks and fuel trucks), isolation from first aid services, and inability to call for help.
- the effectiveness of existing safety measures. Find out whether those measures are being used and whether employees have been adequately trained in their use.

5. BEST PRACTICES

General

Best practices for any health and safety program and for situations where employees work alone involve:

- **Management's commitment to the health and safety of their employees.** Any incidents that occur at the workplace should be investigated and the employer should take corrective action. Wherever possible, employers are encouraged to work with their staff to develop sound and practical safety procedures that are clearly understood and followed.
- **Assessing the hazards of the workplace.** To start building an effective safety program, the employer needs to take into account the business or area's incident history. Employers should also assess aspects of the physical layout of the workplace that prevent staff from doing their jobs properly.
- **Taking corrective actions or measures to prevent or minimize hazards or incidents from occurring.**
- **Training and educating staff so they can perform their jobs effectively.**
- **Investigating an incident that has been reported by employees and following through with measures that will prevent the incident from occurring again.**
- **Evaluating safety measures on a regular basis to ensure that these measures work, taking into account any new changes in your business operation.**

Working Alone

Some best practices are common to all working alone situations. These include proper employee training and having an effective communications system so that employees who are working alone can easily contact someone in case of an emergency. These measures are effective in reducing the risk associated with working alone.

There are additional ways employers can minimize the risk for employees who are working alone.

It may be possible to eliminate any hazards of working alone by re-arranging work schedules. However, requiring two employees may not be practical or effective in some situations. Employers have to weigh all factors to decide the most effective approach to achieve employee safety.

For employees who work alone or in isolation from co-workers, there is a risk by intruders. Employees in this category include retail attendants, one-person bulk plant operations, custodians and security guards. Site security is therefore, the most important control measure. The following control measures should be taken by the employer to reduce the risk:

- **Safe Work Procedure** - The employer should have safe work procedures directing employees to check the security of the work site at the beginning and at the end of the

shift. The procedures should also include how to behave when confronted with an intruder.

- **Site Security** - A secure facility with a proper security system is the primary defense against break-ins. A combination of remote and personal alarms and video surveillance may be used in the security system. Windows and doors should be secured with heavy duty locks and suitable barriers. Employers should consider improving the security of windows and doors.

Cash Handling

The primary risk to employees who handle money and valuables is the potential of violence. The main motivating factor is robbery. Research has shown that retail service stations have an elevated risk of robbery and workplace assault.

A considerable amount of research has been done on different controls aimed at reducing the risk of workplace violence and robbery.

The following strategies should be included in any program:

- **Cash Handling** - Businesses that take steps to reduce the amount of cash on hand, (through the use of devices such as drop safes) and who publicize the fact; lower the incentive for robbers to select them as a target. A good cash control policy is considered the most effective deterrent measure.
- **Good Visibility** - If a business can place its cash handling in an area of high visibility, the chances of robbery can be greatly decreased. The ideal sales counter location should be visible from all four sides, from both the inside and outside of the store. Counters should be located in front of windows with good visibility from the outside and away from walls.
- **Robbery Awareness Training** - Employees and employers can act to reduce their risk of robbery if they are trained what to do. For instance:
 - Robbers prefer to get in and out quickly when the store has no other customers. If employees are trained to be away from the sales counter when no sales are being made, it makes the business a less attractive target.
- **Escape and Access Routes** - Lack of escape and access routes often discourage a robbery. The side or back door should be locked from the outside at all times with only the main entrance accessible to customers. This practice also prevents robbers from entering the store undetected. However, Fire Code Regulations must be taken into consideration. If exits are near well-lighted areas or visible to the public, this reduces the appeal of the store as a potential robbery site.

- **Security Systems** - Robbers do not want to be identified and security systems are a good deterrent. Typical security systems available include video surveillance cameras, alarms (personal and remote), mirrors, observation windows and height markers. Businesses should advertise their security measures to increase their effectiveness.
- **Protective Shielding** - Although not commonly used in business, protective shielding can be a control measure in reducing the risk of violence. The physical barrier provides some protection to employees and makes it more difficult for robbers to intimidate victims. This might be an appropriate tool in high-risk situations.

Driving Alone

Some of the risk to employees who drive alone involves injuries from motor vehicle accidents. The risk is greater when employees cannot communicate in remote areas or are unable to summon help. The prevention strategies for this situation focus on safety on the road.

The following strategies should be addressed in the overall management of the risk:

- **Safe Work Procedure** - Employees must have full concentration on the road when travelling alone. An employer should allow sufficient rest time for employees who are travelling on long trips.
- **Equipment and Supplies** - Well-maintained vehicles prevent exposing employees to unnecessary risk. Appropriate first aid and emergency supplies should be provided.
- **Travel Plan** - An employer should consider a procedure appropriate to the hazards to track the whereabouts of their employees. The travel plan submitted by the employee can be used to assess the rest time available to the employee travelling alone. If employees are working alone in a remote location, the employer should establish a procedure to ensure their whereabouts can be determined. An “overdue employee” procedure should also be in place for locating employees.

Hazardous Work

Employees, who perform hazardous work alone, without routine interaction with other employees and the public, may be unable to get immediate help. The primary prevention strategy is to control the hazards associated with the work.

The following prevention strategies are essential in reducing the risks associated with this type of working alone situation:

- **Safe Work Procedure** - Having written safe work procedures for hazardous work is essential. They provide standard instructions to all employees to carry out the work safely.
- **Equipment Safety** - The employer should ensure that employees use equipment as intended and according to the manufacturer’s specification. All equipment used at a work site should be maintained in good working condition, whether or not it is being used in a

“working alone” situation. High hazard equipment should have a dead-man switch to prevent accidental activation of the equipment. The switch should always be in good working order.

- **Equipment and Supplies** - In addition to proper equipment, appropriate first aid and emergency supplies should be provided to employees who are working alone at a work site.

Communication

The means of securing assistance for a person working alone in the event of injury or other misfortune must consider the degree of risk. Higher risk situations might require special systems and more frequent contact than lower risk ones. The following examples might be of assistance in developing a plan:

- **Periodic Telephone Contact** - Use of the telephone for communication at regular intervals may be adequate in low-risk working alone situations. Telephone numbers for routine calling and emergency situations would have to be posted prominently. The intervals between these contacts would have to be determined by the estimated hazards at the workplace. Maintenance of a “Working Alone Log” of calls made, recording number, date, and time should be kept on file at the location.
- **Personal Check by Another Person** - In working alone instances, checking the worker's well-being may be achieved by periodic visits at regular intervals by an individual, such as the employer, another worker or a designated person. The length of time between checks will depend on the estimated hazard of the job function.
- **Surveillance Systems** - When considering the use of surveillance equipment to accommodate the working alone situation, systems in use at the workplace may be modified to monitor an employee who is working alone, as well as, the status of the workplace itself. Many workplaces utilize personal pagers, two-way radios, visual monitoring systems, and similar equipment but it is important to consider the suitability of the systems and worker's needs. For example, if an employee is deaf, visible alarms should be provided. The use of cellular telephones or two-way-radios, when employees are driving alone, should consider the range of these devices.
- **Central Monitoring** - The development of protection and assistance plans for workers working alone may include an arrangement whereby the activities of those required to work alone are monitored by a person or facility designed for that purpose.

Appendix 1

Retail Facility Self-Assessment¹

DATE:	OIL COMPANY AND FACILITY NAME:	
SITE ADDRESS:		
<div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; margin-bottom: 5px;"></div>		
OPERATOR'S NAME:		
HOURS OF OPERATION:	NUMBER OF FULL TIME EMPLOYEES:	NUMBER OF PART TIME EMPLOYEES:

Part 1 - Crime History

How many crimes of violence have occurred at this site in the past 24 months?

- Armed Robbery _____
- Physical Assault _____

If you have had two or more armed robberies or one or more physical assaults on any of your employees in the past 12 months, a review of your cash handling procedures, more stringent physical security measures and additional staff training should be considered.

How do your local police rate the level of crime in your area?

Crimes against persons: Low _____ Medium _____ High _____
 Crimes against property: Low _____ Medium _____ High _____

If the police in your area rate crimes against persons medium or high, ensure that your staff training is adequate and current, cash handling procedures are strictly adhered to, and physical security measures are adequate.

- | Yes | No | N/A | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do you report all crime losses to police? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do you report all losses to your oil company security department? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do you review all incidents to identify and correct deficiencies? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do you discuss all incidents with your staff and seek their input? |

¹ The purpose of this Assessment is to assist retail operators to identify safety and security issues.

Part 2 - Cash Handling Procedures

Cash is the number one draw for the criminal element. Therefore, keeping the amount of cash on hand to a minimum is the best defense against robbery.

Yes No N/A

- | | | | |
|--------------------------|--------------------------|--------------------------|--|
| | | | How many cash registers are on site? _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do only the cash registers in use have a float? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the float kept at a minimum? |
| | | | How much is the float? Daytime \$_____ Evenings \$_____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the cash currently in the drawer within \$20.00 of the float? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are employees trained in proper cash handling procedures? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do employees get cash handling refresher training at least every six months? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do spot checks ensure staff follows procedures? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are the results of spot checks noted in an employee's file? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there a safe to accept after hour deposits? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the safe bolted to the floor? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the safe in good condition? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the safe opened only when it is safe to do so? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the safe ever left unlocked? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the safe's combination changed occasionally? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the safe's combination changed when a staff member who has the combination quits? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the schedule of cash handling altered from time to time? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is cash always counted in a locked office? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the time that cash is counted varied from time to time? |
| | | | How are interruptions during cash counting dealt with? |
| | | | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is cash ever left unattended? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is a bank deposit made at least once a day? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the person making bank deposits accompanied? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the bank deposit schedule varied from time to time? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are all cash shortages investigated? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are all employee cash shortages recorded in the employee's file? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Have employees been trained on what to do when approached by an armed robber? |

It is an employer's responsibility to identify and document issues that arise and the actions taken to correct or modify the issue.

Part 3 - Site Conditions

How a business looks from both the exterior and the interior is an important part of crime prevention. A place of business that looks well maintained and well managed is less likely to be a victim of a robbery, a break in or a theft.

Exterior:

Yes No N/A

- | | | | |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the entrance easily seen from the street? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the facility well maintained, tidy and free of debris? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there an easily distinguished parking area? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the building, and are doors and windows in good condition? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there an electromagnetic locking device on the front door? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is lighting around pump islands adequate? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are lights in good condition? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is lighting in parking areas adequate? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are lights in good condition? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is lighting at building entrances adequate? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are lights in good condition? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are there dark or shadow areas anywhere on the facility? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are there motion-activated lights in areas of concern? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are vulnerable lights protected from vandalism? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does the facility have fencing? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is fencing adequate? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is it in good repair? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are all fence entrances visible to staff at the pay points? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Have entrances been used for criminal access? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are all entrances necessary? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does fencing restrict visibility to areas of concern? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does fencing create hazardous shadows or dark areas? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does facility have shrubbery? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does shrubbery restrict visibility? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does shrubbery create hazardous shadows or dark areas? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is shrubbery neatly trimmed at all times? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the facility near schools, which could result in swarming? |

Interior:

Yes No N/A

- | | | | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are all exterior doors equipped with hydraulic door closers? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are hydraulic door closers adequate and in good condition? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is back door ever left propped open? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does shelving have good visibility throughout the store? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are mirrors installed to improve visibility? |
| | | | Are security decals in place and highly visible? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “Height Bar at Door” |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “Attendant Cannot Open Safe” |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “No Bills Larger Than \$20.00” |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “Premises Protected by Alarm System” |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “Shoplifters Will be Prosecuted” |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “Robbery Prevention Program in Effect” |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “Less Than \$100.00 on Hand” |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “Make That Drop” |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is lighting adequate? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are lights in good repair? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | At night, are there glass reflections that impair external visibility? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are lines of sight kept clear of obstructions? |

It is an employer’s responsibility to identify and document issues that arise and document the actions taken to correct or mitigate the issue.

Part 4 - Communications

At sites where people work alone, it is essential to ensure that the lone worker has a means of communicating emergencies and summoning help.

It is important that people have a means to communicate with other people who can provide assistance when a problem arises. The site’s risk level will dictate the level of communication required.

Having only a telephone may not be suitable if Part 1 of this checklist determines the site to be high-risk. In such cases, there may be need for additional communication options.

- eg. 1) Personal security pendants.^{2,3}
- 2) Mutual aid agreements with other area businesses to maintain regular visual or telephone contact.

² Personal panic alarm pendants which can be carried by a person at all times allow for dispatching of police and/or EMS in the event a person is unable to use the phone. Regularly check to ensure lone workers wear the pendant.

³ It is critical that people understand under what circumstances they are to activate a pendant.

3) Placing of regular telephone calls to another retail facility.

Yes No N/A

- | | | | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Have workers been trained on emergency response procedures? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do workers know where to find emergency contact numbers? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are all emergency contact numbers current and valid? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do you test people on their understanding of emergency response? |

It is an employer's responsibility to identify and document issues that arise and document the actions taken to correct or mitigate the issue.

Part 5 - Alarms and Closed Circuit Television (CCTV) Systems

Panic alarm systems can provide immediate response for staff in danger. Use a reputable, well-established service provider that can ensure quick response.

CCTV systems act as a strong deterrent to criminal activity (eg. robbery, break-in, shoplifting, etc.) and can provide police with good evidence should a crime occur. However, CCTV systems can not replace the need to ensure proper robbery prevention programs are in place.

Alarm Hardware:

Yes No N/A

- | | | | |
|--------------------------|--------------------------|--------------------------|--|
| | | | How many false alarms have occurred in the past 12 months? _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does the system have a record of good reliability? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the system easy for staff to learn and operate? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the system tested on a regular basis? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are all false alarms investigated? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Have false alarm issues been resolved? |

CCTV Systems:

Yes No N/A

- | | | | |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the service provider reputable and stable? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the recording device secured in the office? |
| | | | How many consecutive days of tapes retained? _____ Days |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are tapes replaced regularly, eg. Every 6 months? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are CCTV monitors clearly visible to customers? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are cameras free of obstructions, eg. signage, displays, etc? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are cameras located such that they deter robbers and provide comfort and security to customers and staff? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the system inspected and cleaned at least annually? |

It is an employer's responsibility to identify and document issues that arise and document the actions taken to correct or mitigate the issue.

Part 6 - Employee Feedback/Training

Some provinces require that you include employees in the Self-Assessment process and that they be given feedback on the results and subsequent hazards and risks. However, even without a regulatory requirement, it is recommended employees be involved in the process as their participation is critical to the program's success.

Some provinces require that a workplace review been done on a regular basis. It is an employer's responsibility to ensure the work place is in compliance⁴.

Every employee should have an employee record that contains, among other things, the dates, type and purpose of training each received and employee feedback.

Safe Work Procedures:

Yes No N/A

- | | | | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do you have a safe work procedure for the hazardous work? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Have you developed a safe work procedure with the involvement of the affected employees? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there a procedure requiring employees to sign out before a job and to provide information on a travelling plan and an estimated time of return? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there a procedure for the employee to check-in prior to and at the end of the planned activities at the site? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do employees have adequate rest periods between work periods when they are traveling alone? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there any hazard tasks identified that employees have been instructed not to perform? |

Employee Training:

Yes No N/A

- | | | | |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are employees properly trained and competent to work alone safely? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are employees aware of the increased risk of working alone? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do you provide working alone training to employees? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Strategies used by the business to discourage robberies? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | How to behave during a robbery attempt? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Proper maintenance of the alarm and CCTV system? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do employees know how to get timely assistance when needed? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the employee's knowledge tested at the end of the orientation program? |
| | | | Others? Specify: _____ |

⁴ Information can be obtained from the provincial Department of Labour.

Part 7 - Equipment

Equipment Safety:

- | Yes | No | N/A | |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do you ensure equipment is in good working condition prior to being used on a work site (eg. safe, dip sticks, emergency shut down switches)? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does all equipment used by employees meet regulatory standards? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is equipment being used in accordance with the manufacturer's specifications? |

Equipment & Supplies:

- | Yes | No | N/A | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does the site have appropriate first aid supplies? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do employees know where to access first aid supplies and are the employees trained on its use? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do employees have appropriate personal protective equipment?
eg. day glow vests, communication capabilities, etc. |

It is an employer's responsibility to identify and document issues that arise and document the actions taken to correct or mitigate the issue.

Appendix 2

Bulk Plant Self-Assessment

DATE:	OIL COMPANY AND FACILITY NAME:	
SITE ADDRESS: _____		
OPERATOR'S NAME:		
HOURS OF OPERATION:	NUMBER OF FULL TIME EMPLOYEES:	NUMBER OF PART TIME EMPLOYEES:

The following will assist employers to implement best practices for employees handling cash.

Part 1 - Cash & Merchandise Control

- | Yes | No | N/A | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there a policy to control cash and valuables in the workplace? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there a procedure to minimize cash-on-hand? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there a drop safe to limit the cash-on-hand to less than \$50? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are signs posted notifying the public that limited cash is kept on the premises? |

Part 2 - Visibility

- | Yes | No | N/A | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there good workplace visibility to discourage robbery? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are windows clear of signs or posters to provide clear visibility of cash handling areas? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the cash register located near the centre front of the business clearly visible to people from outside? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the cash register visible from all sides? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are shelves and counters low enough for good visibility throughout the premises? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are indoor lights effective and are they working properly? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is the building entrance clearly visible from the street and free of heavy shrub growth? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are after dark work areas well lit? eg. off loaders, load rack, parking lots |

Part 3 - Security System

- | Yes | No | N/A | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there a security system at the work site? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are signs posted to publicize the use of security systems? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | In choosing a security system, was consideration given to: <ul style="list-style-type: none"> ▪ Video surveillance cameras ▪ Personal alarm pendants Are security decals posted? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “Height Bar on the Front Door Jamb” |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “Attendant Cannot Open Safe” |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “No Bills Larger Than \$50” |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “Premises Protected by Alarm System” |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “Robbery Prevention Program in Effect” |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | “Shoplifters Will be prosecuted” |

The following will assist employers to implement best practices for employees at hazardous jobs.

Part 4 - Communication

- | Yes | No | N/A | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do employees have an effective method of contacting others capable of responding when employees need immediate assistance? |
| | | | Does the method of communication involve one or more of the following? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Regular Telephone |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Cell Phone |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Radio Contact with Designated Person |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there a policy requiring employees to check-in at scheduled times? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there an alarm system that would alert other employees? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do employees carry a personal alarm system? eg. Personal Pendant |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are there regular security patrols? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are there agreements with a nearby business to maintain regular visual and/or telephone contact? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are emergency telephone numbers (police, employer, etc.) prominently displayed and readily accessible by the employees? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are numbers confirmed at least bi-annually? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there an “overdue employee” procedure to initiate searches for employees who fail to report in? |
| | | | Others? Specify: _____ |

Part 5 - Equipment

Equipment Safety:

Yes No N/A

- | | | | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is all equipment in good working condition?, eg. fall arresters, tank ladders, spill response materials, machinery guards, emergency shut down switches, etc.? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does all equipment and machinery used by employees meet regulatory standards? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is equipment and machinery used in accordance with the manufacturer's specifications? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do all vehicles used by employees undergo a regular maintenance program? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is a dead-man switch or emergency shut down (ESD) switch used in high hazard machinery to prevent unintentional activation? |

Equipment & Supplies:

Yes No N/A

- | | | | |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do you provide employees with the appropriate first aid supplies? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do employees carry appropriate first aid supplies? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are they trained to provide first aid? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do employees carry appropriate personal protective equipment? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do employees carry emergency supplies if they work in remote areas? |

Part 6 - Employee Feedback/Training

Safe Work Procedures:

Yes No N/A

- | | | | |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are there written safe work procedures for all hazardous work? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Was the safe work procedure developed with the involvement of the affected employees? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Are there a procedure requiring employees to advise someone when they leave, to provide a travel plan and an estimated time of return? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there a procedure for the employee to check-in prior to and at the end of hazardous site activities? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Do employees have adequate rest periods when their job requires driving alone? |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Is there any hazard tasks identified that employees have been instructed not to perform? |

Appendix 3

Driving Alone Self-Assessment

This checklist will assist employers and employees to identify those hazards associated with driving alone for prolonged periods and without interaction from customers and/or co-workers. Once identified, the employer and employee should jointly develop and implement a program to mitigate identified hazards and reduce the corresponding risk.

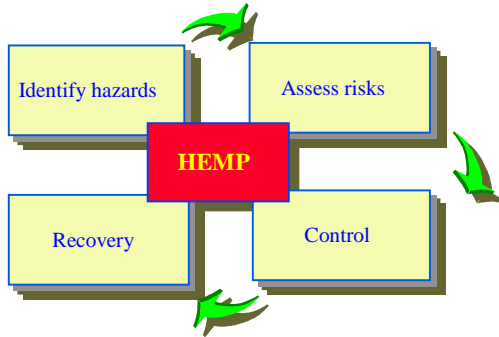
Yes	No	N/A	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is there a written safe work practice for employees driving alone? If yes, how often is it reviewed for relevancy and where is it maintained? <hr/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are employees aware of the risks associated with driving alone and have they been trained to reduce or eliminate the risk? If yes, when and what training have they received? <hr/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is there a written procedure for tracking “overdue employees”? If yes, how often is it reviewed, and when necessary, is updated? <hr/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do employees give a travel plan to a designated contact, including an estimated time of arrival?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do employees check weather forecasts in order to avoid travelling in conditions of severe weather?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do employees have a reliable means of communication? eg. satellite telephone, cellular phone, or radio contact
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is communication equipment checked regularly to ensure it is fully operational? eg. are batteries fully charged?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are employee vehicles maintained in good mechanical condition? Whose responsibility is it to maintain vehicles? <hr/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do employees carry emergency/survival materials when travelling in isolated areas or inclement weather conditions? What does a standard emergency/survival package contain? <hr/> <hr/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do employees have adequate rest periods between work periods when they are driving alone? What is the recommended minimum rest period? _____ hours.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Do employees carry first aid supplies and have they received first aid training? If yes, what is the standard first aid kit they carry and what is the date of last training? _____ (kit standard/model) _____ (dd/mm/yy)

Appendix 4

Generic Risk/Hazard Assessment

Hazard and Effects Management Process (HEMP) Description

The Hazards and Effects Management Process (HEMP) used in the generic risk/hazard assessment is a structured and systematic risk analysis methodology involving the Identification, Assessment and Control of hazards and the Recovery from effects caused by the release of a hazard. All four components are essential for proper hazard management.

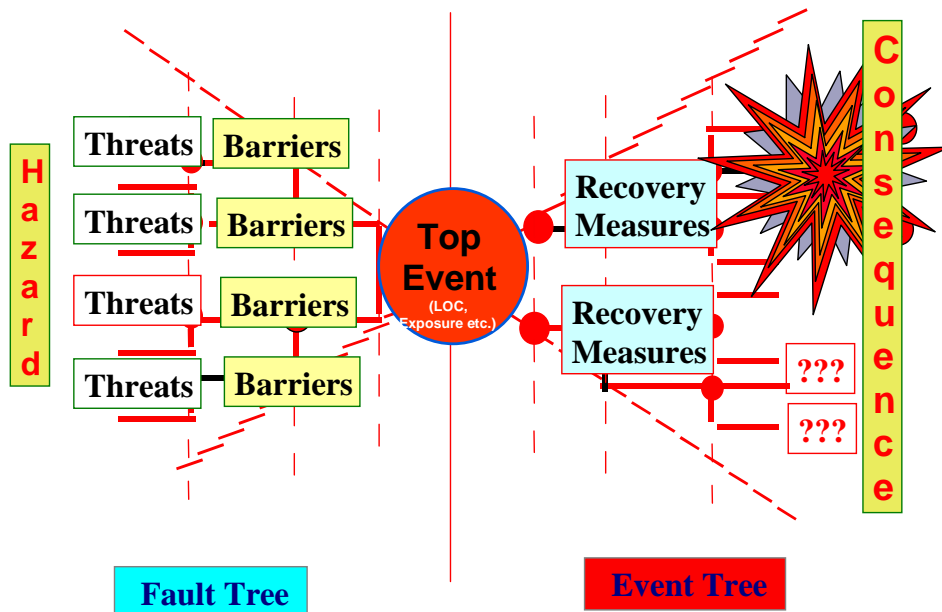


- Identify** *What could go wrong?*
- Assess** *What would be the consequences?*
How Likely is it that this will happen?
What is the risk?
- Control** *Is there a better way to manage the risk?*
Are prevention controls adequate?
- Recovery** *Are controls to mitigate or prevent escalation adequate?*
Are recovery measures adequate?

The identification of the existing control measures allows the assessment of their suitability. In other words, are the controls in place good enough to minimize the risk to an acceptable level.

Bow-Tie Analysis Description

The four HEMP components (identify, assess, control and recover) can be visualized in the so called “bow-tie model”.



The following steps represent the essential parts of the bow-tie analysis undertaken for each identified hazard:

1. Each selected **hazard** is linked to a number of **threats**, which are identified as being able to release the hazard and thus cause the **top event** to occur.
2. For each selected hazard, the potential credible (realistic worst case) **consequences** are established.
3. For each threat, the known **barriers** (or controls) to prevent the unwanted release are identified.
4. The same is done for the **recovery preparedness measures** which are intended to limit the extent of the consequences.

The left hand side of the diagram can be viewed as a “fault tree (causal) analysis” and involves those **threats** associated with the hazard and the **controls**, called **barriers**, associated with each threat. Ideally, the barriers should be sufficient such that the hazard is not released and the “top event” does not occur.

However, no such controls can be assumed to be 100% reliable, and therefore, “**recovery preparedness measures**” are required to be in place to mitigate the effects of a hazard’s release and to aid recovery from the top event. The right hand side of the diagram can be considered as a hazard “event tree (**consequence**) analysis” and involves recovery preparedness measures.

The centre of the bow-tie is commonly referred to as the “**top event**”. This is the release of the hazard.

For each bow-tie diagram, the quality of the barriers and recovery preparedness measures are normally assessed for:

- Effectiveness, whether or not the control is in place and;
- How good it is at doing its job;
- How reliable it is, how easy it is to defeat;
- How independent it is of the “human factor” and ;
- How well the HSE critical activities maintain the control in place?

A generic risk assessment is presented for three areas of the petroleum products business that are common to all CPPI Western Region members and present challenges to working alone. These are retail service stations, bulk plants and delivery, and driving alone. Bow-tie diagrams for each of these areas are found in Figures A1, A2 and A3 respectively.

In the bow tie diagram for each area, the realistic worse case **Consequence** was established as a serious injury to or fatality of an employee. The **Top Event** was identified generically as **Loss of Control**. This might be a robbery resulting from a particular **Threat** (ie. criminal victimization) getting past a series of **Barriers** (eg. cash controls and facility design). A committee of industry experts developed the **Threats** and **Barriers** for each area.

Recovery Preparedness Measures includes systems of communication as a measure that can limit the probability of realizing the Consequence.

It is anticipated that CPPI members will tailor these risk assessments for their specific needs and use them in designing a management system to address working alone situations. It is suggested that in the design of the system, for each barrier and recovery preparedness measure, the link to the person responsible for execution and/or maintaining its integrity is identified. This activity is critical and should be performed according to up-to-date procedures. The competence of the individuals carrying out the activity is also critical.

Figure A1 Hazard (a) Working Alone – Existing Retail Sites
Loss of Control – Serious Injury or Fatality
Summary of Threats 1 to 6 and Consequence(s)

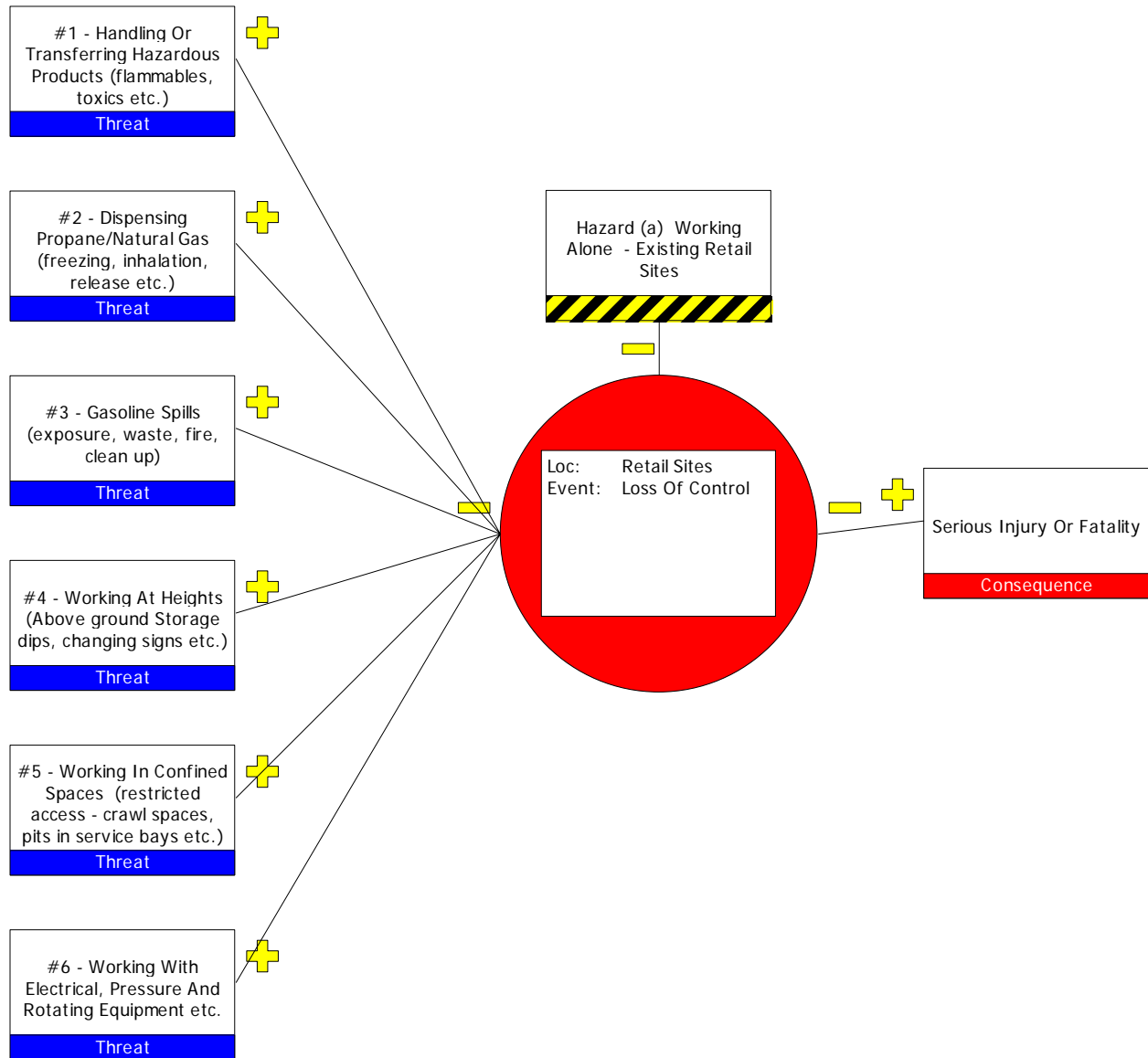


Figure A1 Hazard (a) Working Alone – Existing Retail Sites
Loss of Control – Serious Injury or Fatality
Summary of Threats 7 to 13 and Consequence(s)

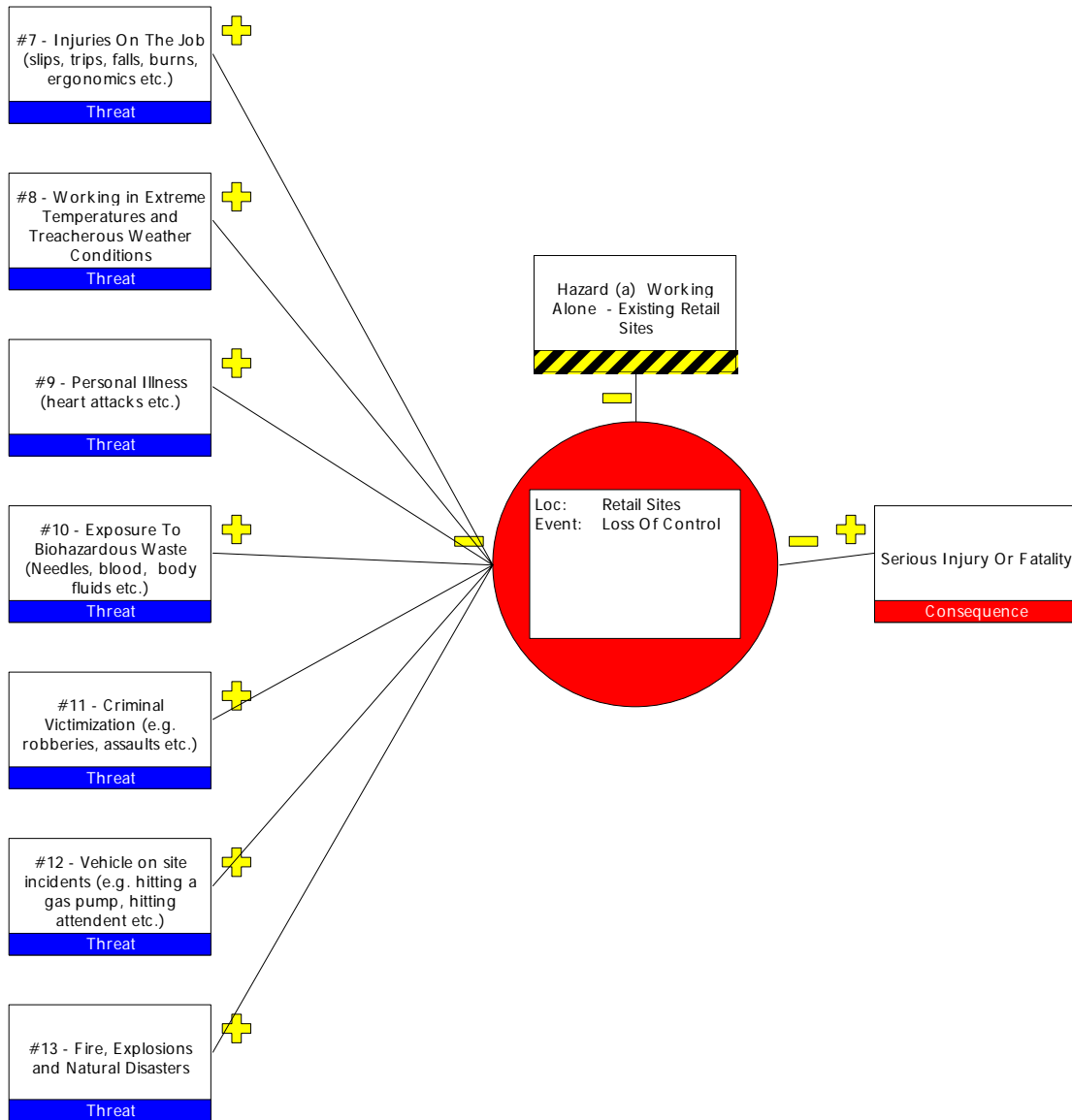


Figure A1 Hazard (a) Working Alone – Existing Retail Sites
Loss of Control – Serious Injury or Fatality
Summary of Threats 1, 2 & 3 with Barriers

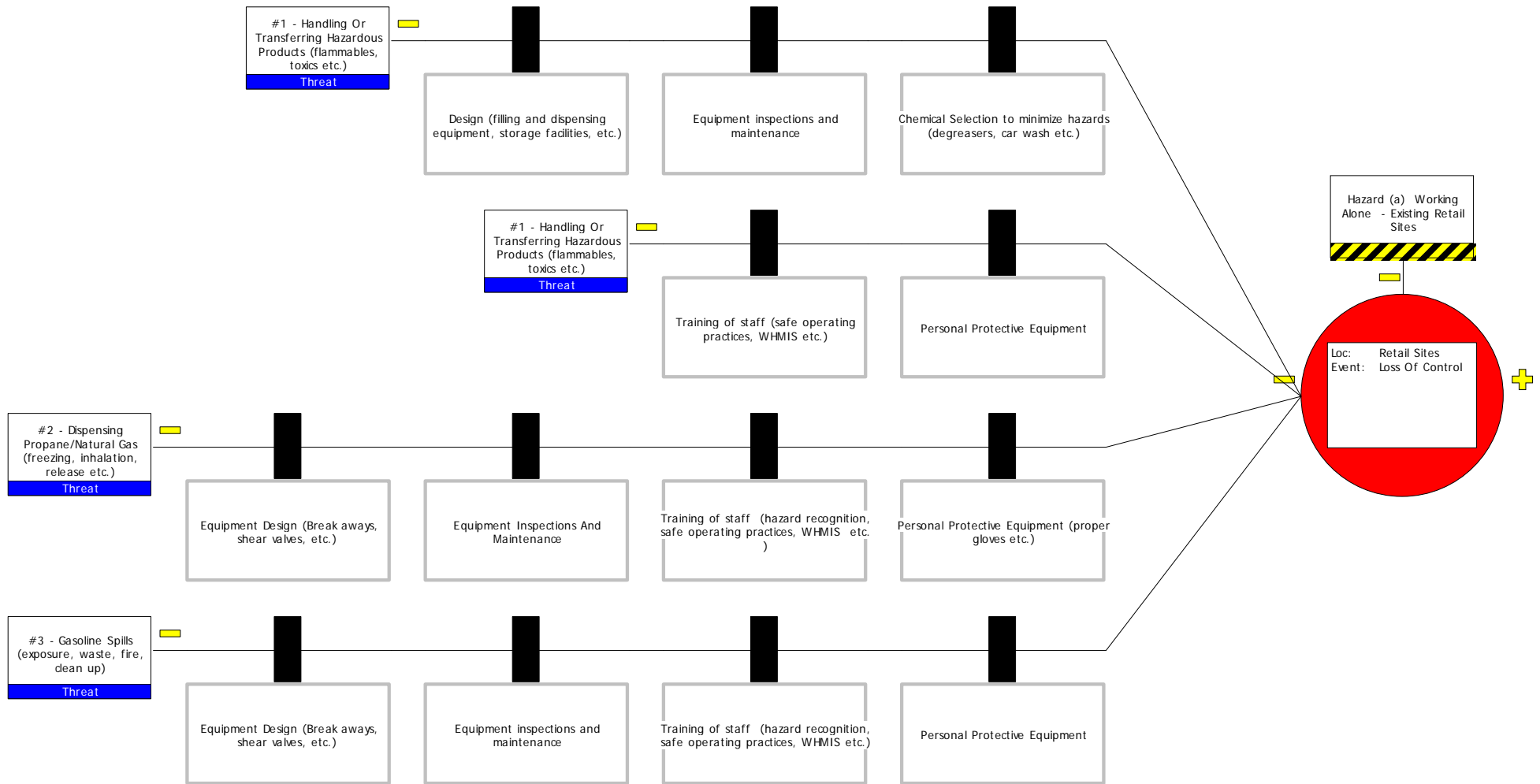


Figure A1 Hazard (a) Working Alone – Existing Retail Sites
Loss of Control – Serious Injury or Fatality
Summary of Threats 4, 5 & 6 with Barriers

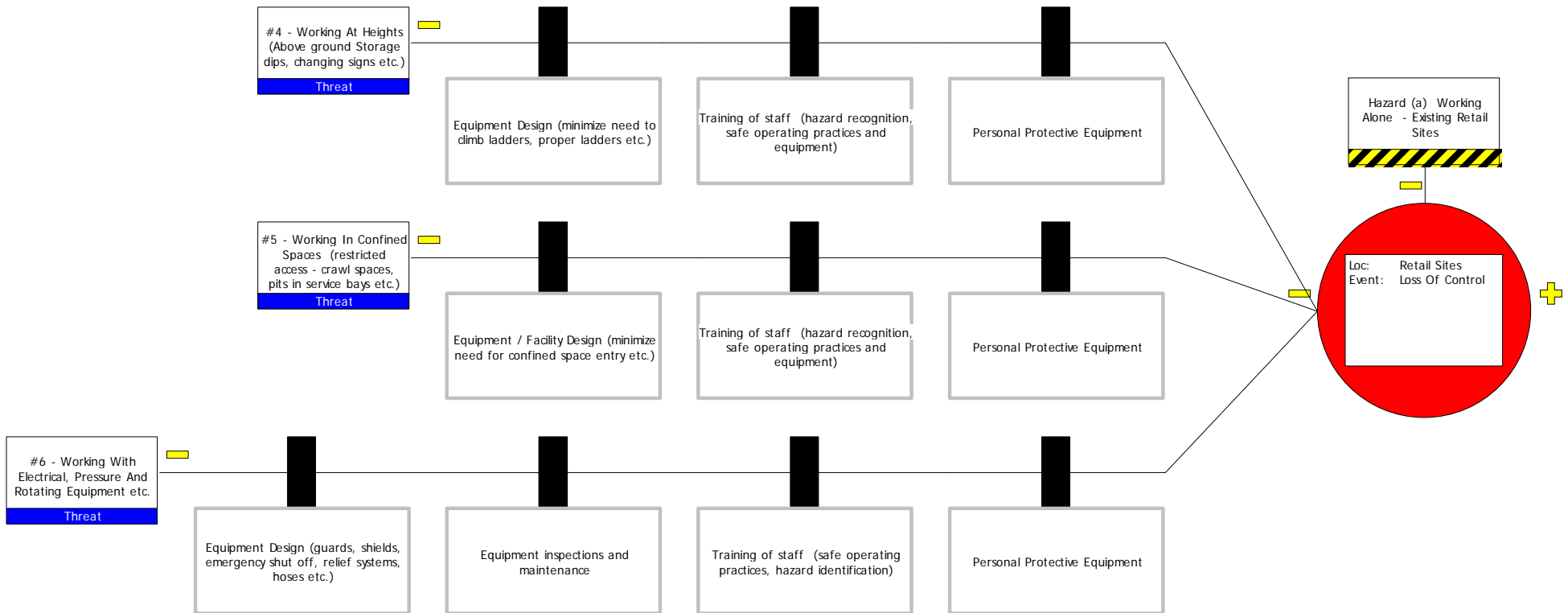


Figure A1 Hazard (a) Working Alone – Existing Retail Sites
Loss of Control – Serious Injury or Fatality
Summary of Threats 7, 8, & 9 with Barriers

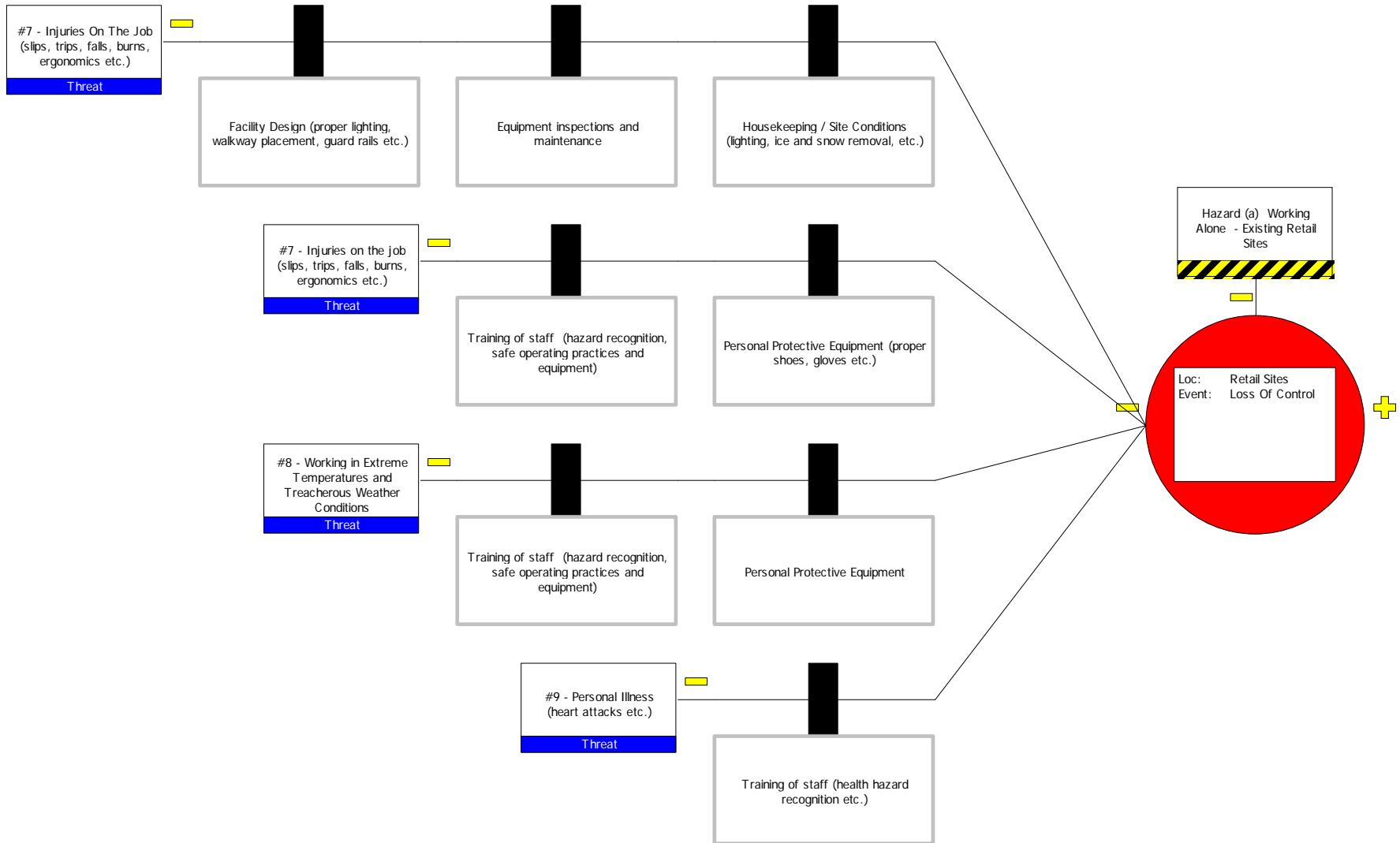


Figure A1 Hazard (a) Working Alone – Existing Retail Sites
Loss of Control – Serious Injury or Fatality
Summary of Threats 10, 11, 12 & 13 with Barriers

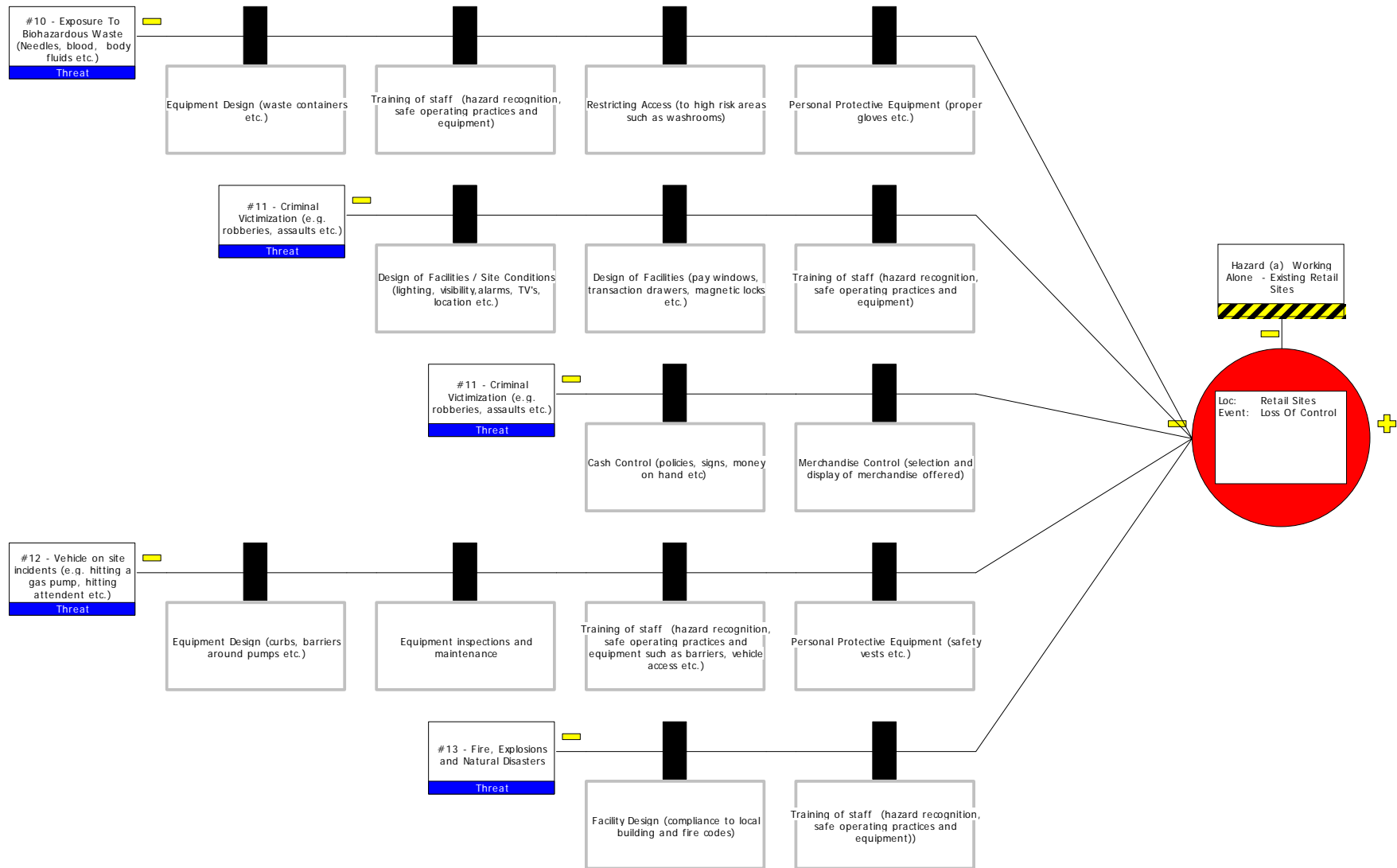


Figure A1 Hazard (a) Working Alone – Existing Retail Sites
Loss of Control – Serious Injury or Fatality
Summary of Recovery Preparedness Measures and Consequence(s)

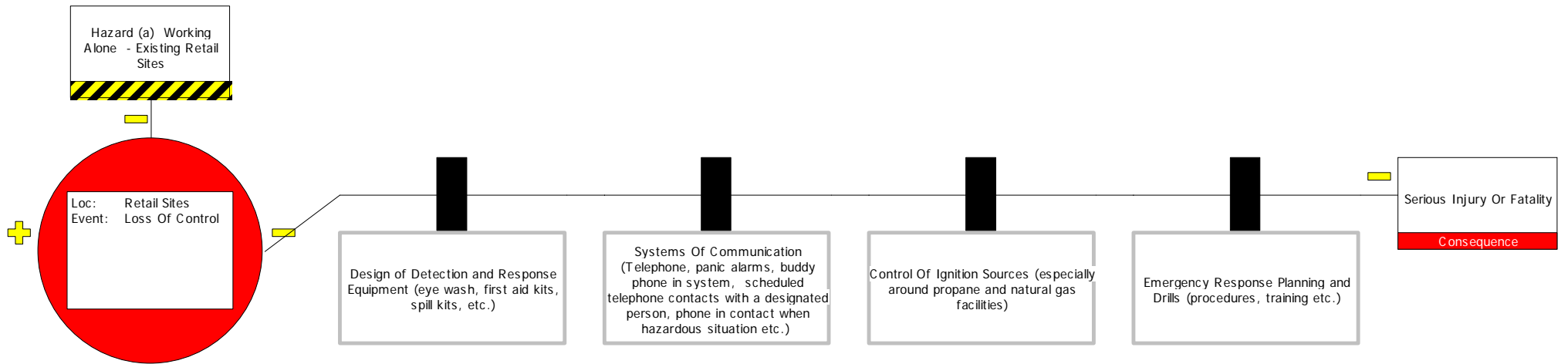


Figure A2 Hazard (b) Working Alone – Existing Bulk Plants and Delivery
Loss of Control – Serious Injury or Fatality
Summary of Threats 1 to 6 and Consequence(s)

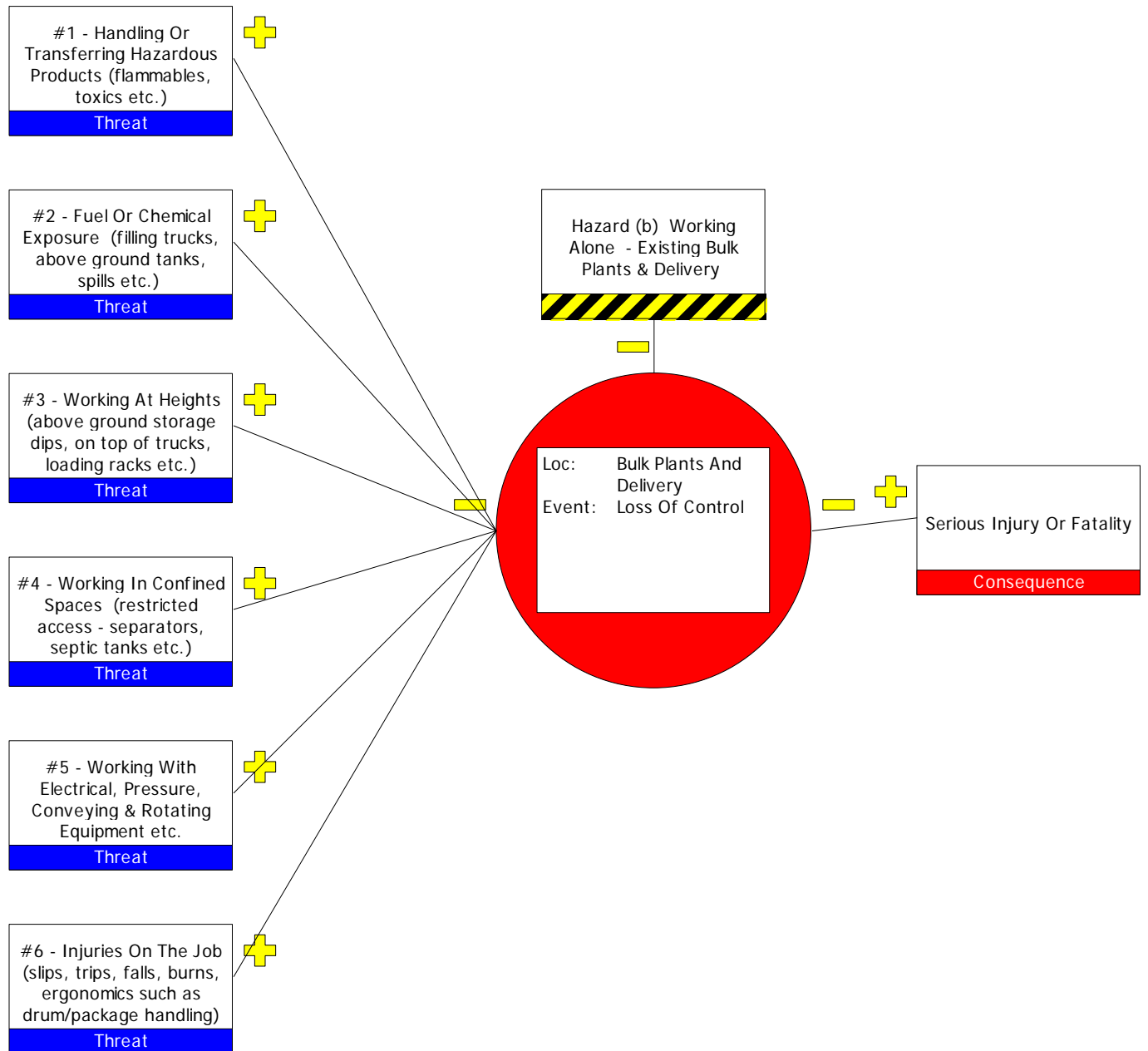


Figure A2 Hazard (b) Working Alone – Existing Bulk Plants and Delivery
Loss of Control – Serious Injury or Fatality
Summary of Threats 7 to 12 and Consequence(s)

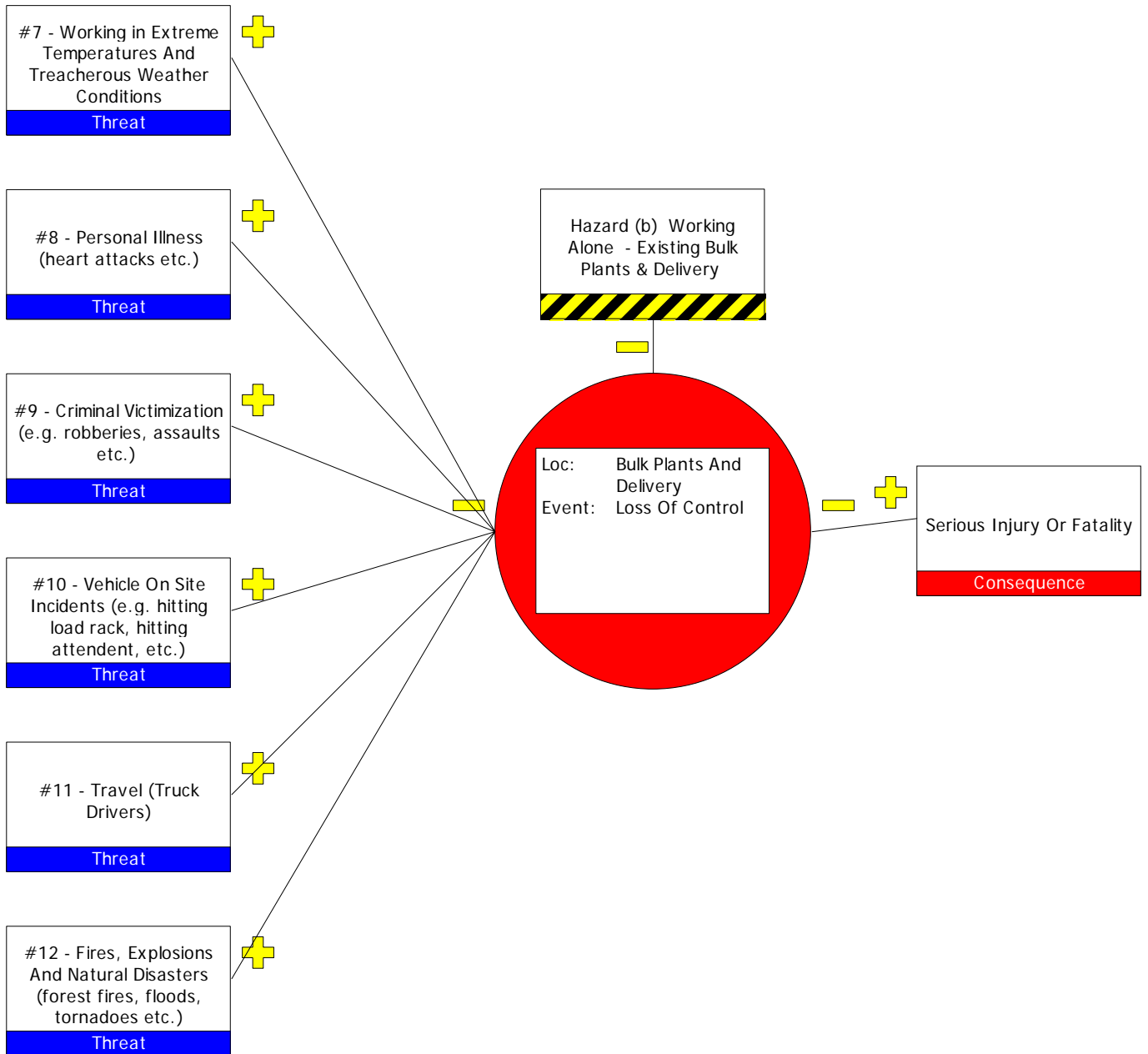


Figure A2 Hazard (b) Working Alone – Existing Bulk Plants and Delivery
Loss of Control – Serious Injury or Fatality
Summary of Threats 1, 2 & 3 with Barriers

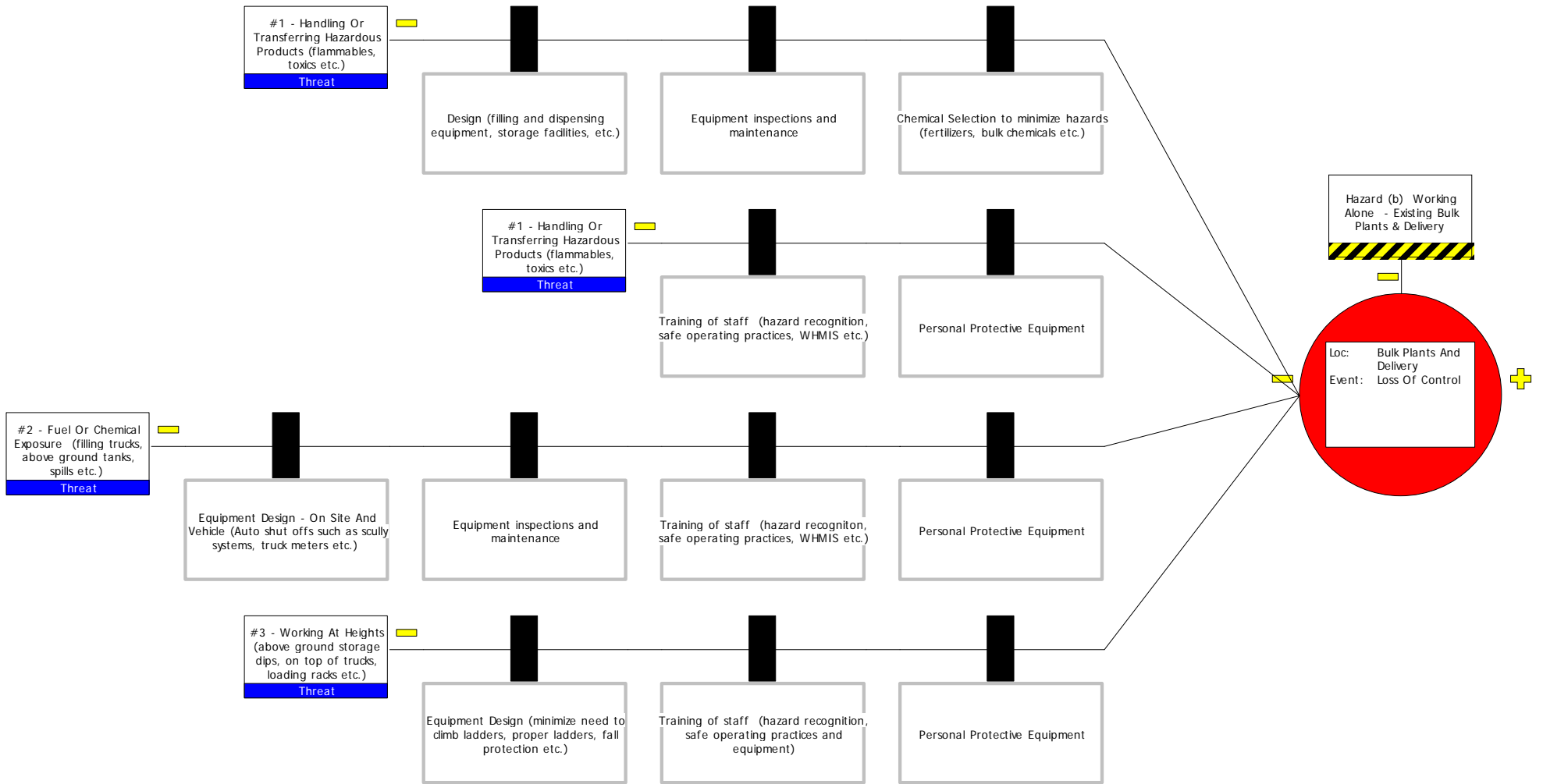
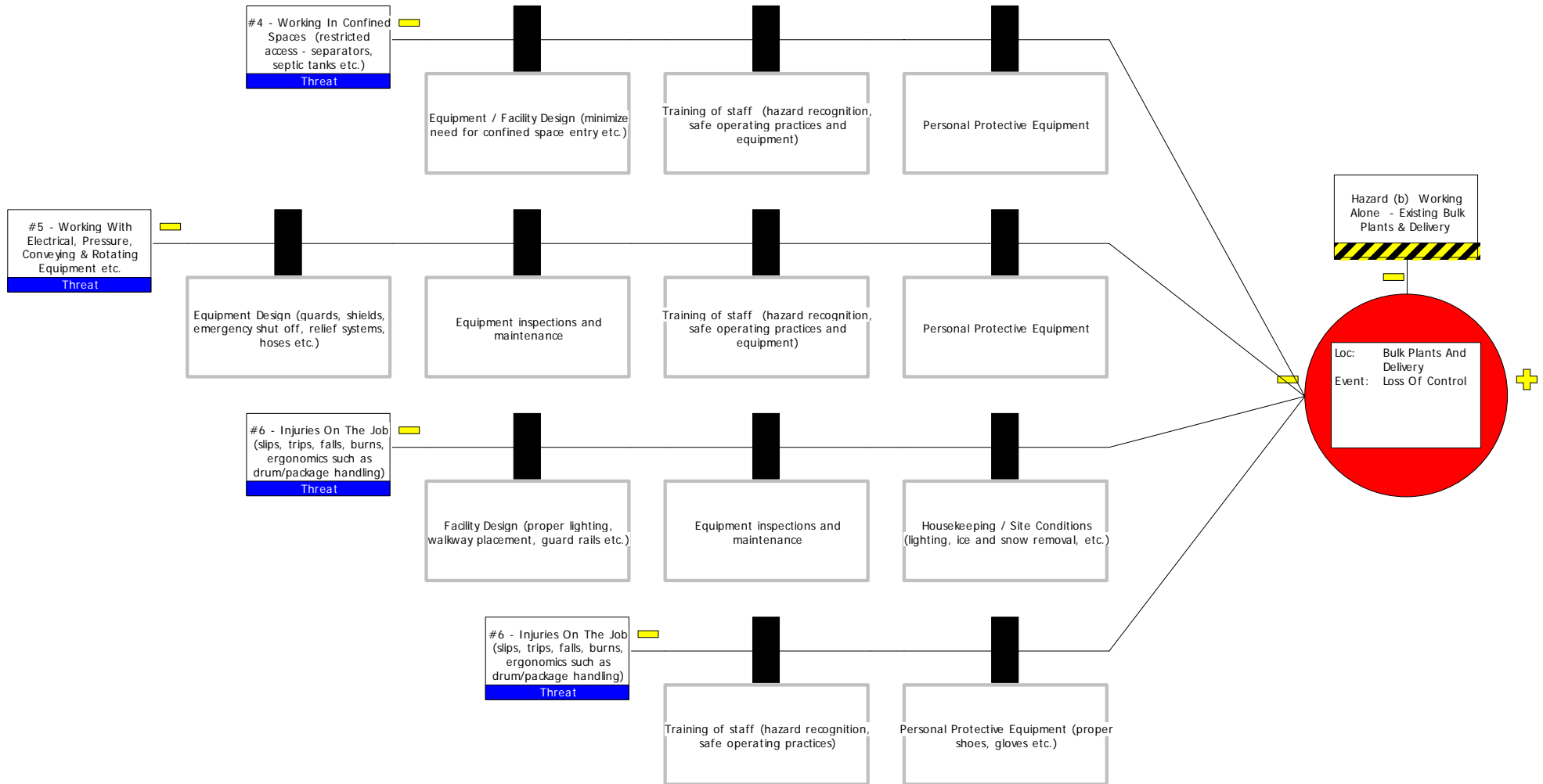


Figure A2 Hazard (b) Working Alone – Existing Bulk Plants and Delivery
Loss of Control – Serious Injury or Fatality
Summary of Threats 4, 5 & 6 with Barriers



**Figure A2 Hazard (b) Working Alone – Existing Bulk Plants and Delivery
Loss Of Control – Serious Injury or Fatality
Summary of Threats 7, 8, & 9 with Barriers**

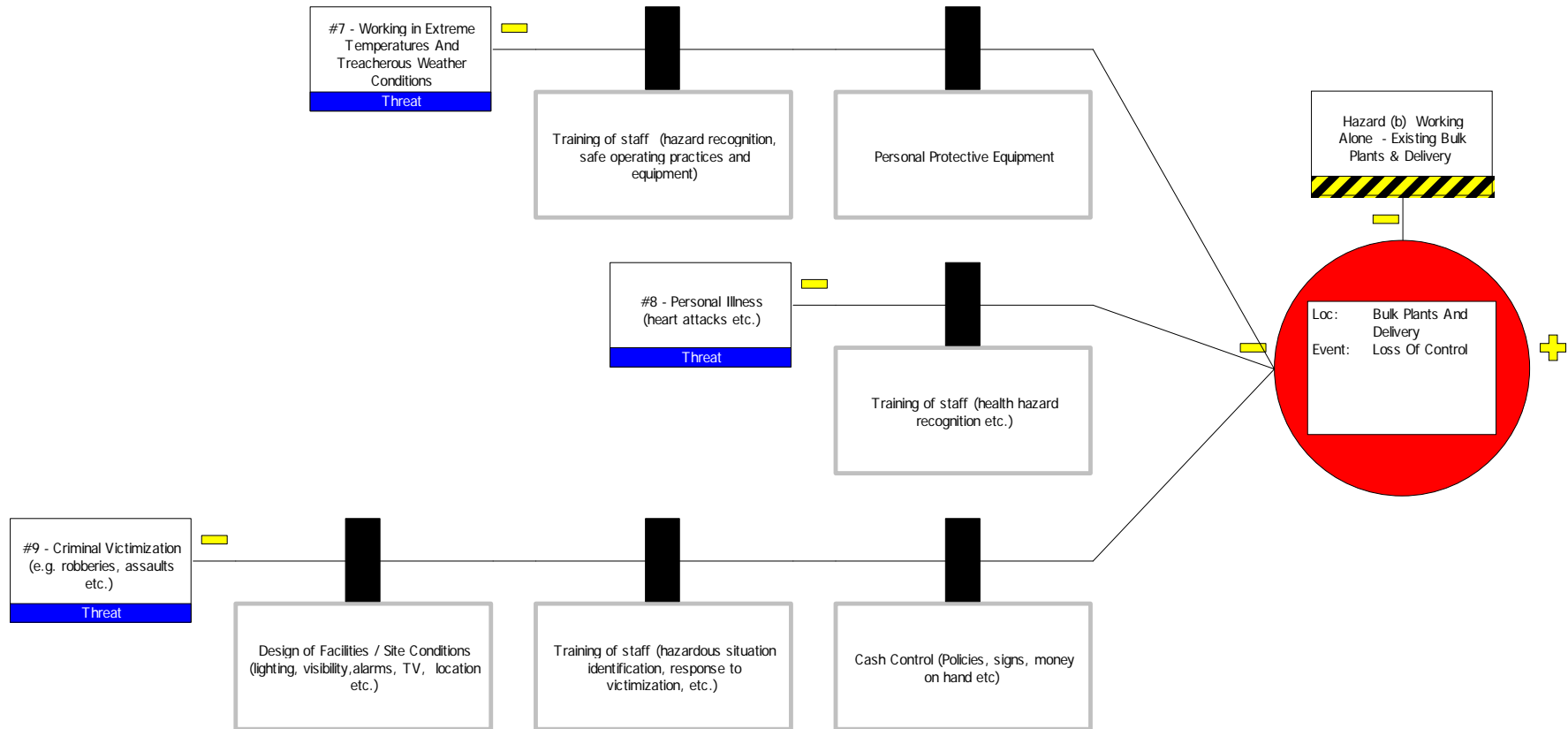


Figure A2 Hazard (b) Working Alone – Existing Bulk Plants and Delivery
Loss of Control – Serious Injury or Fatality
Summary of Threats 10, 11 & 12 with Barriers

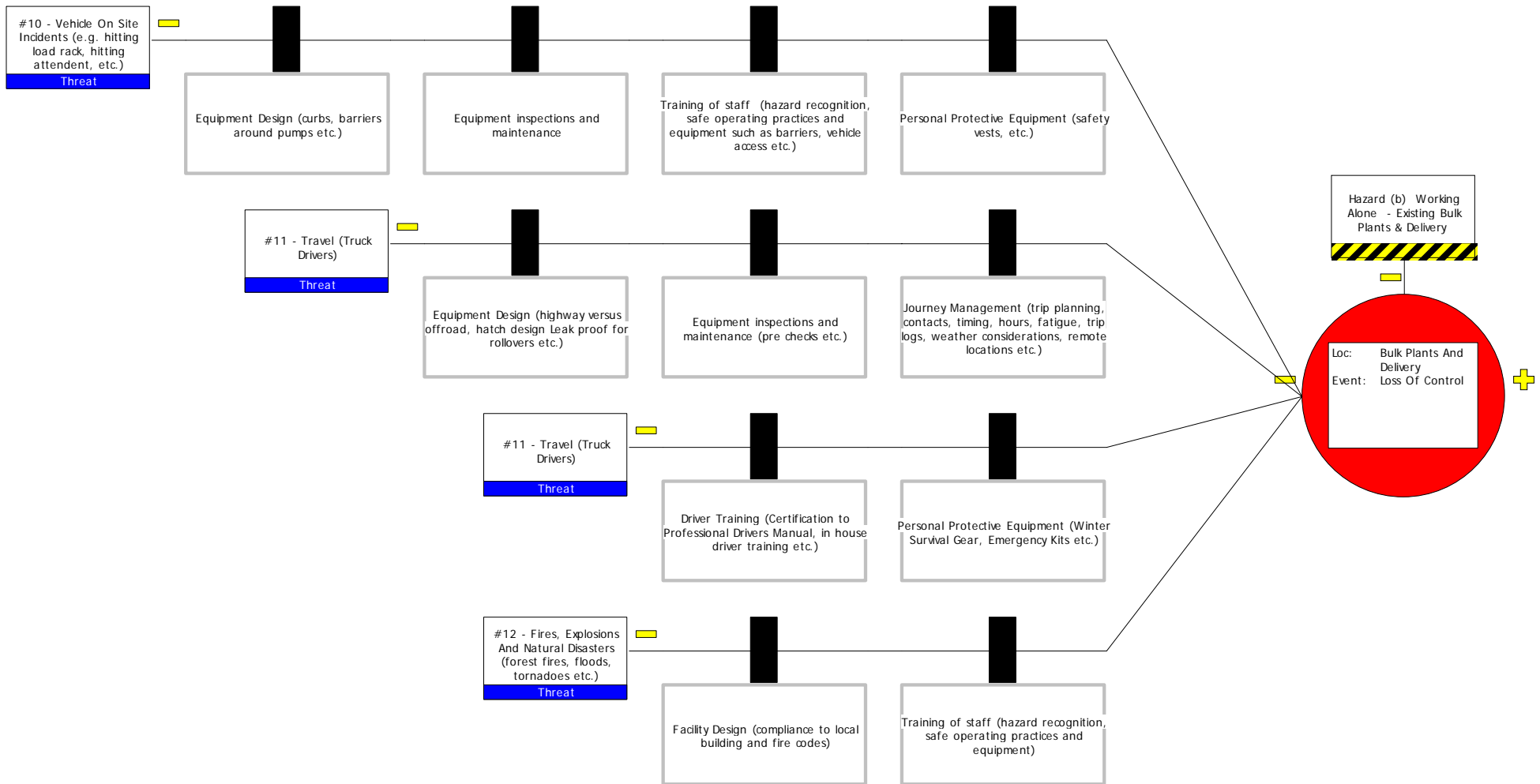
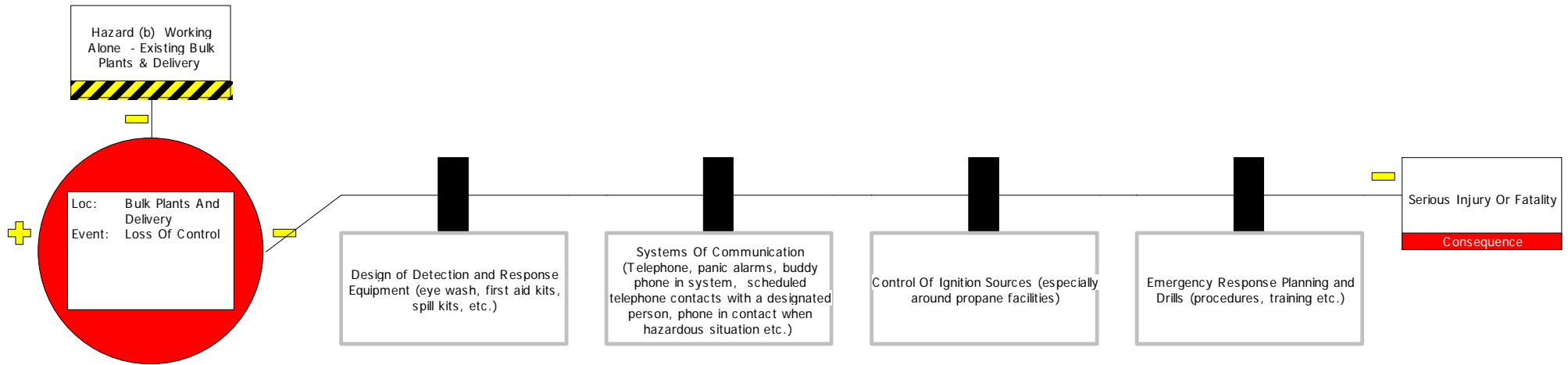
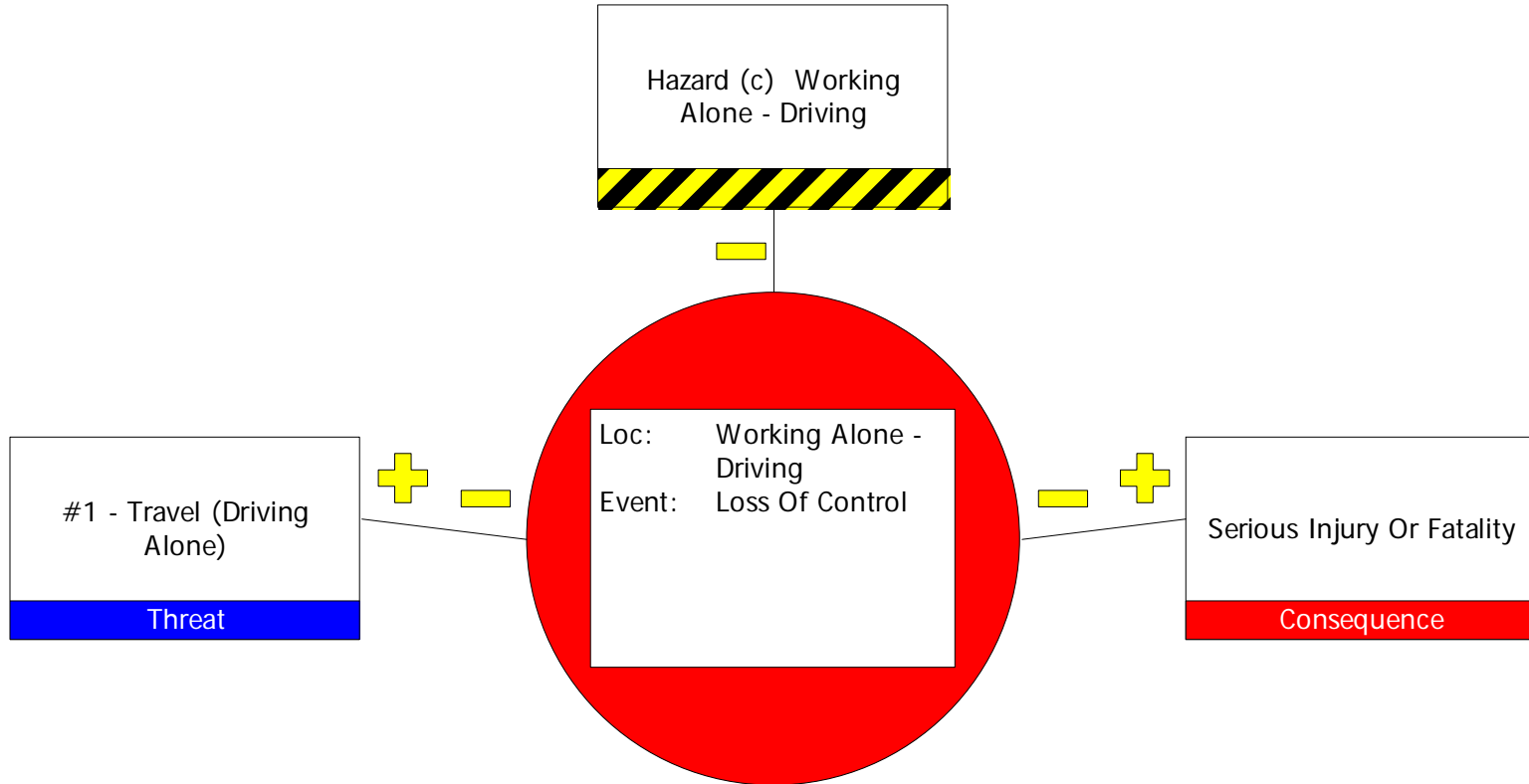


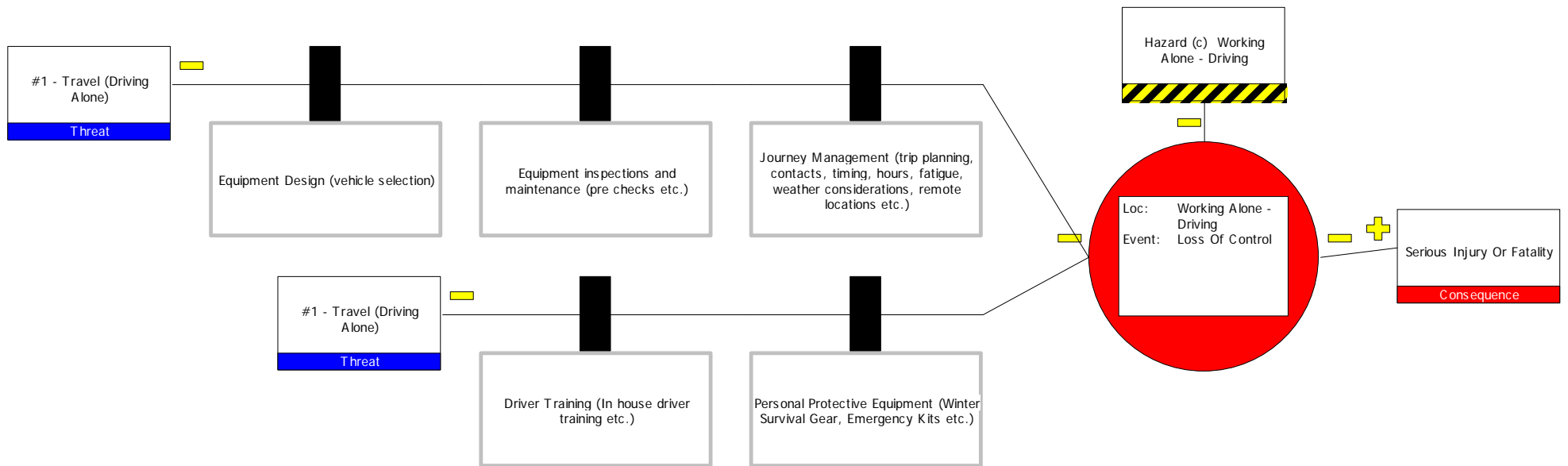
Figure A2 Hazard (b) Working Alone – Existing Bulk Plants and Delivery
Loss of Control – Serious Injury or Fatality
Summary of Recovery Preparedness Measures and Consequence(s)



**Figure A3 Hazard (c) Working Alone – Driving
Loss of Control – Serious Injury or Fatality
Summary of Threats 1 & 2 and Consequence(s)**



**Figure A3 Hazard (c) Working Alone – Driving
Loss of Control – Serious Injury or Fatality
Summary of Threats 1 & 2 with Barriers**



**Figure A3 Hazard (c) Working Alone – Driving
Loss Of Control – Serious Injury or Fatality**
Summary of Recovery Preparedness Measures and Consequence(s)

