2.0 General and Administrative Programs

Of the various environmental, safety, and alcohol liability areas the brewery must address, the basics of a safe and healthful workplace take a central position. The US Occupational Safety and Health Administration (OSHA) has for years espoused a philosophy known as the General Duty Clause (GDC). The brewery staff should seek to understand just how well their facility is living up to this concept. The more proactive and interested facility management is towards safety, the safer the workplace will be and the lower the claims rate for worker injuries, chemical injustices, and other losses.

2.1 General Duty Clause

2.1.1 Concept of OSHA’s General Duty Clause

The GDC is not an OSHA regulation, per se; it is a state of mind and action that must be exemplified by a proactive safety program combined with compliance to specific regulations dictated from the Federal level. While the majority of states now carry out the Federal regulations from State-based offices (so called ‘agreement states’), the core philosophy of OSHA has changed little since its institution in 1970.

OSHA defines the GDC as: 1) the general duty of the employer to furnish each employee with a place of employment free from recognized hazards causing or likely to cause death or serious physical harm, and 2) the specific duty of complying with safety and health standards promulgated under the OSHA act. In other words, the employer must provide a safe workplace, whether or not there is a specific standard relating to the potential hazard, and if there is a specific standard, it must be complied with.

Paul J. Tibbs, director of the Compliance Division of Compliance Consultants, Lee's Summit, Missouri says of the GDC, it “is the most overlooked aspect of OSHA compliance and yet it is the backbone of OSHA standards.”

The basic style of most OSHA regulations is what is known as performance oriented. That is, loosely speaking, ‘we don’t care how you get to a compliant level, just that you do get there.’ This is fundamentally different from regulations put out by the US Department of
Transportation, for example, which use prescriptive regulation to dictate even the size, color, and font of lettering on a hazard class warning placard.

In all honesty, OSHA has not appeared to have ‘targeted’ the brewing industry since its inception. But keep in mind that in 1970 there were approximately 100 breweries in the US, whereas there now are nearly 2000. Consequently, employment in brewing settings has increased, while safety sophistication may not have improved, since so many of these new breweries are small operations with less than sophisticated safety programs.

The principal causes for the initiation of an OSHA inspection, including those which ultimately lead to fines, are:

- serious injury or death in the workplace
- a higher injury rate than typical within a given Standard Industrial Classification (SIC) code
- one or more calls by disgruntled employees

In fact, simply inspecting a facility because they are an employer is rarely the rationale for an inspection, as state OSHA offices everywhere are unable to keep up with the demand for inspections, writing violations, and following through with legal proceedings in the case of serious or recalcitrant violators.

Records on serious injuries and fatalities in breweries are available from OSHA for the period of 1972 through the present. It is clear from the repetition of some brewery’s names and the absence of others, that some understand the GDC better than others. For the inspector, it is vital to assess whether or not a facility has command of these concepts, whether they have been simply lucky in not having serious injuries or fatalities, or whether they have a history of accidents, illnesses or death.

Regardless of ‘by the book’ compliance to OSHA requirements, a facility which ignores safe work practices, workplace controls, and personal protective equipment is at a higher probability of sustaining a loss than a facility with a healthy safety culture.

Interestingly, perhaps the best indication of a safe work mentality is the general housekeeping at a brewery. Are there hoses lying about, no aisles between tanks or bags of malt, or are cleaning chemicals stored with ill regard to their compatibility or hazardous nature? Positive indicators include warning signage, buddy system work practices and an open dialogue about safety between management and operations.

Thus it is vitally important for the brewery management to have a broad view of safety:

- what programs are the best, safest practices, sans regulation
- what programs are essential to OSHA compliance

In other words, the risk of a problem for the brewery occurs along two tracks:

- if a facility leads an unsafe lifestyle and thereby increases the risk of a loss through workers compensation
- if a facility is ignorant of basic OSHA requirements leading to fines, embarrassment, and premium increases in the event of a regulatory violation

Importantly, many business owners are aware that most OSHA compliance programs are not required for employers with ten or fewer employees. This leads some to say, “Why bother?” The answer is simple: planning for growth involves building a proper safety
culture. It is not reasonable to expect that when the business grows to exceed ten employees that OSHA compliance will suddenly be easier. Secondly, all employers have the responsibility to their workforce of creating a safe and healthful workplace under the GDC. Finally, a good insurance loss record will lead to lower premiums in the future.

Please see the OSHA links in the Table of Contents for additional explanation of how the Federal regulatory system works and what OSHA is most often looking for during inspections.

### 2.1.2. Prevention vs. Protection

One of the fundamental theories of safety is the dualism of prevention and protection. Prevention is almost always the preferred first line of defense against hazards. For example, a chemical burn can be prevented by avoiding the use of a caustic chemical. However, it is not always feasible to simply avoid the hazard. If one were compelled to use such a caustic cleaner, one could use rubber gloves and a face shield as protection. In the safest working environments, both prevention and protection strategies are utilized, often in tandem.

In general, the most preventative strategies are called safe work practices and the most protective strategies are called personal protective equipment. Engineering controls and administrative controls fall on the continuum between these end points. Each of these terms is described below.

### 2.1.3. Personal Protective Equipment

Personal protective equipment (PPE) is protective garments, clothing or shields that are worn directly on the person. Examples of PPE found in a brewery include:

- splash goggles or face shield
- rubber boots
- chemical protective gloves
- hearing protection
- safety harness for tank entry

The irony of PPE is that many people recognize it as an important aspect of safety, yet fail to wear it properly and at all times when necessary. Additionally, if an article of PPE fails, the wearer will generally sustain some sort of hazard exposure, as there is no form of prevention or protection which is as intimate with the worker as PPE. Many OSHA required programs have stipulations regarding PPE, in addition to the general requirements for PPE specified in 29 CFR § 1910.132.

### 2.1.4. Engineering Controls

Engineering controls (ECs) are usually manmade tools, equipment or materials that are designed to manage a hazard without the direct human contact potential that PPE possesses. Examples of ECs found in a brewery include:

- clean in place (CIP) systems
- tanks without man-sized entryways
- fixed railings
- insulation on steam and coolant lines
- gripping surfaces on platforms and stairs
- plastic safety shields around a bottle filler or labeler
- fermentation rooms which are well ventilated
- spill absorbents used for chemical releases
- guards on augers and mixers
- lockout/tag out equipment for energized systems
- explosion-proof fixtures in mill settings

The strength of ECs lie in their usually protective nature, however they often fail as a result of inattention, decrepitation, or alteration. Stair treads wear out, safety shields get broken and aren't replaced, or lockout isn't utilized because the worker thinks they are alone and safe.

2.1.5. Administrative Controls

Administrative controls (ACs) are typically procedural versions of engineering controls. That is, an EC for not entering a tank space might be that it uses a CIP system for cleaning, while the AC is a sign placed on the tank stating that entry is forbidden. ACs are general preventative, as long as these controls are adequately provided and brewery employees obey the requirements. Examples of ACs often found in a brewery include:

- worker safety training
- signs excluding unauthorized personnel
- painted aisle ways on the floor
- written training programs, administrative policies and disciplinary procedures
- plans for drunk patron recognition, bouncing, and emergency evacuation

2.1.6. Safe Work Practices

The best and most effective of all workplace control strategies are the safe work practices (SWPs). SWPs do not require extensive written plans, engineering equipment, or special personal protective equipment. SWPs are based in common sense, and as such, are the pure form of prevention; they require no special equipment other than a good noggin. They also do not cost a company any money, other than the cost to hire common sense workers. Indeed, SWPs are a reasonable and effective means for reducing the overall cost of any safety program, as ACs, ECs, and PPE all represent varying degrees of capital investment.

Safe work practices are behaviors that the inspector must see, as they are not written, nor are they equipment sitting on the brewhouse floor. If, while conducting an inspection, the head brewer runs across a slippery wet floor to answer the phone - a safe work practice has been ignored. Likewise, finding out that all brewery workers are given beer on their breaks, SWPs are not being fostered. If bartenders are permitted to give out ten free beers per week to patrons, how can this place control its alcohol loss liability?

Although there are many SWPs, limited only by the positive focus of facility staff, here are several examples of classic brewhouse SWPs:

- brewers walk slowly and deliberately
- housekeeping of brewery, storage, cold room, and kitchen is excellent
- on wet, inclined, or stairway surfaces, personnel walk with bent knees and toes pointed out and utilize railings if applicable
- unauthorized persons (i.e. the public) are not allowed in the brewery
- fermentation rooms exclude unauthorized personnel

2 - 4
- Brewers conduct tank entry with minimum three person teams
- Controlling steam boilers and brewing kettle are performed by two person teams if both systems are not within immediate reach of each other
- Bartenders limit patrons who have over-consumed based on observation
- Line pressure is always bled prior to connecting/disconnecting cylinders

2.2 Emergency Planning

Occasionally the media reports a catastrophic incident where a nightclub burns down and dozens of people are killed. Such tragedies, although rare, constitute a substantial liability to an insurance program such as the Whalen Brewery Insurance program.

Identifying the potential for catastrophic emergencies is essential for insurance inspectors. Potential emergencies in a brewery setting fall into four categories:

- Fires and explosions
- Worker injuries
- Chemical spills, and
- Threatened emergencies

The latter category includes such incidents as bomb threats, patrons brandishing weapons, fights among patrons and/or staff, inebriated patrons resisting ejection, or other incidents of a behavioral nature.

2.2.1 Fire Prevention

Note to the reader. The fire prevention portion of this training is limited to those aspects which apply directly to a brewing operation, but are neither furnace/boiler-related, nor kitchen-related, as these are covered either under other supplemental inspection formats or directly by a boiler underwriter.

It is most important that staff do not first try to extinguish a fire themselves, but make adequate notice to other employees, patrons, and fire department personnel. The three steps in responding to a fire should be well known to staff:

- Sound a local alarm (either a pull box or shout “Fire!”)
- Sound a remote alarm or dial 911
- Fight the fire with readily available extinguishers (if equipment and training permit)

Beer is comprised of over 85% water, the remaining portion being divided between alcohol, carbohydrates, proteins, and minerals. Beer itself does not contain enough alcohol to readily burn and CO₂, which is dissolved in beer and used in packaging and distribution, is a common fire extinguishing agent. Therefore the beer itself is not a particular fire hazard.

The heat for a brewery may be provided by electric coils, direct fired gas burners, or a steam furnace which is fueled by any type of fuel (gas, oil, coal, wood, etc.). It is possible that a brewery uses direct fired heat from oil, coal or wood, but these facilities are very rare.
If volatile fuels (such as natural gas or fuel oil) are used, the inspector must see evidence of both fire prevention and fire protection. Prevention is exemplified by engineering controls that will prevent the release of the fuel in a catastrophic manner. Such controls include automatic thermostatic shutoffs, fuel delivery control valves or critical orifices, and computer controls on the brewery control panel. In the case of manually stoked boilers (coal, wood), the control is much easier - the stoker simply stops fueling the furnace and the steam is blown off.

Breweries which use steam must periodically ‘blow off’ leftover steam. Blowoff can be a serious source of injury, so the inspector should inquire as to the procedures used.

The protection against fires also includes fire extinguishers and possibly sprinklers or automated fire suppressant systems (e.g. water, ANSUL, or HALON). The inspector should look for regular and labeled placement of extinguishers. Automated systems are usually associated with the kitchen operations and will be dealt with on the restaurant supplemental.

2.2.2. Emergency Egress

Adequate and uncluttered emergency exits, unlocked exit doors, aisle space and exit signage, must be provided. Normally these aspects are controlled by the local fire code, which, in turn, is most often based on the Uniform Fire Code (UFC) developed by the National Fire Protection Association (NFPA). Occupancy, which is directly related to emergency egress, is also typically dictated by the UFC. Local fire departments or city permit offices generally inspect facilities and issue occupancy permits and check for adequate emergency exits. Thus, the inspector should assess whether or not the facility has been inspected and permitted by such an agency, as well as examine the location for exit signs, exit doorways, and aisle space. Blocked exits and aisles represent increased risk.

2.2.3. Worker Injury

In the case of a worker injury there are three principal issues: 1) proper care of the injured party, 2) avoidance of blood borne pathogens, and 3) discontinuation of the source of the injury.

As with a fire, there are three steps to a proper injury response:

- sound a local alarm (yell for help from those nearby)
- sound a remote alarm or dial 911 to contact emergency medical services
- render first aid, without body fluid contact (if equipment and training permit)

Seriously injured workers should be kept at ease through positive dialogue and by making the patient as comfortable as possible. If a blood borne pathogens (BBP) safety kit and training to use it are available, the facility is a step ahead of others.

After an injury is incurred, there are four important follow up steps:

- notification of state or Federal OSHA with the OSHA form 200 (see § 2.3.)
- notification of Whalen Insurance regarding any lost time injury (see § 2.3.)
- appropriate follow up with the injured party for necessary medical services
2.2.4. Chemical Spill

In the event of a chemical spill, three principal issues exist: 1) avoiding contact with the chemical, 2) performing appropriate control and cleanup of the spill, and 3) notification of wastewater authorities in the case a bulk release to the municipal treatment plant.

Five steps to avoid complications after a spill are:

- identify the substance(s) involved in the spill
- assist any individual who may be contaminated
- control access to the area with signs, barriers, or by word of mouth to reduce the chances of unknowing persons coming into contact with the material
- contact an emergency service such as the Fire Department Hazardous Materials Team or a spill cleanup contractor in the event of a catastrophic release (if needed)
- employ safe cleanup techniques to capture and contain the material (if equipment and training permit)

After a spill occurs, there are three important follow up steps:

- notification of insurance provider regarding any injuries or possible environmental violations
- appropriate follow up with the jurisdictional authorities in the event of release to the environment (sewer, air, land, etc.)
- documentation of the spill regarding the name and type of substance spilled, the estimated quantity, reason(s) the spill occurred, steps taken to avoid a similar incident in the future, etc.

2.2.5. Hostile Actions

Hostile actions are those where a factor other than accidental incidence is motivational. Such emergencies can include facility security breeches, bouncing instances, fights or violent threats against staff or patrons, disruption in the parking lot, and vandalism for example. These are emergencies that may be dealt with by trained staff, police, or both.

Such incidents are not uncommon at establishments where alcohol is offered, as alcohol lowers inhibitions and makes a fertile ground for interpersonal conflicts and lapses of judgment.

Assessing the customer demographic and facility policies regarding entertainment, drink incentives and business hours will assist the inspector in appreciating the relative risk of these exposures which are detailed in chapter 6.
2.3. Injury Reporting Procedures

2.3.1. OSHA Form 200

Employers are required by OSHA to record, and post in the workplace, information about all serious physical harm (a.k.a. recordable injuries) incurred at the workplace. The Form 200 is most commonly used for compliance, although OSHA allows other formats if the required information is provided.

Serious physical harm means an injury or illness incurred as a result of employment, in which an employee receives medical treatment (as defined by the standard) and is recordable on the OSHA Log. Serious physical harm applies to an injury or illness for which an employee receives medical treatment and is unable to convalesce to 100 percent of their normal capability or capacity. Medical treatment includes treatment (other than first aid) administered by a physician or by registered professional healthcare personnel under the standing orders of a physician.

Exempt first-aid treatment is defined as one-time treatment and subsequent observation for minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care. In other words, a Form 200 entry is not required for employees who receive only first aid pursuant to a minor injury.

An link to Form 200 and instruction page is provided in the Table of Contents.

2.3.2. OSHA Form 101

In addition to the Form 200, the employer is also required to complete the Form 101, a supplementary record of injury. A link to Form 101 and instruction page is provided in the Table of Contents.

2.3.3. Insurance Carrier Notification

In the event of any kind of loss, whether an injury, a product loss, damage to the brewery, or what have you, promptly notifying Whalen Insurance will be in the brewery’s best interest to reduce the overall impact of the loss.