

Are There Challenges With Supplying Standardized PPE Internationally? You Bet!

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Introduction

The phone rings; it's your boss enthusiastically informing you that the company has secured the overseas contract you worked on last year. You are congratulated for your part in winning the work. She notifies you that the new contract is expanded in scope and now includes the construction, outfitting, operation and maintenance of a new, 1 million square-foot light manufacturing facility. The employee population is forecast to be 2000 in the first year of operation, and 3000 thereafter. The original contract only included provisions for consulting services in this project.

You submitted the winning safety plan, so your boss tags you as the safety manager for this effort. As you sit in your office, undoubtedly looking forward to the challenge, you realize that you have never implemented a safety program overseas. Furthermore, as the mist of uncertainty starts its descent from the white ceiling tiles in your office, you realize that most, if not all, of your colleagues have not designed and implemented a complex safety program overseas either.

Your boss's expectations are that you will follow the most stringent safety regulations regardless of work location. Your direction is that if there is a conflict between the U.S. and the foreign country's safety requirements, the most protective and compliant will apply.

Now What?

The normal approach takes over. The top level safety program development process is initiated:

- A full read of the scope of work—Done
- Preliminary hazard assessment—Done
- Identification of safety program requirements—Done
- Identification of resources—Done
- Identification of contractors, vendors, suppliers, and support personnel—Done
- Identification of applicable U.S., international, and host country safety regulations—Done
- Gap analysis of applicable safety regulations—Done
- Import/export control regulations and other due diligence—Done or not done?

The last bullet above identifies a major step in the process that is often overlooked by safety professionals. While the provisions of import/export control regulations are broad, we will focus this article on the regulatory requirements and other considerations that may influence a safety

professional's ability to adequately protect personnel overseas, specifically in the implementation of an effective international personal protective equipment (PPE) program.

Now that the hazard assessment has identified the appropriate PPE, is a simple stroke of the PPE order button enough? Can you unilaterally package and mail the PPE directly to the point of use? Can you simply purchase PPE locally or regionally? Not so fast!

PPE challenges associated with the international workplace are often identified after the fact through the process of discovery and lessons learned—the hard way. Very often, the results of these lessons have a hefty price tag in terms of employee injuries and workers' compensation claims, third-party liability, international and U.S. regulatory enforcement actions, operational inefficiencies, and host-nation relations.

Today's globalized economy requires safety professionals and manufacturers of safety equipment alike to do their homework on specific host country requirements and to look beyond the norms when designing, specifying, manufacturing, and exporting PPE. Yes, exporting PPE can be an issue as well. In order to effectively manage this process, safety professionals and manufacturers of PPE can follow a four-part approach: (1) research the regulatory environment; (2) understand and respect host country regulations and cultural norms; (3) consider local climate extremes; and (4) measure results. Assuming an otherwise strong safety program that only specifies PPE from trusted sources, taking these four steps can help with the ultimate goal of protecting people at the global level.

Research the Regulatory Environment

There are three primary sets of U.S. export control regulations to consider when exporting or trading anything, including PPE or PPE technology internationally:

1. U. S. Department of State, International Traffic in Arms Regulations (ITAR)

ITAR contains the United States Munitions List (USML) of restricted articles and services. Any manufacturer or exporter of articles or services found on the USML is required to register with the U.S. State Department's Directorate of Defense Trade Controls, which helps to validate entities engaged in the defense trade.^{1,4}

2. U. S. Department of Commerce, Bureau of Industry and Security, Export Administration Regulations (EAR)

The primary focus of the EAR is to control the export of "dual-use" technologies, i.e., items that are used, or have the potential to be used, for military as well as non-military purposes if such export could adversely affect the national interests of the United States.²

3. U.S. Department of Treasury, Office of Foreign Assets Control (OFAC)

OFAC administers and enforces economic embargoes and trade sanctions based on U.S. foreign policy and national security goals against targeted foreign countries, terrorists, international narcotics traffickers, and those engaged in activities related to the proliferation of weapons of mass destruction.³

If you are not confident in your ability to master the ITAR, EAR, and OFAC process, it is highly recommended that you invest in the services of a trade compliance professional.

Exporting products, such as body armor, without proper authorization will place the organization in hot water with the U.S. State Department under ITAR. A simple action, such as a project manager innocently shipping a respirator to an international location without checking the applicable export laws in the U.S. and abroad, could place the company in a litigious situation with the U.S. Department of Commerce under EAR. Exporting PPE to U.S. government “watch list” countries could expose the company to severe discipline, fines and, in extreme cases, jail time.

The message is clear: know the U.S. and international import/export laws and regulations before engaging in an international business opportunity.

Understand and Respect Local Regulations and Cultural Norms

Culture is one of the most overlooked considerations when specifying PPE at international locations. After all, it is just PPE, and all workers are familiar with it, right? Not quite. Consider the fact that most of the PPE to which we are accustomed is designed and manufactured using western standards and culture.

Consider the fact that, in some cultures, certain colors are considered bad luck while others are considered good luck. For example, Chinese superstition is that the color of black is associated with evil, disaster, and bad fortune,⁵ as is the color black for young boys,⁶ while red is associated with happiness, wealth, fame, and good luck.^{5,6} Thailand shares China’s sentiment on the color black. In contrast, South Africa considers red as the color of mourning.⁶ So, what color would the safety eyewear frames be if you were to send your Chinese workers a pair or if you were looking to break into China’s market? What about Thailand or South Africa? In Japan, a yellow hard hat works better than a white one because yellow signifies courage and a white carnation signifies death.⁶ In China, a green hat means a man’s wife is not loyal to him. Forget about marketing green bump-caps in China.

Aside from colors, culture also has an effect on the use of PPE. As you migrate into an indigenous workforce, you may find that, in many cultures, people have never worn shoes. The introduction of safety footwear requires purposeful and unique training due to the potential for trips, slips, falls, and foot abrasions. Essentially, the user must learn to walk again.

Other tripping points include beliefs or cultures that prevent PPE from replacing articles of clothing, cultural facial hair requirements that prevent the use of respirators, anti-technology culture that prevents the use of any powered machinery, such as a powered air-purifying respirator (PAPR), etc.

Different approaches to PPE training must be taken under consideration as well internationally. In the Marshall Islands, for example, elders teach and the young learn. Accordingly, in their tradition, the PPE instructor should be the eldest person in the room, unless another arrangement is agreed upon in advance. We have found cases where inattentive workers drilled holes through their respirators to accommodate cigarettes. The root cause analysis revealed that they did not realize or understand the purpose of the PPE simply because they elected not to listen to the younger instructor’s teachings relative to use, limitations, maintenance, fit, protection factor, etc. Had the elder been the instructor, attentiveness would have increased significantly, and the situation would likely not have occurred. Awareness of culture anomalies, as insignificant as they may seem, may mean the difference between protecting workers and exposing them.

Another core element in maximizing safety in local cultures is to address physical requirements such as height, facial structure, and hand size to ensure a proper fit. For example, understanding that proper fit is crucial to PPE performance, one must consider the general physical attributes of the indigenous population who will be using the PPE.

Where are you shipping U.S./Canadian PPE? To a tribe in the Amazon, the north slope of Alaska, a Samoan village, a local township in the middle of Siberia, South Africa, anywhere else? A customized, localized approach is critical to addressing the unique needs of workers.

Consider Local Climate Extremes

Very often the right PPE may not be the right PPE in a given situation. In extremely warm or cold climates, such as those experienced in the world's deserts and at the Poles, donning PPE could be the cause of injury unless additional precautions are not taken.

For example, donning of welding PPE at elevated desert air temperatures increases the risk of heat exhaustion without the incorporation of personal cooling PPE apparel. As incredible as it may seem, you sometimes need PPE to protect workers from PPE in certain climates.

Cold weather extremes present their own PPE challenges, e.g., metal-framed safety eyewear causes accelerated frost bite, light plastic protective eyewear can become brittle and break, respirators freeze solid within seconds of saturation by the moisture from the user's breath, etc.

Measure Results

While metrics required by law form the baseline for approaching international markets, companies and organizations serious about maximizing the opportunity for a 100-percent safe environment often apply additional metrics, such as employee feedback and evaluations through in-person meetings and/or employee surveys. Keeping track of what was sent where, and when, and to whom is the key to compliance and effectiveness.

The Bottom Line

Optimal personal protection in foreign locations extends beyond hazard identification and logistics. An intentional effort in harmony with a systematic approach will assure compliance and the conformity. Assuming there is a strong safety program that incorporates the provision of right PPE from trusted sources, the added challenges of the international marketplace can be overcome by following a four-step process:

1. Researching the regulatory environment
2. Understanding and respecting local regulations and cultural norms
3. Considering local climate extremes
4. Measuring results to help with the ultimate goal of protecting people.

Identify any gaps in your safety program relative to import/export control regulations. Develop sustainable programs to assure compliance and secure the advice of your company's import/export control professionals before engaging in international operations.

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Endnotes

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