

March 18, 2008

OSHA Docket Office  
U.S. Department of Labor  
Room N-2625  
200 Constitution Avenue, NW  
Washington, D.C. 20210

Subject: Docket No. OSHA-S049-2006-0675  
Proposed Rule 29 CFR 1915 Subpart F

To Those Concerned:

Northrop Grumman Shipbuilding-Gulf Coast appreciates this opportunity to submit comments on the Occupational Health and Safety Administration’s (OSHA) proposed rule covering *General Working Conditions in Shipyard Employment*, Docket Number OSHA-S049-2006-0675.

Northrop Grumman Shipbuilding-Gulf Coast employs 18,000 persons at five sites in two states. The two major facilities, Pascagoula Operations and New Orleans Operations, are the largest private employers in Mississippi and Louisiana, respectively. Northrop Grumman Shipbuilding-Gulf Coast is an integral component of Northrop Grumman Corporation, a major defense contractor.

To avert possible confusion, please be aware that another of our sector’s operating wings, Northrop Grumman Shipbuilding-Newport News, will file separate comments on this matter.

You will find our remarks as follows:

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Again, Northrop Grumman Shipbuilding-Gulf Coast thanks OSHA for this forum to express its positions on the prospective standards.

Sincerely,



Murv Granderson  
Manager, Safety  
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Northrop Grumman Shipbuilding

## 1915.82 Lighting

### **1915.82(a)(1) General Requirements, Minimum Lighting Intensities (Table 1):**

Northrop Grumman Shipbuilding-Gulf Coast (NGSB-GC) believes that OSHA's proposal to adopt rigid minimum lighting intensities as detailed in "Table 1 to Subpart F" does not adequately take into account the challenges confronting major shipyards, particularly during new construction. NGSB-GC's business is building large Navy and Coast Guard ships that contain hundreds or thousands of compartments. Commonly, a workforce in excess of a thousand craftspersons will occupy a single vessel. The dynamic nature of modular construction means that the vessel is continually expanding and changing shape. As part of this process, we must reassign and move employees and temporary lighting to accommodate the construction schedule.

NGSB-GC contends OSHA's proposal that "the employer ...ensure that each area of the workplace is illuminated to at least the intensities in Table 1 *whenever an employee is present*" would prove unduly exhaustive and overbearing. Moreover, activities such as abrasive blasting and work in oddly configured spaces would complicate absolute compliance and unnecessarily deplete temporary lighting inventories.

The current standard, 1915.92(a) requires that "...areas shall be adequately illuminated." This, or similar phrasing, appears in many passages throughout the General Industry volume, and NGSB-GC maintains that it should remain in effect for shipyards. This language enables us to continue to provide adequate lighting throughout the various ship construction evolutions by optimizing available resources.

### **1915.82(c)(3) Handheld Portable Lights:**

*The employer shall ensure that only explosion-proof, self-contained handheld portable lights are used in areas that are not gas-free, or other electric equipment approved by a nationally recognized testing laboratory...*

For clarity's sake, Northrop Grumman Shipbuilding-Gulf Coast recommends that OSHA more closely approximate the wording in existing standard 1915.13(c)(9) by:

- Inserting the phrase between "or other electric equipment approved by a...NRTL" between "portable lights and "are used in areas" instead of keeping it at the end of the first sentence. The sentence as constructed in the proposal is awkward and confusing.
- Substituting "areas that are not gas free" with "hazardous locations as described in 1915.13(a) until such spaces have been certified as 'Safe for Workers'." 29 CFR 1915 does not define "gas free," and the reference to 1915.13(a) provides the location and source of the needed information.

## 1915.87 Medical Services and First Aid

### **1915.87(e) Quick Drenching/Flushing Facilities:**

The proposed rule would mandate that “where there is a possibility that an employee could be injured if splashed with hazardous or toxic substances, the employer shall provide facilities for the quick drenching of the eyes and body...within each work area for immediate use.” OSHA’s prospective definition of “Hazardous or Toxic Substances” as published in 1915.95 is:

- 1) *Any substance regulated by subpart Z of part 1915;*
- 2) *Any material listed in the U.S. Department of Transportation Hazardous Materials Regulations (49 CFR parts 171 through 180);*
- 3) *Any atmosphere with an oxygen content of less than 19.5%;*
- 4) *Any corrosive substance; or*
- 5) *Any environmental contaminant that may expose workers to injury, illness or disease.*

Northrop Grumman Shipbuilding-Gulf Coast agrees with OSHA’s preamble statement that substances other than “injurious corrosive materials [1910.151(c)]...can injure or burn the skin or eyes or be absorbed rapidly through the skin...” As such, NGSB-GC provides emergency flushing facilities for employees performing cleaning, painting and stripping operations, as well as other activities that may generate irritating or sensitizing agents.

However, NGSB-GC believes the proposed definition is exceedingly broad and offers the employer minimal guidance in providing effective employee protection against contact/absorption hazards. In fact, most of the criteria comprising the definition have little or nothing to do with absorption as a route of entry:

- Subpart Z, particularly 1010.1000, overwhelmingly targets inhalation hazards. Moreover, substance-specific standards already prescribe the measures for comprehensive exposure control.
- 49 CFR addresses the gamut of threats, including explosion.
- Oxygen deficiency is irrelevant for 1915.87(e).
- “Any environmental contaminant that may expose workers injury illness or disease” is so vague and speculative as to provide no practical use.

As written, 1915.87(e) would require quick drenching facilities at virtually every work area since even common commodities, such as copier cartridges and household-variety cleaners and disinfectants contain ingredients legally classified as “hazardous.”

NGSB-GC respectfully recommends that OSHA specifically target acute contact/absorption hazards by retaining but expanding upon the 1910.151(c) terminology by adding “irritating and sensitizing” to “corrosive.” Moreover, NGSB-GC requests that the Agency consider the fact that all potential absorption hazards do not present emergencies and do not require emergency flushing stations. For instance, some irritants, such as insulation material fibers, are easily and effectively removed with simple running water and a wash basin that may not be “within each work area for immediate emergency use”. Also, OSHA already covers other vital aspects of skin contaminant removal in the decontamination provisions of several substances within Subpart Z.

## 1915.88 Sanitation

### **1915.88(h) Eating, Drinking and Break Areas:**

This rule declares that “the employer shall ensure that food, beverages and tobacco products are not consumed or stored in any area where *hazardous or toxic substances may be present*.” For this proposal, Northrop Grumman Shipbuilding-Gulf Coast echoes much of its comment on 1915.87(e). The Agency’s definition of “Hazardous or Toxic Substances” is expansive but vague and does nothing to realistically target illness through the indirect ingestion of materials in the workplace:

- Subpart Z, particularly 1010.1000, overwhelmingly targets inhalation hazards. Moreover, substance-specific standards already prescribe the measures for comprehensive exposure control.
- 49 CFR addresses the gamut of threats, including explosion.
- Oxygen deficiency is irrelevant for 1915.88(h).
- “Any environmental contaminant that may expose workers injury illness or disease” is so broad, vague and speculative as to provide no practical use except to categorically prohibit all food, drink and tobacco consumption.

Ingestion is the rarest route of entry for “hazardous or toxic substances.” NGSB-GC, moreover, has no recent memory of an employee reporting an instance of occupational illness resulting from the indirect ingestion of a material in the workplace. Yet, as written, 1915.88(h) would effectively ban eating and drinking in shipyards, since even common commodities, such as copier cartridges and household-variety cleaners and disinfectants contain ingredients legally classified as “hazardous.” This would be the case even if the “hazardous or toxic substances” were completely contained and stored according to legal mandates and manufacturers’ specifications.

OSHA has no substance ingestion thresholds and does not explain its rationale for paragraph (h) in the preamble.

Northrop Grumman Shipbuilding-Gulf Coast, of course, acknowledges the possibility of employees transferring contaminants from their hands to oral consumables prior to ingestion. The company also recognizes the possibility of other ways that toxins can taint food, drink or tobacco. NGSB-GC, however, believes that OSHA adequately matters of hygiene in paragraphs (a) and (e) of this section. Northrop Grumman further thinks that manufacturers’ recommendations and focused OSHA standards are the efficient and effective means to target the subject of toxic substance control, including its application to ingestion as a route of entry.

Northrop Grumman Shipbuilding-Gulf Coast recognizes its obligation to ensure that its employees have clean places to eat and drink; however NGSB-GC also views 1915.88(h) as infeasible and, in fact, internally unenforceable.

NGSB-GC recommends that OSHA retain the language in current standard 1915.97(c) prohibiting oral consumption in “areas undergoing surface preparation or preservation.”

## 1915.89 Control of Hazardous Energy (Lockout/Tagout)

### **1915.89(b)(5)(ii)(B) Standardized Lockout Devices:**

This rule requires that “lockout and tagout devices shall be standardized within the facility by at least one of the following criteria: color, shape or size.” Northrop Grumman Shipbuilding-Gulf Coast agrees with OSHA that the ability to quickly recognize a device enhances not only employee awareness but also program effectiveness. Although OSHA included the lockout device standardization provision in its original lockout/tagout standard, NGSB-GC recommends that the Agency exclude lockout devices in the proposed rule for two reasons:

- Standardizing all lockout devices within a large and functionally diverse shipyard is infeasible. As the 1915.95 definition makes clear, a lockout device encompasses much more than a padlock. It may also include blank flanges, bolted slip blinds, chains, clasps or any part used to “hold an energy isolating device in the safe position...” Manufacturers, of course, produce lockout devices – or equipment incorporated into lockout devices - in the gamut of colors, shapes, sizes and materials. The number of energy sources – both landside and shipboard - at NGSB-GC is in the thousands, and the variety of isolating devices often compel our sites to implement the best available options, regardless of appearance.
- Standardizing all lockout devices is irrelevant to energy control effectiveness. As “a positive means to hold an energy isolating device in the safe position and prevent energization or startup,” NGSB-GC believes that the key attributes of a lockout device are that they:
  - 1) Are “substantial enough to prevent removal without the use of excessive force,” and
  - 2) Remain under the “exclusive control” of the authorized employee who applied it.

NGSB-GC views the lockout device standardization requirement as an undue impediment to selecting the most effective devices for positively controlling hazardous energy.

Since “lockout and tagout devices shall identify the identity of the employee applying the device” [1915.89(b)(ii)(D) in the proposed rule], virtually all industry lockout/tagout procedures require that tagout devices be attached to lockout devices when lockout is implemented to control hazardous energy. Tagout devices offer prominent alerts and their standardization, durability and attachment requirements are clearly stated in 1915.89(b).

With this in mind, NGSB-GC recommends that OSHA delete lockout devices from 1915.89(b)(5)(ii)(B) and add a requirement in 1915.89(b) that tagout devices be attached to lockout devices when lockout is implemented to control hazardous energy.

**1915.89 Control of Hazardous Energy (Lockout/Tagout), continued**

**General Concern: Coordination of Permanent Vessel's Systems Lockout/Tagout Operations:**

Northrop Grumman Shipbuilding-Gulf Coast, as do many shipbuilders, requires that a vessel's lockout/tagout operations be coordinated and implemented under the direction of designated employees, such as Tests Department engineers. These persons, in fact, do apply/remove energy control devices. Further, NGSB-GC employs these coordinators for *all* permanent vessel systems lockout/tagout operations, not only group lockout/tagout as covered is 1915.89(e)(3). This, of course, is because of their thorough knowledge of the localized and extended workings of all of the intricate ship systems and the details (as well as the ramifications) of shipboard energy isolation. Most authorized employees, on the other hand, are craftspersons whose expertise and focus is on the immediate task at hand.

1915.89(b)(8) states that "lockout or tagout shall only be performed by the authorized employees who are performing the servicing or maintenance." OSHA's 1915.95 definition of "Servicing and/or Maintenance" includes "inspecting" among the activities comprising servicing and maintenance; however, whether the depth of these coordinators oversight constitutes inspection may be subject to interpretation.

NGSB-GC requests that OSHA insert language in 1915.89 that explicitly acknowledges vessel systems experts/coordinators as authorized employees.

## 1915.95, Definitions

### **Hazardous or Toxic Substances:**

1915.95 states that a “hazardous or toxic substance” is:

- 1) *Any substance regulated by subpart Z of part 1915;*
- 2) *Any material listed in the U.S. Department of Transportation Hazardous Materials Regulations (49 CFR parts 171 through 180);*
- 3) *Any atmosphere with an oxygen content of less than 19.5%;*
- 4) *Any corrosive substance; or*
- 5) *Any environmental contaminant that may expose workers to injury, illness or disease.*

Northrop Grumman Shipbuilding-Gulf Coast agrees with OSHA’s inclusion of criteria one and two in this definition. NGSB-GC, however, views the remaining criteria as inappropriate.

- Any atmosphere with an oxygen content of less than 19.5%:

First, NGSB-GC’s view is that the purpose of a definition of hazardous or toxic substances is to assist in identifying harmful agents with the aim of targeting measures to eliminate or control their presence in the atmosphere. This passage now says that the tainted atmosphere itself is the harmful agent. The criterion embraces an “after the fact” approach that is reactive and counterproductive.

Second, this phrase is unnecessary for employee safety and health. 1915 Subpart B adequately regulates oxygen content and applies to all areas within shipyards.

- Any corrosive substance:

This inclusion is redundant as “corrosive” is presently included in the definitions of 1910.1200 Appendix A. OSHA previously references this in criterion one, Subpart Z 1915, which, in turn, references 1910.1200.

- Any environmental contaminant that may expose workers to injury, illness or disease:

NGSB-GC understands 29 CFR does not and likely can never regulate every “hazardous or toxic substance.” However, instead of providing the bases for determining the hazard potential of substances unnamed in Subpart Z, the Agency offered a vague catch-all clause. The company believes that this criterion is virtually impossible for employers to enact and also for OSHA to enforce or defend.

For example, one of Northrop Grumman’s shipyards recently received a medical report of an employee who incurred an allergic reaction after a nearby colleague peeled an orange. This affliction resulted from an action that was not work-related. Although NGSB-GC could not reasonably anticipate the employee’s illness, the orange mist, according to the definition, constitutes “any environmental contaminant.” Frivolous as this instance may seem, it illustrates the impracticality of criterion five. 1915.95, of course, does not define “environmental contaminant.”

1910.1200(b)(2) advises that the Hazard Communication standard “applies to any chemical which is known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency.” Criterion five far exceeds this reasonable and practical application.

Northrop Grumman Shipbuilding-Gulf Coast respectfully recommends that OSHA delete criteria three, four and five from its definition of “hazardous or toxic substances” in 1915.95.