U.S. DEPARTMENT OF LABOR INFORMAL PUBLIC HEARING ON OSHA'S PROPOSED RULE ON GENERAL WORKING CONDITIONS IN SHIPYARD EMPLOYMENT 9:30 a.m. October 22, 2008 Renaissance Seattle Hotel 515 Madison Street Seattle, Washington KIMBERLY MIFFLIN, CCR, CSR NORTHWEST COURT REPORTERS 1415 Second Avenue, Suite 1107 Seattle, WA 98101 (206) 623-6136 www.northwestcourtreporters.com DOL Administrative Law Judge: JUDGE JENNIFER GEE DOL Office of the Solicitor: SARAH SHORTALL, Project Attorney SUSAN BRINKERHOFF OSHA Directorate of Standards and Guidance: BILL PERRY, Deputy Director OSHA Office of Maritime Standards and Guidance: JOSEPH DADDURA, Director AMY WANGDAHL, Project Officer DANIELLE WATSON OSHA Office of Regulatory Analysis: PAUL BOLON, Project Economist OSHA Office of Communications: VENETA CHATMON, Hearing Officer (Hearing Commenced at 9:30 a.m.) JUDGE GEE: This is the Informal Public Hearing on OSHA's Proposed Rule on General Working Conditions in Shipyard Employment. Today is October 22, 2008. Our program continues today with a panel -- I'm sorry, it's not a panel. Mr. Allen Rainsberger will be the first 7 person to testify. Mr. Rainsberger. MS. SHORTALL: Your Honor, as Mr. Rainsberger gets up and ready to testify, I would like to enter a couple of items into the record. JUDGE GEE: All right. MS. SHORTALL: First is Exhibit 0177, written testimony from Lurilla Lee, and the second of all is

Exhibit 0178, the hard copy of the Power Point 14 15 presentation that Mr. Rainsberger will be making. THE COURT: So ordered. 16 17 MS. SHORTALL: Thank you, your Honor, JUDGE GEE: Mr. Rainsberger, state your name 18 19 and spell your first and last name and your affiliation and then you may start. 20 MR. RAINSBERGER: 21 My name is Allen Rainsberger. The first name is A-L-L-E-N, last name is R-A-I-N-S-B-E-R-G-E-R. I'm with Foss Maritime and 22 23 president of the Puget Sound Shipbuilders Association. 24 25 JUDGE GEE: Thank you. You may begin. 0004 1 MR. RAINSBERGER: Thank you. I know that on October 3rd the group has heard a lot 2 3 of folks from the aircraft carriers and some of the bigger operations as far as shipyards, and yesterday I 4 5 think you got a good overview of the fishing fleet here 6 in the Northwest, at least. 7 Today I think the Association would like to give some testimony and some presentations to the panel on 8 9 some of the small to mid-sized shipyards. The issues sometimes are vastly different. 10 And what I would like to actually do today is give 11 you a little bit of an overview, moving into those that 12 13 will actually be doing the individual presentations through the today. 14 15 I, as I said, am president of Puget Sound Shipbuilders Association, and the association is a group 16 of 32 different entities that meet on a quarterly basis 17 here in the Puget Sound regarding safety. I'm also a 18 member of the American Society of Engineers. 19 I'm a member of the Seattle Fire Code Advisory Board and a 20 21 member of Marine Chemist Qualification Board, and also 22 preside over the Environment Coalition of South Seattle. 23 I've got 30 years in the industry, and I worked at Todd Shipyard for 28 years, 20 of those years in the safety department, and I started out in the shipyards as 24 25 0005 1 So I know from the deck place the operations a painter. that happen in shipyards all the way up to the administrative challenges of the operation of the 2 3 4 shipyards. 5 Our members include a lot of folks throughout Alaska, Washington and Oregon, so it's misconceiving to 6 7 say the Puget Sound Shipbuilders Association, but the 8 association has just grown quite a bit, so we do have 9 other shipyards outside of the Puget Sound region that 10 actively belong to the association. I'm not going to read all of these different names. You've got them all in front of you. But just to give 11 12 13 you an idea, we do have a lot of small to medium-sized shipyards, the largest being Todd Shipyards in Seattle, 14 15 which currently employs about 500 people. 16 We also have some associate members that involve the 17 insurance companies, worker's compensation carriers. Ι think you have all heard from Amy Duz from iWorkWise, who 18 belongs to our association as well, welding manufacturers 19 and suppliers helping us with the hexavalent chromium 20 issues that we deal with and studies of that work from 21 the University of Washington, as well as the marine 22 chemists, different safety suppliers and life-saving equipment suppliers as well. So we try to get a lot of 23 24 25 different facets of the safety representation throughout 0006 1 our association so we feel we're pretty well rounded. 2 The Puget Sound Shipbuilders Association itself is a nonprofit organization. We do have a set of bylaws that 3 actually go back to the mid 1940's when the association 4 5 was formed. We have quarterly meetings. We actually just had a meeting on Monday, and Mr. Vonkowski from OSHA 6 was a speaker at our meeting and he gave an overview on fire plan requirements under Subpart P. 7 8 9 We do have daily interactions through e-mails and 10 phone calls within the members working together to assure that we provide safe workplaces for all of our employees. 11 Collectively we all believe strongly that the strongest 12 resource that we have in the shipbuilding industry is the 13 employees that we have. We take it very seriously that 14 15 we protect these employees.

16 We do a lot of education and training employers on 17 the safety issues. Some of the smaller shipyards have

anywhere from 10 to 50 people. They don't really have 18 the resources to have a full-time safety person per se. 19 20 That person may wear a lot of different hats. So sometimes it's good for them to come up to one of the 21 other shipyards that already has a program and help them 22 23 out too, give them the resources that they need to bring forth safe work measures to their employees. 24 25 So the networking is really key to all of this. 0007 try to share the information and grow from that. 1 We do a lot of the technology presentations of new safety equipment that's available, better ways of doing things, thinking outside the box a little bit other than 2 3 4 standard procedures that have been in place for quite 5 some time. 6 7 We do have an alliance with OSHA throughout the 8 Puget Sound Shipbuilders Association. OSHA does attend 9 our meetings all the way from the area directors to the 10 regional directors to compliance officers. Same with the state act too with the DOSH folks, they have attended our 11 meetings in the past. We do have seminars that we've done. As I mentioned, we did one on fire plans under Subpart P on Monday. We've done OSHA 300 recordkeeping. 12 13 14 It was actually an ex-OSHA employee, Linda Glasby 15 actually gave that with her 30 years of experience 16 17 We're done presentations on hexavalent chromium standards, the electrical standards and shipboard 18 ventilation are just some examples. I'm sure I forgot some of the other things we covered through the alliance. 19 20 It's been very active. It's been beneficial for both 21 OSHA and for the Association. 22 Many shipyards in this region have closed for a number of different reasons. Just recently Fairhave 23 24 Just recently Fairhaven 25 Shipyard of Bellingham shut their doors on Wednesday of 0008 1 last week, not because of safety reasons but because of 2 labor negotiations that have been going on for some time 3 unsuccessfully. We've also had Duwamish Shipyards, Marco, Tacoma Boat and some of our other local shipyards 4 5 that actually have closed their doors. So the industry itself is facing a lot of challenges, a lot of economic challenges, a lot of 6 7 8 environmental challenges. The Puget Sound region has 9 very stringent environmental regulations such as keeping our yards very clean for the environment, which actually 10 dovetails into safety issues as well because a clean yard 11 is a safer yard as well. 12 1915 also not only covers the shipyards but a lot of shoreside activities as well. Hence my question from 13 14 yesterday about the subcontractors that's been taken into effect. You asked for a number of percentile of 15 16 17 subcontractors that work in the industry, and I can only guess at what that number is, but it is substantial. 18 Ιf you want me to estimate, I would say between 20 and 30 percent of the shipyard work is subcontracted out. That 19 20 probably hasn't been factored into your numbers. 21 You did a good job earlier going out to the BLS 22 survey showing improvements. If you go back actually, the improvements are about 75 percent over the time 23 24 25 period that you went, all the way from 38 of an incident 0009 1 rate to the current BLS standards of around nine. So the industry itself in the last 15 years has done a lot of good things. A lot of things have changed with 2 3 technology and opportunities, and we try to capitalize on 4 5 those things. The only thing I really want to say because you asked about it, heard too much about it, is on .89, Hazardous Energy for lockout/tagout. It's a huge issue 6 7 8 for a lot of different folks. It's huge for aircraft carriers. It's important -- it doesn't involve just 9 10 electrical, it involves hydraulics and steam and other 11 things as well. But there will be other people 12 testifying as far as the lockout/tagout hazardous energy 13 portion as well, but I just wanted to make sure you knew 14 15 it was on my radar screen as well. The wording in the eye wash section is just an 16 example of things that would make sense to me. If you're 17 around an acid tank or a caustic tank to have a shower 18 there, an eye wash. The way it's worded right now, you have to have an eye wash every 15 feet in the shipyard. 19 20 It's just not practical, and it's not feasible. 21

Snow removal language. I'm sure the east coast 22 folks probably have some comments about that as well as 23 24 my brethren from Alaska who is in attendance. Huge challenge for the way it's worded in snow removal. 25 0010 think every yard does a great job of doing what they can do to get all the snow up. To get every flake of snow up 1 2 3 is virtually impossible. 4 AED's, challenges there. I think it's a great thing here in the city of Seattle, largest per capita of CPR folks in the nation. In my facility we do have AED's, 5 6 7 and we actually have them on our tug boats as well. Challenge would be what if someone doesn't want to use 8 9 it, what do you do. Toilet facilities, I think that needs to be worked out a little bit too. I know what the intent is or the way the language is. It has some work that needs to be 10 11 12 13 done. 14 Really the solution that I see is to allow our association to work with some of the other associations 15 to get the wording right, come up with something that's 16 17 doable, feasible and practical for all our employees, to 18 get a good product that keeps all of our workers safe. That's really the goal for me personally and for the 19 members of the Puget Sound Shipbuilders Association. 20 That's basically all I have, Judge. JUDGE GEE: Thank you. Is there anybody in the 21 22 audience who would like to ask questions? 23 MS. SHORTALL: Yes, your Honor. 24 We have 25 questions. We'd like to start with Mr. Daddura. 0011 1 JUDGE GEE: We have a question from the 2 audience. 3 MS. SHORTALL: Excuse me. 4 JUDGE GEE: Please identify yourself, spell 5 your name and state your affiliation. MR. SCULLY: Yes. My name is Andrew Scully, 6 7 and I'm president of the Synergy Group. We're a safety, health and environment consulting group. 8 9 MS. SHORTALL: Your Honor, this person has not filed, to my understanding, a notice of intention to 10 appear here today. Therefore, discussions would not be 11 12 allowed. MR. SCULLY: I can't ask a question? 13 MS. SHORTALL: No. You have to file a notice 14 15 of intention to appear. However, Your Honor, it is within your discretion if he has comments he wants to make, at the end of the day, 16 17 to allow him up to 10 minutes to make any comments he 18 19 wants. JUDGE GEE: Well --MR. SCULLY: Did I misunderstand you asked for 20 21 22 questions? I just wanted to ask a question of Mr. 23 Rainsberger. 24 MS. SHORTALL: We have a procedure that 25 requires that any person who wanted to participate in the 0012 1 rule file a notice of intention to appear, and every person -- this was a legal document, placed in the Federal Register on OSHA's web page. Any person w 2 3 Any person who was interested was able to file for either the purpose of 4 5 testifying or asking questions. 6 However, we do understand every once in a while 7 there is someone who doesn't get the word, and for those persons if time permits at the end of the hearing, we do 8 9 allow for them to have up to 10 minutes to have their 10 say. MR. SCULLY: Okay. Well, I didn't get the notice of the proposed rulemaking, but I did find out later about it and thought I might have an input on a 11 12 13 question. 14 15 JUDGE GEE: You'll be able to do that at the 16 end of the day. MR. SCULLY: I won't be able to because I won't 17 be here at the end of the day, but perhaps I can submit a written comment to the panel later. Is that possible? 18 19 MS. SHORTALL: At this point the participation 20 is limited to those persons who filed a notice of 21 intention to appear. If you have an organization that 22 23 you're working through who has filed a notice, you can certainly could give your comment or question to them. JUDGE GEE: Thank you. I'm sorry about that. 24 25

0013 MS. SHORTALL: We have questions and we will 1 start with Mr. Daddura. MR. DADDURA: Good morning, Allen. 2 3 MR. RAINSBERGER: Good morning. 4 5 MR. DADDURA: Just a couple of questions. You're representing an organization currently at this 6 7 meeting; is that correct? 8 MR. RAINSBERGER: I'm representing the Puget 9 Sound Shipbuilders Association and my employer, Foss 10 Maritime. 11 MR. DADDURA: Puget Sound Association, how many employees do they have roughly? 12 MR. RAINSBERGER: Roughly about 2,500. 13 MR. DADDURA: You have one yard, one location 14 15 in your company? MR. RAINSBERGER: We have two yards actually. We have a yard in Seattle and a yard in Rainier, Oregon. 16 17 18 MR. DADDURA: How many employees in each yard? 19 MR. RAINSBERGER: We have 105 in Seattle and 29 20 in Oregon. MR. DADDURA: Being a safety and health professional as you are, injury rates for both of your yards, and I guess your association also, I understand. 21 22 23 Let's talk about your yards, first in Seattle. Do you 24 25 track injury rates? 0014 1 MR. RAINSBERGER: Absolutely. 2 MR. DADDURA: Can you tell us what type of 3 major injuries and number of injuries you're having 4 currently. 5 MR. RAINSBERGER: The major injuries we have 6 are sprains and strains. 7 MR. DADDURA: Okay. 8 MR. RAINSBERGER: Our incident rate is 9 approximately at 8.9 right now, total loss time of about 10 з. 11 MR. DADDURA: What about your small yard in 12 Oregon? MR. RAINSBERGER: Last year they had no 13 injuries at all. They had one reportable injury this 14 15 year. 16 MR. DADDURA: Association, do you have those 17 numbers? MR. RAINSBERGER: We have done some 18 benchmarking in the past, and historically our numbers have been very comparable to the BLS numbers. 19 20 21 MR. DADDURA: Would you please explain a little bit more about the association, when it was started, and 22 is it all just shipyards involved or is it other people? 23 24 MR. RAINSBERGER: It's maritime activities, 25 it's not just shipyards. We do have people from the 0015 1 fishing fleet. We have people from shipyard engineering firms, shipyards themselves. We actually have an 2 environmental attorney. We have other safety 3 professionals throughout the worker's compensation 4 carriers with Sea Bright and Alaskan insurance, safety 5 6 vendors. 7 So it's not just shipyards. Everyone who has a 8 maritime interest is invited to join the association. 9 MR. DADDURA: Thank you. Let's move on to the standard now. When a ship 10 11 comes in regardless of the size, how do you control the amount of hoses and lines and equipment and walkways? 12 13 MR. RAINSBERGER: We use a lead management 14 system where we use what's called Christmas trees and hangers. Christmas trees is basically a stanchion that 15 goes up. It's has hooks that goes off the side and you elevate the leads up off the deck, have them up away from the aisleways and the walkways, as well as what we call S hooks that actually go into the overhead and have a hook 16 17 18 19 that comes in an S shape where you actually put lines up 20 21 with as well. 22 Those lines, high steam lines and things you can't 23 put up in the overhead for fear of causing more damage than it would, we actually put barriers over them so that 24 25 they're not a tripping hazard. 0016 1 MR. DADDURA: Barriers meaning like a ramp or 2 crossover? 3 MR. RAINSBERGER: Correct.

MR. DADDURA: So you establish walkways? 4 5 MR. RAINSBERGER: Yes. 6 MR. DADDURA: What's the difference between a 7 walkway and the work area or work surface, working 8 surface? 9 MR. RAINSBERGER: Oh, a working surface to me basically would be an area where the mechanic would 10 actually be stationed for a period of time doing a 11 12 designated work task, where a walkway would be an area where the thoroughfare would be going through, people pass through going from one area of the vessel to another 13 14 15 area. 16 MR. DADDURA: The working surface, work area, are the lines placed in these hooks in the overhead and 17 things of that nature also? 18 19 MR. RAINSBERGER: Correct. 20 MR. DADDURA: So new lines on every deck? 21 MR. RAINSBERGER: I wouldn't say every. The 22 shipbuilding industry is ever changing. Every 15 minutes things change, the body positioning, parts of the components of the ship, so there is a constant need to 23 24 25 evaluate workplace and move things again. So I wouldn't 0017 1 say there is never anything lying on the deck. That wouldn't be a correct assumption, Mr. Daddura. MR. DADDURA: What about material or equipment; 2 3 is that placed on the deck or is that placed in overhead 4 5 also? 6 MR. RAINSBERGER: Material depending on the 7 size would be brought in either by crane or by handtruck or by a person actually carrying something in that was of 8 lighter weight. The intention of the industry is to make 9 sure the equipment gets into place as soon as possible, 10 11 to get any dunnage that was left over such as cardboard 12 or crating off the vessel expeditiously and then let them do their production work to put that system in place. 13 MR. DADDURA: So you're saying there's never 14 15 material laying on the deck in a work area? MR. RAINSBERGER: There would be for a period 16 of time until you put the material up to where it's going 17 to be. Not everything lays on the ship. 18 There's a lot of things in the overhead and on the bulkhead, so it's 19 got to be on the deck for a certain period of time until 20 you can move it into place and put it in. 21 MR. DADDURA: But you only bring on the 22 material that you use for that ship, that employee? MR. RAINSBERGER: That is definitely the goal, 23 24 25 yes. 0018 MR. DADDURA: Is that working? 1 2 MR. RAINSBERGER: It works well. MR. DADDURA: Utilities. Let me go back. 3 Contractors, how do you control contractors bringing on their equipment, lines, hoses and things of that nature? 4 5 MR. RAINSBERGER: We make sure they coordinate 6 7 through our superintendents and our supervision. Then we use our crane service for a heavy lift. 8 For the materials they bring on themselves, we have 9 10 safety observations that go on on a daily basis to make sure the subcontractors are following our same 11 12 procedures. 13 MR. DADDURA: If you find a violation, what 14 happens? 15 MR. RAINSBERGER: We'll sit down and talk with them and explain the way the procedure is supposed to 16 17 work. 18 MR. DADDURA: Thank you. Utilities. What procedures does Foss have? In most 19 PSSA shipyards that hook up and steam to the vessels; 20 21 what procedure is there? MR. RAINSBERGER: There's temporary services 22 that come off utilities that involve steam, water, 23 sewage, electrical and such that is actually piped and 24 25 plumbed from pier side up to the vessel. 0019 1 MR. DADDURA: And your steam, it a high 2 pressure steam? MR. RAINSBERGER: We don't use a lot of steam. 3 There's very little use for steam in most of our shipyard 4 5 applications. MR. DADDURA: When you do use steam, do you 6 provide a relief valve and gauge?

MR. RAINSBERGER: Yes. 8 9 MR. DADDURA: Where do you position the relief 10 valve, next to the gauge? It's closer to the pier side 11 MR. RAINSBERGER: than it is to the vessel. 12 13 Most shipyards are unionized, and the plumbers have the jurisdiction on setting those up, so they have that 14 15 expertise, the journeymen who actually set those systems 16 up. 17 MR. DADDURA: Is it near walkways or access? MR. RAINSBERGER: No, it would be away from the 18 19 access to the vessel. MR. DADDURA: 20 Thank you. 21 Let's talk about work you could find in isolated spaces. I'm sure there is occasion or is there occasion 22 23 where your employees are assigned tasks in work locations that are not normally with other workers involved nearby, 24 25 second shift and things. How do you provide safety for 0020 1 them or how do you check on them to make sure nothing has happened, they didn't slip or fall or become injured? MR. RAINSBERGER: Well, supervision has to do 2 3 frequent checks on the employees, and in our operations 4 we make sure it's at least hourly. 5 The employees also have means such as whistles, 6 two-way radios, other ways to alert someone that it's a situation that takes place on the back ships. 7 8 9 We have shipyard competent people who actually roam the jobs to make sure that areas remain safe. There is a 10 number of means to address that situation. 11 MR. DADDURA: The maintenance people for your 12 shipyards, they work all shifts, correct? 13 MR. RAINSBERGER: We probably just work days 14 15 and swing shift. 16 MR. DADDURA: Do they have radio 17 communications? MR. RAINSBERGER: Yes. 18 MR. DADDURA: If they are down there by themselves, working in the pump rooms and things of that 19 20 21 nature? MR. RAINSBERGER: They do have radios, yes. 22 MR. DADDURA: Let's move on to lighting. 23 Does your yard measure the lighting for employees to walk and work? I'm speaking of lumens, foot-candles, the old 24 25 0021 1 terminology is foot-candles. MR. RAINSBERGER: There's not a formalized 2 process on measurement, no. MR. DADDURA: Have you ever done a check on the 3 4 5 lighting? 6 MR. RAINSBERGER: Years ago, I did, yes. 7 MR. DADDURA: Where was that at? 8 MR. RAINSBERGER: It was at Todd Shipyards. MR. DADDURA: Was it the parking lot, was it the shipyard, the pier? 9 10 11 MR. RAINSBERGER: It was actually the buildings and the facility. And we did some on one of the native 12 vessels that was in for repair at the time. 13 MR. DADDURA: Do you find that the vessel lighting is adequate or inadequate where you have to supplement temporary lights to the existing lighting on 14 15 16 17 the vessel? 18 MR. RAINSBERGER: In general the ship's 19 lighting is sufficient. The exception may be if you are down in a confined space where you would have to have 20 21 temporary lighting to supplement anything else. MR. DADDURA: Do you measure that lighting? MR. RAINSBERGER: Not in lumens or anything. 22 23 The measurement is basically a standard for how the 24 25 electricians set up their lighting. No. 1, it would have 0022 1 to be explosion proof if it's in a confined space; No. 2, there is a number of lights and stringers that actually 2 go on. They tend to actually light those up even greater 3 than they were if you were inside the ship. MR. DADDURA: What about the employee working 4 5 in the corner or on a flag somewhere where lighting is 6 not very adequate, and he has to perform some welding or 7 fitting or burning or something like that. How do you 8 supplement the lighting for that? MR. RAINSBERGER: Some people use a strap-on 9 10 light on their hard hat, flashlights. They'll bring the 11

screen closer to their work site actually, essentially 12 13 improves ventilation as well. 14 MR. DADDURA: Do you have a problem with power going out and lighting going out and people are trapped 15 into the tanks and spaces? 16 17 MR. RAINSBERGER: It's very rare. MR. DADDURA: Is there a requirement for your 18 employees to carry a handheld flashlight with them? 19 20 MR. RAINSBERGER: Yes. 21 MR. DADDURA: At all times? MR. RAINSBERGER: Yes. 22 23 MR. DADDURA: Sanitation. Speaking for your shipyard -- I don't want you to speak for all the 24 25 association -- do you have enough sewer fixed toilets to 0023 1 handle your population? I mean, is your population stable, work population stable? MR. RAINSBERGER: Fairly stable, yes. 2 3 4 MR. DADDURA: What it's, 100? 5 MR. RAINSBERGER: We have a 105. We'll dip down to 95 or ramp up to 115, so it's fairly consistent. 6 MR. DADDURA: Do you use portable toilets? MR. RAINSBERGER: There are some available 7 8 There are some available out 9 on the piers that are away from the main facility where the majority of the toilets are. 10 MR. DADDURA: Are you allowed to use the ships 11 12 toilets at any time? 13 MR. RAINSBERGER: Depending on the customer. lot of times you can use the system if everything is 14 plumbed up. If the plumbing is being worked on or something or is tagged out, then you're not allowed to 15 16 use the facility. So it just depends on the nature of the repairs being taken care of. 17 18 MR. DADDURA: When you use the term "plumbed 19 20 up," do you mean secured? 21 MR. RAINSBERGER: Yes. 22 MR. DADDURA: Thank you. 23 Do you only do work in your shipyard, your geographical location of your shipyard? Do you ever do 24 25 work outside of the shipyard for customers? 0024 MR. RAINSBERGER: At Foss Maritime we will do very rare occasions outside of our facility. But other 1 2 shipyards probably do work outside of their facilities, 3 4 ves. MR. DADDURA: Do you know about the facilities there; I mean, if they're downtown Seattle at a pier, are 5 6 there facilities available on that pier for the 7 8 employees? MR. RAINSBERGER: The ferry dock right in Coleman is an example of when they do work on the ferry, 9 10 11 there is toilet facilities right there and everything 12 they want is right there. 13 MR. DADDURA: I'm assuming there's hand washing 14 facilities there also? 15 MR. RAINSBERGER: Sure. 16 MR. DADDURA: Have you ever used hand washing 17 facilities for portable toilets? 18 MR. RAINSBERGER: Yes. 19 MR. DADDURA: Lockout/tagout, energy control. How many shops do you have in your shipyard? 20 MR. RAINSBERGER: We actually have 11 different 21 unions that comprise I believe 12 shops. 22 MR. DADDURA: Physical shops, buildings? MR. RAINSBERGER: Well, it's two large 23 24 25 buildings and six buildings in each shop, I believe. 0025 MR. DADDURA: What form of lock out/tag out do 1 you use for maintenance of those buildings or your cranes 2 3 or your mobile equipment? 4 MR. RAINSBERGER: They use locks, tags, hasps, 5 clasps, the energized systems, take away the wires and Everyone has been trained. There are effective 6 fuses. 7 employees, those who are actually authorized to do ag out. We don't have any problems with that. MR. DADDURA: Is all your equipment lockable? 8 lockout/tag out. 9 MR. RAINSBERGER: No. 10 MR. DADDURA: Is there plans to replace that 11 equipment, the unlockable equipment? 12 13 MR. RAINSBERGER: Probably not in my working 14 career. 15 MR. DADDURA: Okay, that's an honest answer.

Interesting you said about pulling a lead or 16 17 disconnecting or pulling a fuse. Is that done routinely in the shipyard maintenance portion of it? 18 19 MR. RAINSBERGER: A large percent of the time that would be one of the methods used or supplemental 20 method as well, just to eliminate the hazard altogether so it's not an issue for anyone else. 21 22 MR. DADDURA: How about your crane maintenance. How do you ensure that the mechanic working on the crane 23 24 25 is shut down, not operable? 0026 1 MR. RAINSBERGER: Pretty much going through the same process, make sure they bleed out all the energy 2 after they've done the lockout/tagout procedures. 3 think Richard McKenzie, who I believe speaks after me, is 4 actually a crane expert with maintenance and has 5 performed the last ten or 12 of his 13 years of his 6 7 career doing crane maintenance. He might be the best person to answer that question. 8 9 MR. DADDURA: Okay. Let's move on board Do you have routine customers who bring vessels 10 vessels. 11 back each time that you're familiar with? MR. RAINSBERGER: Yes, and in my situation we 12 13 work on a lot of our own fleet. MR. DADDURA: What engine control procedure do 14 15 you have working on vessels? MR. RAINSBERGER: Actually, each one of our 16 vessels has a kit, a lockout/tagout kit that has all the 17 different locks, tags, different types of hasps, other types of barriers for piping systems and such particular to that vessel as well as a log. Everyone has been 18 19 20 through a training protocol that's been done locally 21 within the industries and received training. 22 23 MR. DADDURA: What type of vessels do you 24 normally work on? 25 MR. RAINSBERGER: Tug boats, barges and small 0027 1 fishing boats. MR. DADDURA: Any big processors or anything 2 like that? 3 4 MR. RAINSBERGER: No. 5 MR. DADDURA: Do any of these vessels have emergency generators on them? 6 7 MR. RAINSBERGER: I believe some vessels do 8 have emergency generators, yes. 9 MR. DADDURA: Do you secure that system when a 10 ship comes in? 11 MR. RAINSBERGER: I'm not really familiar with what the requirements are for that. 12 13 MR. DADDURA: When it gets down to the 14 hydraulic system and the valves, what procedures do you 15 use, just the lockbox that we saw yesterday with the plastic cap on top of the valve handle that locks? 16 17 MR. RAINSBERGER: I've seen chains with different locks for securing. I've seen people take the 18 handles off so you can't turn the handles, a bunch of 19 different means to positively secure the system. 20 I think the most important that you can do is bleed the system out to make sure there is no energy left. 21 22 23 MR. DADDURA: Is there a requirement for your employees, your maintenance people to test before they 24 25 actually put their hands into a situation where hazardous 0028 1 energy could be? 2 MR. RAINSBERGER: Absolutely. MR. DADDURA: Is that done daily? I mean, some 3 4 work is continued on from day to day or week to week. Is 5 there a requirement for any tests to make sure that the 6 system is still secure? 7 MR. RAINSBERGER: Yes. 8 MR. DADDURA: Is that in writing? 9 MR. RAINSBERGER: It's in our policy, yes. MR. DADDURA: Can you provide that program of 10 11 your policy to this hearing? MR. RAINSBERGER: I could do that at a later 12 13 date, yes. MR. DADDURA: I appreciate it. Thank you. 14 MS. SHORTALL: Mr. Bolon, do you have any 15 16 questions? 17 MR. BOLON: Just a few. It sounds like your yards are primarily or 18 exclusively engaged in the ship repair rather than in 19

20 shipbuilding? MR. RAINSBERGER: The Seattle yard is all 21 22 repair, and the Rainier yard is all new construction. MR. BOLON: Just to follow up on a point that Joe raised, the total is a comprehensive program which 23 24 25 requires that it be written and you've mentioned training 0029 1 already. Does Foss have a comprehensive program that's 2 written as well as the various types of provisions that's 3 in the proposal? MR. RAINSBERGER: Yes. 4 5 MR. BOLON: That's all I've got. MS. SHORTALL: Ms. Wangdahl has questions next. MS. WANGDAHL: I just have a few questions. 6 7 8 I believe you said you have AED's at your facility? 9 MR. RAINSBERGER: We have them at our shipyards 10 and have them on our tugboats. MS. WANGDAHL: Do you know if Washington has a 11 12 Good Samaritan law? 13 MR. RAINSBERGER: I believe Washington does, 14 yes. MS. WANGDAHL: But you don't think it should be a requirement; you think it should be more of a guidance 15 16 17 or --18 MR. RAINSBERGER: Are you going back to my 19 comments earlier in my opening? MS. WANGDAHL: Yes. 20 MR. RAINSBERGER: I think there is situations, 21 not just in the workplace, where people are uncomfortable 22 giving CPR even though they've been trained. And there 23 are situations where somebody doesn't feel comfortable 24 25 using an AED just because they've been through a training 0030 1 class. Do they have an obligation to use that? I think 2 the answer is probably no. 3 MS. WANGDAHL: How long have you had them in 4 your shipyards? 5 MR. RAINSBERGER: Probably going back about six 6 years. 7 MS. WANGDAHL: And then one more comment. Going back to your testimony, you talked about that the sanitation section needs work. Can you elaborate on 8 9 that? What portion of the sanitation needs work? MR. RAINSBERGER: I only read it I think twice 10 11 over the last four months or whatever, so I might not 12 13 remember all of it. But it just seems to be provisions where you would 14 actually -- the portable sanicans are acceptable for 15 certain periods where if someone needed to actually use a 16 toilet facility on a short-term basis or on a vast basis 17 18 versus walking a little bit further to go to the main 19 plumbed area where there is actually a series of toilets. And depending on the person who read it and depending on 20 21 the wording in there and the enforcement officer that shows up to enforce how that's written, I think it's not 22 clear, it's unclear. 23 Does that mean that we have to start plumbing every 24 25 pier we have with toilets and we'll just have a yard of 0031 1 toilets? It's very unclear. And I've seen inspectors come through and they're 2 3 very reasonable and could read something and say, I know what the intent is, and I've seen a compliance officer 4 5 come through that would read it totally the opposite. MS. WANGDAHL: Do you agree with the ratio, the 6 7 amount of toilets per employees; is that working for you? 8 MR. RAINSBERGER: You have to refresh my memory 9 of the numbers. MS. WANGDAHL: 10 One to 15. 11 MR. RAINSBERGER: That's probably a sufficient number, yes. 12 13 MS. WANGDAHL: Thank you. MS. SHORTALL: Ms. Brinkerhoff has questions 14 15 next. 16 MS. BRINKERHOFF: Do you have any idea how many 17 of the small shipyards in the Seattle area attend your safety seminars, like what percentage? 18 MR. RAINSBERGER: Ninety-five percent. MS. BRINKERHOFF: You also said you've got 19 20 21 people from the fishing fleet in your organization? MR. RAINSBERGER: Correct. MS. BRINKERHOFF: Do they attend those safety 22 23

24 seminars also? 25 MR. RAINSBERGER: Absolutely. 0032 1 MS. BRINKERHOFF: Because I think someone mentioned yesterday that there were a lot of people who 2 3 were not at this meeting, and our concern would be do they know about this rulemaking. But it sounds like they 4 5 hear about safety issues from your organization and you 6 reach out to about how many, do you think, of the small 7 fishing owners? 8 MR. RAINSBERGER: Well, we have Trident and 9 American Seafood are members of our association. They belong to other associations. 10 11 But I couldn't estimate the number outside of the 12 association. 13 MS. BRINKERHOFF: Okay. And my last question is about audit. Do you perform audits or inspections of 14 15 your hazardous energy control systems at your shipyard? MR. RAINSBERGER: Yes, we do. MS. BRINKERHOFF: About how often? MR. RAINSBERGER: At least annually. We try to 16 17 18 do it twice a year. MS. BRINKERHOFF: Do you have any idea how 19 20 many -- what the members of your organization are doing 21 22 in that regard? MR. RAINSBERGER: Could you be a little more 23 24 clear? 25 MS. BRINKERHOFF: I mean, is it kind of 0033 1 standard industry procedure to do audits or inspections on an annual basis or semi-annual? 2 MR. RAINSBERGER: It's something that I do 3 twice a year walking our facility. For my walks, I would 4 5 generate other questions. But the electricians and the pipefitters who are 6 7 probably the ones who are involved in lockout/tagout are the ones I go to and let them audit the programs. MS. BRINKERHOFF: Does that seem to be 8 9 10 something that other shipyards do, do you know? 11 MR. RAINSBERGER: I'm not sure what each 12 company does. MS. SHORTALL: Thank you, Mr. Rainsberger. I appreciate you being here today. I have a few questions 13 14 15 as well. 16 I was wondering if you could tell us, you say you're here representing the small to mid-sized shipyards. 17 Could you tell me what characterizes small to mid. Is it 18 19 based on sales or income or number of employees or size of the shipyard? 20 21 MR. RAINSBERGER: It's more on the size of the vessel that they actually work on and the number of employees in the facilities. 22 23 MS. SHORTALL: So could you tell me for small 24 25 to mid what size vessels do you work on? 0034 1 MR. RAINSBERGER: Small to mid could be anywhere from 30 feet up to 58 feet, mid could be from 58 2 3 up to 250. 4 MS. SHORTALL: What would you say for those 5 PSSA members that are the small to mid shipyard their average number of employees is? 6 7 MR. RAINSBERGER: Anywhere from 10 to 50 would 8 be small, and anywhere from 50 to say 200 would be 9 considered a mid-sized. MS. SHORTALL: 10 And what about the physical size of small to mid shipyards and then mid to large? 11 MR. RAINSBERGER: Some of the smaller yards 12 might be an acre or two. Some of the medium-sized would 13 be anywhere from three acres up to 20 acres. 14 15 MS. SHORTALL: Three to 20, okay. MR. RAINSBERGER: I do want to add all the 16 17 yards that belong to our association are private shipyards. There are no public shipyards, so we're not 18 subsidized by the Navy or anything. 19 MS. SHORTALL: I was just trying to figure out 20 21 how you classify --MR. RAINSBERGER: I understand. MS. SHORTALL: -- what went into that. I would 22 23 have thought it would have been size or number of 24 25 employees. It's very interesting to find out that for 0035 you you classify the size of the vessel you work on. I 1

thought that was very interesting. 2 MR. RAINSBERGER: It's one of the factors as 3 well as the number of employees. 4 5 MS. SHORTALL: Are there any substances in using shipyards that if an employee were splashed with 6 7 them they could cause serious and immediate damage to the 8 eyes or skin other than corrosives? 9 MR. RAINSBERGER: Well, corrosives, acids and 10 caustics would be the main concern. When you talk about the type of damage, did you use the word severe damage? 11 MS. SHORTALL: Acute, immediate and serious. 12 So we're talking about something that, you know, it would 13 cause, if you didn't get something right now you could 14 15 have serious damage occurring. MR. RAINSBERGER: I've had paint splashed in my eye, and I flushed it out with water and was fine the 16 17 next day, so I wouldn't call that serious. So paint would not fall in that category. 18 19 20 I've never squirted 409 in my eye, but there is 409 21 in the shipyard. 22 MS. SHORTALL: I just wanted to know if there 23 were ones that you consider to be other than corrosives the kinds of substances that if your employees were 24 25 splashed with them while they're on the job and they 0036 1 didn't have something to immediately wash off, it could 2 cause serious and immediate damage to them. 3 MR. RAINSBERGER: I'm not thinking of anything off the top of my head, no. MS. SHORTALL: If OSHA were to rewrite in its 4 5 final rule that instead of saying for quick drench 6 facilities toxic or hazardous substances, instead say employers each provide these facilities, if there is a 7 8 9 potential that an employee could be splashed with a 10 substance that could cause immediate and serious damage, would that take care of a lot of the concern that you 11 have about that particular provision? MR. RAINSBERGER: That would sure assist versus 12 13 the way it's written right now. I think you can clarify 14 15 even more by saying acids and caustics would make it pretty clear, it's cut and dry. When you use words like toxic or hazardous or severe, I mean, there is different interpretations of the definition depending on who you're 16 17 18 19 talking to. MS. SHORTALL: Do you consider an acid to be a 20 21 corrosive? 22 MR. RAINSBERGER: An acid is a corrosive, yes. 23 MS. SHORTALL: You were here yesterday. MR. RAINSBERGER: I was in the morning and had 24 to go to work. 25 0037 MS. SHORTALL: A number of people who were here 1 yesterday in addition to Amy Duz indicated that they have 2 3 preference for locks, would like to see that happen for the lockout/tagout programs for shipyards and vessels. 4 5 MR. RAINSBERGER: Sure. 6 MS. SHORTALL: Do you agree with that? 7 MR. RAINSBERGER: Whenever it's capable of being locked up, that's the preferred method, yes. 8 9 MS. SHORTALL: In his testimony afternoon, Mr. Davis indicated that through a course of just routine 10 equipment replacement over let's say 10 years, that his 11 company could make some big inroads in moving from 12 13 nonlockable equipment to lockable equipment. How long would it take your company through normal 14 equipment replacement to also have significant inroads 15 16 and change into all lockable equipment or achieve an all 17 lockable equipment status? MR. RAINSBERGER: 18 To be 100 percent may take a 19 little bit longer. You know, sometimes it's like the cart before the horse, you have to educate the 20 manufacturers of panels today, say from now on when you make these panels, make sure they're lockable. As we ge 21 22 As we get this panels five years down the road, seven to 10 years, 23 24 then it's there. 25 There is still a lot of manufacturers who make brand 0038 1 new things that don't accept a lock on their system, so it's a lockout/tagout issue. That's the challenge, I 2 3 think, is the manufacturers aren't there yet. MS. SHORTALL: So, for example, would a 10-year 4 5 lead time be enough to get the word out to manufacturers

and get manufacturers on board so as shipyards go through 6 their routine replacement they could move to lockable 7 8 equipment? 9 MR. RAINSBERGER: That would sure be great. MS. SHORTALL: I know that Mr. Daddura has some 10 11 further questions he would like to ask you. I would just like to say on behalf of OSHA's Solicitor's Office, I 12 would like to thank you for coming here today and for all 13 14 the work that you and PSSA have done to be involved in 15 this rulemaking. MR. RAINSBERGER: I think you can tell we have 16 17 a lot of passion for this and we want to make sure our employees are well taken care of. 18 MS. SHORTALL: It's obvious that both the 19 20 organization and you personally have a great passion for it. It's easy to see. 21 MR. RAINSBERGER: We do. 22 23 MR. DADDURA: Just a couple of more follow-up 24 questions. 25 A question about quick drenching. Is there ever a 0039 1 time when an employee who could be drenched in a paint thinner or highly polymeric materials that would need a 2 3 quick drench shower operation? MR. RAINSBERGER: If a hose exploded on an 4 5 airless sprayer that was full of thinner, that situation could arise, yes. MR. DADDURA: Jumping to lockout/tagout. 6 7 How 8 do you handle group lockouts currently in your yard and 9 on your vessels? MR. RAINSBERGER: Well, going back to removing 10 the hazard completely would eliminate the group lockout 11 in a lot of occasions. 12 13 MR. DADDURA: Let's clarify, what do you mean 14 by "removing the hazard completely?" 15 MR. RAINSBERGER: Such as taking the wires away and taking the fuse out so there isn't a hazard to start 16 17 with. So if electrical folks and maintenance are working on the system, there would be no need for a rigger who is 18 19 working on the opposite side of the area to be affected 20 in any way, because there's no way they could energize it even if they tried to. There isn't a hazard there. 21 That's the best way. 22 23 Now, to put a group hasp on there with multiple ways to lock it off is one way to do it. But I'm not sure if 24 25 the rigger who is actually working on a task 30 feet away 0040 1 would need to have a lock that would be part of the group lockout/tagout. If you follow where I was going with 2 that. 3 4 MR. DADDURA: Completely. But you have a union 5 yard, correct? 6 MR. RAINSBERGER: Yes. 7 MR. DADDURA: And you have lines. 8 MR. RAINSBERGER: Yes. 9 MR. DADDURA: Let's take for example a fire You disconnect the cable and the wire from the 10 pump. fire pump and then you have the riggers come in and 11 remove it, right, and then sheetmetal come back and check 12 13 something. When you have multiple crafts like that or welding or whatever the case might be, it could be six or 14 seven crafts involved, multiple employees on each craft, do you feel a lockbox is adequate, should be used once 15 16 17 the hazard has been removed completely to where that pump is not going to turn, is not going to energize? 18 MR. RAINSBERGER: If they could eliminate that hazard from being energized in the first place, that 19 20 means away from the turn on and off switch to that pump 21 going back somewhere in the system to do that, then I 22 23 would feel comfortable that a group lock wouldn't be necessary. 24 25 MR. DADDURA: How would the electrician know 0041 1 when they were done? MR. RAINSBERGER: They would be the initial one 2 to tag it out and they would be the initial one to put it 3 back on line. 4 MR. DADDURA: Suppose one day, let's say I'm 5 going to go down and hook that pump back up, and you've 6 7 still got people working on that system. How do you 8 prevent that? MR. RAINSBERGER: Through communication and

10 signage just to make sure people understand, job safety 11 analysis. 12 MR. DADDURA: I'm saying is it the employee's responsibility to get in and assign themselves work, him 13 14 or her? 15 MR. RAINSBERGER: They're assigned work by 16 their supervisors. 17 MR. DADDURA: So the supervisors control their 18 assignments basically? MR. RAINSBERGER: Absolutely. MR. DADDURA: So they can't just go, let me go 19 20 hook this pump up or this system up before I leave 21 22 here --MR. RAINSBERGER: Right. 23 MR. DADDURA: -- without checking with anybody. 24 25 MR. RAINSBERGER: That's correct. 0042 MR. DADDURA: Same with the contractors? 1 2 MR. RAINSBERGER: Absolutely. MR. DADDURA: They have to go through the supervisor, superintendent, whatever to --MR. RAINSBERGER: Subcontractors go through our 3 4 5 6 supervision to do the lockout/tagout measures. 7 MR. DADDURA: Okay, that's all I have. Thank 8 you. 9 MS. SHORTALL: Thank you. 10 JUDGE GEE: Thank you, Mr. Rainsberger. Our witness next is Andrew Posewitz and Phil 11 12 McKenzie. MR. McKENZIE: Andrew is not going to be able to be here today, and he sent an e-mail to that effect. 13 14 I think the person told me some additional comments will 15 be forwarded that related to this. 16 17 JUDGE GEE: Will you please state your name and 18 your affiliation. MR. McKENZIE: Phil McKenzie and I'm with Todd 19 Pacific Shipyards. 20 21 JUDGE GEE: Thank you. MR. MCKENZIE: Thank you for your time today and the great distance you've traveled to be present. name is Phil McKenzie, and I'm the safety manager for 22 My 23 24 25 Todd Pacific Shipyards, and I will be speaking on behalf 0043 1 of Todd today because Andrew is not able to be here 2 today. 3 Todd Shipyards has been in the industry since 1960. As a member of the maritime industry, we've actively 4 5 participated in the many challenges that have occurred since then. We currently employ as few as 300, which is 6 about where we're at right now, and at times over 1,000 employees. We normally utilize between nine and 12 8 9 subcontractors, but in really high periods that number could be 20 to 30. 10 11 We recognize and appreciate OSHA's commitment to safety as well as your expertise in the formulation of 12 13 the specific language used in regulations, but we also recognize that as members of the maritime industry we are 14 the experts in the day-to-day functions and challenges that are present in our work. Many of our challenges we 15 16 17 face are strictly unique to our industry. Using the Bureau of Labor Statistics data, we have a demonstrated 18 track record of our commitment to safety. 19 From 1996 to 2006, the period of time that reflected no significant -- I won't say none -- but no significant 20 21 regulatory changes by OSHA, our industry's reportable 22 injury rate shows a steady decline from 27.4 to 10.7. 23 24 Our efforts are not just a product of compliance. We 25 have a vested interest to self-regulate. 0044 1 In a time of watchful spending, our industry is very competitive. The high costs associated with worker 2 3 injuries is more than just insurance and medical payments, it's also the loss of friends, coworkers, years 4 of talent, morale and productivity. We have and we will 5 6 continue to embrace new ideas and technologies for our 7 workers' safety. In fact, several years ago when AED's first came 8 out, and I wasn't the safety manager at the time, but 9 when they first came out we had an employee that an AED 10 11 was utilized on. Not only is that employee alive, but 12

12 he's still an active member of our workforce today. We 13 recognize and appreciate those technologies, and we look 14 forward to expanding those. 15 With that said, though, the exclusion of our 16 expertise in the formulation of the proposed new regulations has resulted in what we believe to be no 17 meaningful purpose towards that advance of safety. Many 18 19 elements of the proposed rule will be spoken at in length by my colleagues and with greater detail than I could 20 ever provide. I'm fairly new as a safety manager. But in addition to that, I would like OSHA to note 21 22 23 my support of the written comments of PSSA, and I would hope that and strongly encourage that once again, as it's 24 25 happened before, the maritime industry would work with 0045 1 OSHA in a collaborative effort to bring about the formulation of regulations that will not just be effective in reaching our shared goal of increased worker 2 3 safety but also be cost effective as well. 4 The cost 5 effective in this competitive environment is very important for all of us. 6 7 JUDGE GEE: Is there anybody in the audience 8 who has questions for Mr. McKenzie? 9 The OSHA panel. MS. SHORTALL: We'll start with Ms. Wangdahl. 10 11 MS. WANGDAHL: Good morning, Mr. McKenzie. MR. MCKENZIE: Good morning. 12 13 You stated that you have AED's MS. WANGDAHL: at Todd right now? 14 MR. McKENZIE: We do. MS. WANGDAHL: Can you tell me how many you 15 16 17 have, where they're located? MR. MCKENZIE: We currently have two. 18 We have one that is in the -- we have an emergency van that is 19 loaded with additional equipment along with the AED, and 20 21 then we have one in our medical dispenser. 22 MS. WANGDAHL: The van, is that what you're using right now for your first aid provisions? 23 MR. McKENZIE: Yes. 24 25 MS. WANGDAHL: Who operates the van? 0046 1 MR. MCKENZIE: The fire safety officers and the 2 medical or the clinic staff. MS. WANGDAHL: What's the physical size of 3 4 It can be a rough estimate. Todd? 5 MR. McKENZIE: I believe it's like 40 acres. Al is out there, and he can verify that. 6 MS. WANGDAHL: Are you operating 24 hours? MR. MCKENZIE: Yes. Well, what do you mean? We are capable of operating 24 hours a day, and we have 7 8 9 security personnel and fire safety personnel there 24 10 11 hours a day. MS. WANGDAHL: But you don't necessarily have employees there 24 hours all the time? 12 13 MR. McKENZIE: Not all the time. 14 15 MS. WANGDAHL: Just as work is needed? MR. MCKENZIE: We just have as work is 16 required. We normally run a day shift Monday through Friday and swing shift Monday through Friday, and as 17 18 needed we may work a day or swing shift on Saturday or Sunday, holidays. We do have provisions in the labor 19 20 agreement for a graveyard shift as well. 21 MS. WANGDAHL: Is your fire safety officer 22 there during all those shifts as well? 23 MR. MCKENZIE: Yes. MS. WANGDAHL: So there's more than one; 24 25 0047 1 obviously you have more than one? 2 MR. McKENZIE: There is at least one security and a minimum of one fire safety officer. 3 MS. WANGDAHL: Can you explain what would 4 5 happen if there is an accident. What's the method of communication and how long would it take the van to get 6 7 to the employee? 8 MR. McKENZIE: That's a really good question. The method of communication, we have radios, we have telephones. The fire safety officer also has a dedicated 9 10 cell phone, the on-duty cell phone. 11 We also have a dedicated ring line that is in the 12 medical clinic, in the safety office, in the 13 transportation office, and also at the main gate. If any 14 15 one of those phones is picked up, all phones will ring, everybody will get on the line and that's an additional 16 method of communication. 17

MS. WANGDAHL: How long would it take the van 18 19 to get to the employee? 20 MR. McKENZIE: Anywhere in the yard is just a 21 few minutes. 22 On the vessel is another story. On the vessel or if it were an employee that was working inside of dry dock 23 doing maintenance, that would be difficult for me to give 24 25 you a specific answer. 0048 1 MS. WANGDAHL: Is the fire safety officer CPR 2 and first aid trained? 3 MR. McKENZIE: Yes. In fact, currently of the staff that I have, all but one of them has EMT 4 5 experience. 6 MS. WANGDAHL: Is there anybody else within the 7 yard that also has these certifications? MR. McKENZIE: Yes. Many of the supervisors 8 9 have first aid CPR training that we go through, as well 10 as we have a medical clinic that is staffed on day shift and swing shift during the normal Monday through Friday 11 with medical technicians that have advanced medical 12 13 skills. 14 MS. WANGDAHL: So for any type of accident, you would rely solely on your in-house fire safety officer or 15 are there instances when you would call 911? 16 MR. MCKENZIE: Oh, absolutely there is instances when we would call 911. As good as our staff 17 18 is, we consider them the first line of defense and only 19 an immediate beginning of the process, and a 911 call for 20 21 that specialized care. 22 MS. WANGDAHL: What's their response time? MR. McKENZIE: They are quick. Station 36 is 1.75 miles from our facility, and Station 36 is the 23 24 25 maritime experts for marine recovery rescue, and if they 0049 1 needed additional support the other stations are not much 2 further. 3 MS. WANGDAHL: Do you have first aid kits 4 throughout the yard? 5 MR. MCKENZIE: We, we do. MS. WANGDAHL: So you allow employees, if they 6 7 need a Band-Aid or some supplies from the first aid kit, 8 they can go there whenever they need? 9 MR. McKENZIE: Yes, we do. Our injury program requires that any injuries more than a Band-Aid, the 10 11 employee, the affected employee and his supervisor must both come to the medical facility and fill out our 12 13 accident reports. The medical officer determines what the classification is, what the necessary treatment is and if we need any additional support at that time. 14 15 16 But yes, we do have the first aid kits out there, 17 and yes, they can put a Band-Aid on. MS. WANGDAHL: Let's shift gears a little bit 18 19 and talk about working in confined and isolated spaces. As you know, this is a current requirement, so when we 20 say isolated space, what does that mean to you? 21 MR. McKENZIE: Isolated? 22 23 MS. WANGDAHL: Working in an isolated space. MR. McKENZIE: Confined space? Confined space 24 or an isolated space? 25 0050 MS. WANGDAHL: Isolated space. MR. McKENZIE: You got me, you got me. I'm not a -- confined space, as I'm sure you're aware of, we deal 1 2 3 with on a daily basis. But I'm not so sure I understand 4 5 what an isolated space is. 6 MS. WANGDAHL: Do you think we need a 7 definition for this in the final rule? MR. MCKENZIE: It sounds good to me. 8 9 MS. WANGDAHL: How do you check on your employees when they're working in confined spaces? 10 MR. McKENZIE: In confined spaces? 11 Yes. 12 MS. WANGDAHL: The employees are -- the 13 MR. MCKENZIE: immediate supervisors for those employees are directly 14 15 responsible for those employees and make regular checks. They are supposed to check the workspace before the work 16 assignment is given to ensure that they have the tools 17 that they need, that the space is adequate for the work 18 19 that is being performed and the proper certifications have been completed for the space. 20 21 In addition to that, the fire safety officers are

the persons that take care of those certifications for 22 the confined spaces. And in addition to doing that, they 23 24 also make regular checks during their shift of all the 25 vessels in the yard and all areas where work is going on 0051 1 to ensure that safety is being followed. MS. WANGDAHL: Do you have an end-of-shift 2 muster or end-of-shift check? 3 4 MR. MCKENZIE: The supervisors take care of the employees time, and they assign a task and they are required to check at the end of the day to ensure that 5 6 7 the people are there and they can't enter the time if 8 they're not. 9 MS. WANGDAHL: Do you have any sort of procedure if somebody doesn't show up at the end of a 10 11 shift? 12 MR. MCKENZIE: I'm sorry? 13 If someone doesn't show --MS. WANGDAHL: At the end of the shift? 14 MR. MCKENZIE: 15 MS. WANGDAHL: Yes. MR. MCKENZIE: The supervisor will make the 16 17 notifications to his supervisor and will go and look and find out where they are. 18 MS. WANGDAHL: Let's talk about lockout/tagout 19 20 again. Can you talk about your procedures that you have or your program that you have. 21 MR. MCKENZIE: The lockout/tagout program that 22 we have is probably very similar to what you just heard from Al Rainsberger, since a lot of that was set up by 23 24 25 him as my predecessor. 0052 1 The lockout/tagout program for us because of the 2 size of our facility, we have a maintenance program for 3 the facility side, which is strictly for the facility 4 side. It parallels the same requirements as the production side except that we have a designated 5 lockout/tagout coordinator, permanent lockout/tagout 6 7 coordinator, and we have a book that's maintained at the facilities office. 8 9 Any tag that is put on by an authorized employee that is going to be there for anything, anymore than an 10 11 eight-hour shift or an eight-hour period must be logged in the book. And nobody can remove a tag except that 12 Sorry, had a 13 authorized employee or the coordinator. little blank spot. 14 MS. WANGDAHL: I have them all the time. 15 What is your biggest challenge with the proposed 16 17 rule or what do you perceive is going to be your biggest challenge? 18 MR. MCKENZIE: Well, I think Al addressed it quite well. We have our shipyard, as I mentioned, is a 19 20 very, very old shipyard, and a lot of our systems could 21 be locked out in the manner that have been spoken to or 22 23 addressed. The replacement of those, I'm sure even as young as I am, they probably won't all be replaced before I'm 24 25 0053 1 gone. 2 And, of course, there is others challenges as well. The 440 equipment is ground fault. There is not very much equipment out there for that. The manufacturers, as 3 4 you suggested, extending the lead time I think is 5 probably a very wise move to give manufacturers time to 6 7 make sure those products are available for us. MS. WANGDAHL: Thank you very much. MS. SHORTALL: Mr. Bolon will ask questions 8 9 10 now. 11 MR. BOLON: How do you transport people around 12 your shipyard? 13 MR. MCKENZIE: I'm sorry? MR. BOLON: How do your employees get around 14 It's fairly big. 15 your shipyard? MR. McKENZIE: We walk. 16 MR. BOLON: Do you use forklifts at all? MR. MCKENZIE: We do have forklifts, yes. 17 18 MR. BOLON: Are your employees required to wear 19 seat belts when they're operating them? 20 MR. MCKENZIE: Yes, they are. 21 MR. BOLON: Do you move people around via 22 pickups or any kind of things like that, golf carts? MR. McKENZIE: We do have some -- we do have a 23 24 few vehicles, some pickups, but those are not primarily 25

for the movement of people within the yard. We do have 1 some battery-powered carts, golf carts, if you will, that are used. There is a few of them, and they're used 2 3 mostly for the maintenance crew who have designated 4 equipment that they need to go from place to place. 5 6 There is one or two people. Those carts as well have 7 seat belts. 8 The production personnel though primarily, they carry tools to and from the workspace with the except of 9 the heavy tools that we have. We have boxes that we've 10 converted into deployable units that are prepped prior to 11 the job with the tools and equipment, the safety gear, 12 whatever is needed or expected to be needed for that job, 13 called kitting for the job, and that box is moved out by 14 15 a forklift to the job site. And that's how most of it is carried out there. 16 17 MR. BOLON: Do you have any safety issues with your vehicles and pedestrian traffic, just do you have any accidents or safety issues about how they move 18 19 20 around? 21 MR. McKENZIE: We haven't had any accidents in regards to that recently. I think a very, very long time 22 23 ago I do seem to recall something, something minor. But for the most part we do not. We have signage, 24 25 we have lines, we have stop lines on blind corners. 0055 1 have areas where we've installed mirrors where a person can see around the corner. 2 3 We really don't have a big issue with that. 4 MR. BOLON: Thanks. 5 MS. SHORTALL: Ms. Watson will ask questions 6 next. MS. WATSON: I just have one quick question. Earlier when Ms. Wangdahl was questioning you and you 7 8 9 mentioned for emergencies you use cell phones and radios for communication. I'm just curious how those have worked out for you. Have there ever been situations 10 11 where maybe someone couldn't get through to their 12 13 responders? 14 MR. MCKENZIE: No, we really haven't had an issue with it. The radios actually probably work better than cell phones do, especially in the wing walls. Our experience has been that sometimes a cell phone won't get 15 16 17 out of the wing wall whereas the radios, we seem to be 18 able to have radio coverage throughout the yard. 19 In fact, our transportation offices where they 20 21 dispatch the forklifts has a, what do you call it, an outside antenna which increases the available coverage. 22 So even if someone on the other end of the yard couldn't 23 24 hear, the transportation office always does, and one of 25 the ring down phones is in the transportation office. 0056 1 MS. WATSON: With those radios, who are issued those other than the emergency responders; is it 2 3 supervisors? 4 MR. MCKENZIE: Yes, supervisors have radios, the fire safety officers have radios, the security 5 officers have radios. Just about every craft group has a 6 7 number of radios. Certainly not every employee does, but at least every supervisor does. 8 9 MS. WATSON: So those supervisors are in charge of a certain amount of employees and they're checking up 10 11 on them? 12 MR. MCKENZIE: That's correct. MS. WATSON: Thank you. 13 14 MS. SHORTALL: Mr. Daddura will ask questions 15 next. 16 MR. DADDURA: Good morning. MR. MCKENZIE: Good morning. MR. DADDURA: I'll try and make it short. 17 18 19 Have you ever had an occasion where you sent an employee to a machine shop or rigging shop off ship when 20 21 no one else is around to pick up material or equipment that's needed for a job? 22 23 MR. McKENZIE: Let me make sure I understand the question. When you say nobody is around 24 25 MR. DADDURA: No one is off ship. You have 25 0057 people working on ship, working through the ship. The supervisor says, Hey, Phil, go down and get me a reach rod or an inch and a quarter, and Phil goes to the 1 2 3

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machine job to get the reach rod, no one else is working 4 5 in the machine shop. Has that ever happened? 6 MR. MCKENZIE: I can't say that it hasn't. But I certainly can say that every trade is very prominently represented in our yard and have very clear lines of 7 8 9 jurisdiction, and if that is not their job, they're not going to do it. 10 11 MR. DADDURA: The question is to send someone 12 into an area where no one else is there. 13 MR. McKENZIE: So you're not talking about --MR. DADDURA: No, I'm talking -14 15 MR. McKENZIE: You're just talking about going into a building where nobody else might be. 16 MR. DADDURA: Correct, or a tank or a space on 17 a ship, something like that. 18 19 MR. McKENZIE: Well, in a building I would say that probably does happen with some regularity. MR. DADDURA: What about a space in a ship, a 20 21 22 tank, passageway? 23 MR. McKENZIE: Passageway, probably yes; 24 confined spaces, no. 25 MR. DADDURA: Do you think there are isolated 0058 1 spaces when no one else is around that can --MR. MCKENZIE: That would probably be a fair 2 3 definition. MR. DADDURA: If you send someone down to put a 4 bolt in a bracket in the engine room to finish a job and 5 6 no one else is there, that's what our concern is. When 7 we say isolated spaces, no one else is there. On day 8 shift you have people walking around doing other jobs; 9 they are visually seen. That's what our concern is with 10 isolated spaces. MR. MCKENZIE: Okay, that's fair. MR. DADDURA: You used the term wing wall or 11 12 13 wing tank. 14 MR. McKENZIE: Wing wall, yes. Those are in 15 reference to our floating dry docks. MR. DADDURA: Can you explain that a little bit 16 17 just for the record, explain what that terminology is. MR. MCKENZIE: Yes, I will. The floating dry 18 docks are somewhat of a U-shape, if you will, so you have 19 an open end. In this case the way ours are oriented, you 20 21 have an open end on the north and you have an open end on the south. 22 23 On the east and west you have walls of the structure. Those wing walls have an outside deck, and 24 25 then just below that at a minimum they have a safety 0059 deck. On that safety deck is usually where the 1 2 equipment, pumps for control for the submergence and bringing up of a dry dock. 3 And then below that safety deck is where we're 4 talking about the wing wall itself, which is the internal structure, the retrods that go from the pumps to the 5 6 7 actual valves that are inside of the tanks and the 8 different tank areas that comprise the floating dry dock 9 itself. 10 Does that help? MR. DADDURA: Yes, that helps a great deal. 11 Can you send more than one person in there? 12 13 MR. McKENZIE: Yes. 14 MR. DADDURA: In the same location? 15 MR. McKENZIE: Yes. MR. DADDURA: Can you send more than one person 16 to all of your confined spaces or in close spaces? 17 18 MR. McKENZIE: Well, that wouldn't be a fair statement because sometimes a confined space is so 19 20 confined that --MR. DADDURA: You can't fit more than one. MR. MCKENZIE: -- you can't fit more than one. 21 22 MR. DADDURA: I understand. MR. MCKENZIE: In a confined space, there is 23 24 25 always one person that is doing the work and at least one 0060 1 person that is either directly observing the work or 2 outside the space. MR. DADDURA: Thank you. 3 MS. SHORTALL: Ms. Brinkerhoff will ask 4 5 questions now. MS. BRINKERHOFF: During your testimony you 6 described employees at Todd ranging from 300 to 1,000.

I'm wondering what causes that range; is that just kind 8 of a periodic fluctuation or is it seasonal or is it a 9 function of the economy? MR. McKENZIE: Yes, yes, yes. 10 11 MS. BRINKERHOFF: And why are you at 300 now? 12 13 That seems a low point. MR. McKENZIE: 14 The workforce fluctuates depending on the production requirements. We, as a shipyard, do mostly repair, some building. And when the 15 16 17 work is there, you have employees; when the work is not there, you roll down to the minimum amount of 18 administrative staff and the required personnel. 19 MS. BRINKERHOFF: So is it something that 20 happens kind of periodically, it comes and goes? 21 MR. McKENZIE: Everybody is watching the 22 dollar. So, yeah, I mean, they certainly try to -- we want as much business as we can, just as any shipyard 23 24 25 And we try to keep our berthing spaces and our dry does. 0061 1 docks as full as possible. Obviously that's the only way to make money. But it doesn't always happen that way. 2 3 MS. BRINKERHOFF: Thanks. MS. SHORTALL: Mr. McKenzie, thank you so much for being here today. I have also a few questions. 4 5 You happened to mention before certain lines of 6 7 authority and if something isn't your job, you know, you're not going to do it. Can you tell me what labor 8 organizations are represented at your facility? 9 MR. MCKENZIE: Well, we have the electricians, 10 pipefitters, we have the Teamsters, who we actually have two groups of Teamsters, one who do the outside forklift 11 12 and one who do the warehouse work, and so a warehouse 13 forklift driver cannot take supplies or loads outside of 14 15 dropping it off outside of the warehouse. And then an 16 outside forklift has to pick it up and take it to 17 wherever else it has to go. We have operating engineers for the crane operators. 18 19 We have inside machinists, we have outside machinists. I know I'm missing some. We have the labor, labor 20 department, we have boilermakers. 21 MS. SHORTALL: The laborers? MR. McKENZIE: Laborers, yes. I'm not sur which union that is, but we have a labor department. 22 23 I'm not sure 24 25 MS. SHORTALL: Is that Labors International; is 0062 1 that what it is? 2 MR. McKENZIE: I can do that later, I'm sorry, 3 I don't know. 4 I don't know, boilermakers, riggers. MS. SHORTALL: It's a big list, isn't it? MR. MCKENZIE: Yes, it's a big list. 5 6 7 And they're all represented individually by their 8 different unions, but they all collectively bargain under 9 the Metal Trades Council. MS. SHORTALL: If you think of any other 10 organizations that are at your shipyard, could you add 11 that in your post-hearing comments? 12 MR. MCKENZIE: I would certainly be happy to just forward you a copy of it. 13 14 15 MS. SHORTALL: All right. Can you tell me how many injuries you've had at your shipyard this year? 16 MR. McKENZIE: In the past 12 months? MS. SHORTALL: Do you do your recordkeeping on 17 18 19 a calendar basis or on a fiscal year? MR. MCKENZIE: We have a rolling record. And 20 21 our current rate, I believe, is 12. MS. SHORTALL: 22 Your current rate is 12? 23 MR. MCKENZIE: Yes. So am I --24 MS. SHORTALL: 25 MR. MCKENZIE: I believe that to be correct. 0063 1 MS. SHORTALL: So that would be the rate for 2 the industry as a whole? MR. MCKENZIE: Right now, yes. But then a 3 4 couple of months ago it was eight. 5 What are the injury trends; what MS. SHORTALL: tend to be the operations in which injuries are occurring 6 most often and what type of injuries are you seeing most 7 8 frequently? 9 MR. MCKENZIE: A lot of our workforce is an aging workforce, and the biggest majority is -- we do see 10 some minor eye injuries. But most of our injuries are 11

strains and sprains and trips and falls. 12 MS. SHORTALL: Do you know of any substances other than corrosives or acids in your workplace where if 13 14 15 an employee was splashed with them it could cause acute, 16 immediate and serious damage? MR. McKENZIE: I was listening to that question before and kind of running through my head, and I cannot 17 18 think of anything else that I could add to that. 19 20 MS. SHORTALL: If OSHA were to change our final rule, so moved away from that toxic and hazardous, and 21 instead focused on quick drench and try to get at areas 22 where if you don't get something right away you are going 23 to be injured, there could be serious damage, so if we focus on that, would that take care of a lot of the 24 25 0064 1 concern you have over -- the concern the industry has over that particular provision? 2 3 MR. McKENZIE: I think it would make it easier 4 to comply with. MS. SHORTALL: All right. MR. MCKENZIE: More appropriate in practice and 5 6 7 would provide a level of safety for the employees that 8 the alternatives would not. 9 MS. SHORTALL: I don't know if you were here 10 yesterday. MR. McKENZIE: I wasn't. I was not able to be 11 12 here yesterday. MS. SHORTALL: We had several people indicate 13 that they have a preference for locks for lockout/tagout 14 15 Do you share that preference as well? in this industry. MR. McKENZIE: I would agree that whenever 16 possible a lock, a physical barrier rather than just a 17 tag is always the most appropriate, or as Al said, and we 18 have them as well, just isolate the system completely to make it completely safe, there is no hazard. MS. SHORTALL: Do you think over let's say a 19 20 21 10-year period of normal replacement of equipment in your 22 23 facility that you could make significant inroads or make significant increases in the number of, the amount of 24 25 lockable equipment you have in the shipyard? 0065 1 MR. MCKENZIE: I would say that the statement 2 of a significant increase would be fair, yes. MS. SHORTALL: How long do you think it would 3 take you to go from, just a normal routine replacement of 4 5 equipment, to go from a non-lockable situation in the shipyard to being totally lockable? 6 7 MR. MCKENZIE: That would be very difficult for me to answer, and I'll explain why. Again, the shipyard 8 has been there since 1916, and naturally some of the structures have been there probably longer than that. 9 10 It 11 wasn't always Todd. A lot of the equipment that was built and is still 12 13 in service today was built at a standard to last a lifetime versus what we build today, which is, you know, there is a rather defined period of life to it. 14 15 In fact, as an example, we have some -- we have a 16 crane, an inside crane, overhead crane. Anyway, this crane is still in service today and was originally 17 18 manufactured, I believe in 1920-something. And it's a 19 very -- it's a very great crane, it works well. It's 20 very difficult to get parts for. 21 But to try and change it is even more difficult and 22 23 extremely cost prohibitive. The really only viable alternative would be actually take it out of service and 24 25 replace it with something. 0066 1 MS. SHORTALL: One other small line of inquiry. What arrangements do you have in your shipyard for when 2 it snows, cleaning off so employees can, one, walk to the place where they need to work, and two, do the work in a 3 4 situation where they're not going to be slipping and 5 6 falling? MR. MCKENZIE: We have a freeze-up plan that is part of our contingencies, and in fact, just went back 8 9 into effect last week. In this freeze-up plan, our powerhouse operators watch the temperatures, the 10 11 surrounding temperatures. 12 When the temperature gets to 34 degrees or less, 13 they make a notification to facilities manager or his designee and explain what's going on and what appears to 14 be the trend. They make a decision based on that 15

information to say yes, we need a crew and this is how 16 17 many we need. 18 And when that decision is made, that crew is called out either immediately, depending on circumstances, or 19 several hours before the regular workforce comes in so 20 21 that they can prepare the areas and ensure that we have a 22 safe area. MS. SHORTALL: Do you get -- I was really surprised when I woke up this morning and turned on the 23 24 25 television and found out there were significant areas of 0067 1 Seattle that had black ice today. Is black ice an issue 2 in your shipyard? 3 MR. McKENZIE: Not so much for us. Ι personally live about 40 miles from the shipyard, and 4 where I live, I can walk out of the door and find frost 5 and ice and black ice and everything. And then by the 6 time I get down to Harbor Island, you know, it's 40-plus degrees, warm. So there can be a lot of variance there. 7 8 9 We do occasionally have problems during the winter months, and like I said, we call the freeze-up crew and they're out there early, and then they periodically throughout the day as needed will take whatever 10 11 12 13 corrective steps. MS. SHORTALL: We had one person in our Washington DC hearing who said they did not like 14 -- we've 15 had several -- but one person who said, I don't like the 16 17 way you've phrased remove slippery conditions as they occur and suggested instead what the language might be is 18 19 where employees are walking and working, you have to clear it off, and where they're not, you don't have to; 20 in other words, restrict the area. 21 If we were to change to get to that type of thing to 22 23 protect people actually where they are, would that also take care of some of the problem that you've having? MR. MCKENZIE: Most certainly. And especially 24 25 0068 1 for us and the size of our facility, we would have to hire an entire contingent of personnel just to maintain a 2 facility for areas that nobody is going to be in. We currently have probably -- well, at least 3 4 one-third of the yard that is not used at all on a 5 regular basis, and then probably another third that is 6 7 only used as needed. It could be a huge expense for us. MS. SHORTALL: And you don't allow people to go 8 9 in places that haven't had the snow and ice removed? MR. MCKENZIE: Right. MS. SHORTALL: Thank you very much. 10 11 It was really helpful to have you hear today, and we really look forward to your post-hearing comments. Thank you. 12 forward to your post-hearing comments. Thank you. JUDGE GEE: Thank you, Mr. McKenzie. Let's take a five-minute break. And if there is 13 14 15 anybody in the room who has not checked in with Veneta, 16 17 please do so. 18 (Recess from 11:00 a.m. to 11:05 a.m.) 19 JUDGE GEE: Our next speakers will be a panel 20 consisting of Rick Brown, Doug Ward, Kim Hodne and John Killingsworth. If you could sit in the order in which I 21 called your name, that will help the court reporter. 22 23 MS. SHORTALL: Your Honor, while we're waiting to start, I would like to mark Mr. Brown's hearing 24 25 testimony as Exhibit 0179 in the previously-mentioned 0069 1 document. 2 JUDGE GEE: All right, so ordered. 3 We're still missing one person. 4 MR. HODNE: Mr. Ward was unable to attend We're from the same company, so I'll carry on. JUDGE GEE: We'll ask Mr. Brown to begin. 5 today. 6 7 Please state your name and your affiliation. MR. ROWN: Rick Brown, Trident Seafoods. I'm 8 going to repeat some of the information that we already 9 provided yesterday. 10 11 Good morning, Judge Gee, ladies and gentlemen, my name is Rick Brown. Thank you for the opportunity to testify today on behalf of Trident Seafoods Corporation. 12 13 As you heard yesterday from Lurilla Lee, our VP of 14 vessel safety, we harvest, process and market seafood 15 from Alaska, the Pacific Northwest and around the world. 16 17 Trident Seafoods is firmly committed to providing a safe workplace for our employees. We want each and every 18 person working for us to go home safely every day. 19

I'm the Alaska Support Engineering Manager for 20 Trident's fleet of over 40 fishing industry vessels, 21 currently comprised of 16 fish tenders, 16 catcher 22 vessels, six fish processor vessels and four catcher 23 24 processors. 25 Our vessel lengths range from 66 feet to 356 feet. 0070 1 Our crew sizes range from four to 235 persons per vessel, 2 many from various places throughout the world. We have two repair and maintenance facilities located in Puget 3 4 Sound for our fleet. We own our customer base and they 5 own us. 6 Our two facilities almost exclusively service 7 vessels owned and operated by Trident Seafoods. Our 8 Tacoma facility sits on 12.6 acres with 3,030 feet of 9 mooring space, and 150 persons employed during peak 10 activity. Our Seattle facility sits on 2.5 acres with 400 feet 11 12 of mooring space and 70 persons employed during the peak activity. These facilities are truly multi-purpose and 13 include all of the following services: moorage for our 14 15 vessels between fishing seasons, shipping and receiving for our vessel fleet and shore plants, purchasing, 16 warehousing vessel processing equipment storage, process equipment overall, fishing gear storage, and of course, 17 18 vessel repair and maintenance as well as fabrication of 19 new process equipment for vessels and shore plants. We 20 employ over 190 subcontractors at various times 21 throughout the year at both locations. 22 We have no dry dock capability at either facility, 23 which makes us dry dock customers to most of the 24 25 shipyards throughout Puget Sound when needed for our 0071 fleet. One of our most active trawlers is actually going 1 2 up on dry dock this morning at Todd Shipyard here in One of our fish tenders has been up on dry dock 3 Seattle. at Marine Industries Northwest in Tacoma for the past 4 5 week. 6 We are members of the North Pacific Fishing Vessel 7 Owners Association and Puget Sound Shipbuilders 8 Association, both of whom have OSHA alliances. I have over 30 years of maritime experience. obtained a Bachelor of Science degree in marine 9 Ι 10 11 engineering from the U.S. Merchant Marine Academy. I have held a U.S. Coast Guard Chief Engineer's license for 12 13 steam and motor vessels of any horsepower since 1986. sailed on various inspected vessels in the U.S. Merchant 14 15 fleet following graduation, steadily advancing in responsibility from third engineer to chief engineer 16 I entered the fishing industry in 1987 as chief 17 18 engineer on a Bering Sea factory trawler converted from an offshore supply vessel at a small shipyard in Slidell, 19 Louisiana. I worked on that vessel through the 20 conversion in Louisiana, delivered it to Seattle for final outfitting in early 1988, and subsequently sailed 21 22 on that vessel and another ship in Alaska as chief 23 engineer for the next ten years. 24 I have been shoreside since 1998 and worked at 25 0072 Trident Seafoods since 2004. 1 The past year I've been transitioning into the role of Alaska Support Engineering 2 3 Manager and prior to that I worked directly for Lurilla Lee in the Trident Seafoods Vessel Safety Department. 4 5 Here are a few of my proposed rule comments. Section 1915.81 on housekeeping. In Paragraph (g), I 6 7 recommend adding the phrase, quote, eliminate as 8 practical, unquote, with regards to snow and ice on 9 walking and working surfaces. It's not always practical or possible to eliminate snow and ice as it occurs. Some 10 11 of these comments have already been covered. I'm probably going to be redundant. I'll reiterate them for 12 13 the record. 14 In Paragraph (i), I recommend including the option 15 of ensuring that hoses and electrical cords are kept to the side of a walkway or working surface provided they 16 17 are not trip hazards or in danger of being damaged. Hanging over or placing under can be difficult in 18 some circumstances due to no under deck access, awkward 19 construction and/or the sheer time needed to run the 20 lines and hoist configurations to complete a quick task. Section 1915.82 on lighting. Paragraph (b)(7), I 21 22 recommend referencing a recognized standard for 23

determining appropriate splices insulation such as an 24 25 NFPA NC 70, Article 400.1 splices. 0073 1 Paragraph (c), even when we provide portable handheld light, it will be difficult to ensure each 2 3 employee carries a light when they are entering spaces that may unexpectedly go dark. Where temporary lighting 4 from outside sources is provided, it may prove difficult to ensure portable lights are available in the immediate 5 6 7 area. Generally in the work and living spaces, of 8 course, commercial lights are permanently installed and 9 functional on our vessels. Section 1915.83, utilities. In the paragraphs on steam supply systems, steam hoses and electric power, I ask that you include in the body of the regulations 10 11 12 instead of it being a preamble, a statement, quote, employers are free to ascertain the critical information 13 14 15 from a responsible vessel's representative, a contract or 16 any other person who is qualified by training, knowledge 17 or experience to make that determination. That determination refers to determining those shipboard 18 systems that are in a, quote, safe condition. Section 1915.84, work in confined or isolated 19 20 We request that isolated spaces be defined and a 21 spaces. 22 better description of how frequently each shift the worker in these types of spaces should be checked. 23 Section 1915.87, medical circumstances and first 24 This is certainly a repeat here. Please note that 25 aid. 0074 1 outside entities, such as our local fire departments and Coast Guard use their own response equipment. Therefore, 2 3 we recommend that no more than one basket structure be required per vessel. 4 5 We also ask that we be allowed to use alternative 6 devices meeting the same criteria as basket stretchers, 7 such as a sked. 8 Although we do have AED's available at our facility, 9 we do not recommend requiring them. The cost of AED's built to withstand shipyard and shipyard environments 10 remains significant, over \$2,500 per unit, and this does not include the reoccurring training costs and the costs 11 12 13 of replacing components at expiration dates. Section 1915.89, control of hazardous energy, 14 15 lockout/tagout. These requirements must be feasible and reasonable for our shipyard applications. We must be 16 17 allowed to rely on system experts who isolate hazardous energy. I ask that you develop a control of hazardous 18 19 energy program and associated regulations by working with the affected stakeholders and our OSHA alliances. As 20 you've already heard, we strongly support the development of one standard, 1915.89, as the single standard for 21 22 servicing ship systems on board vessels. 23 But the way, I want to confirm that our ship's crews 24 25 do frequently perform service work on our vessels, both 0075 1 off site and on their way while under OSHA's 2 jurisdiction. Section 1915.93, motor vehicle safety equipment, operation and maintenance. This regulation requiring the 3 4 5 employer to ensure all employees are wearing their seat belts in a personal motor vehicle will be challenging as 6 7 we will only be able to routinely check that as the vehicle enters in with the gate guard. We do not have dedicated travel lanes for vehicles, bicycles or 8 9 pedestrians at our facilities. However, we do tape off 10 temporary walkways when crewing our fishing vessels, and 11 by that I mean when we're letting the vessel crews on for them to travel north to Alaska. So we put in temporary 12 13 walkways so that they can get on the gate, directly to 14 the vessel, that kind of thing, with caution tape. Thank you again for the opportunity to take part in 15 16 these hearings. Trident Seafoods and others in the fishing industry look forward to working with you in 17 18 producing an updated version of the shipyard employment 19 regulations to meet our common safety goals. JUDGE GEE: Thank you. Mr. Hodne. MR. HODNE: Hello, I'm Kim Hodne, and I 20 21 22 appreciate the opportunity to be here to testify. 23 I started my career in the shipyard industry as a 24 25 laborer, moving up to a painter, serving on the company's

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1 safety committee to the confined space rescue team, and

in 1996 became a certified shipyard competent person. I 2 actually owe a debt of gratitude to OSHA for my 3 4 accidental career in safety. 5 It was the September 1990 rule change, the clean shaven clause. Due to my baby face, I could not shave, 6 7 and when I approached the owner of Dakota Creek with my doctor's note, I was kind of floored when he said they didn't want to lose me and wanted to keep a person that 8 9 10 came into the shipyard, and I was fortunate to be moved 11 to the safety department. It was my pleasure to have as teacher and mentor Mr. 12 Killingworth, whom I have the distinct pleasure of 13 sitting on the panel with today to teach me and bring me 14 15 up in the ranks of safety. The next milestone for me came in May 2000. 16 That's 17 when I was recruited by the regulatory agency, WISHA for the position of compliance officer. This was also an 18 accident. Because of the physician's prerequisite, they 19 20 had to go outside the department to hire. I also followed through with the hiring process 21 because we were appealing a WISHA citation at the time, 22 23 and I didn't want to rock the boat. I had a job, and I loved it. I love working in the shipyard industry. It's 24 25 an industry that as a boy from Iowa, it amazes me every 0077 I pinch myself for the opportunity to do what I get 1 day. 2 to do. 3 So when the opportunity for employment came, I once again had to approach my boss with the news out of left 4 5 field, much like the clean shaven rule, I will never forget his reply or his reaction. He told me to take the 6 7 job, it would be good for the industry to have someone from the shipbuilding industry versus non-industry 8 9 inexperienced inspectors we currently had to deal with. 10 Coat ties, as they were known. 11 He also told me if I couldn't handle the politics and the bureaucrats, I would always have a job back at 12 13 Dakota Creek. It was a win/win situation for me and a great education. 14 The point of this story is that I have been part of 15 all three sides, employee, regulatory and shipyard 16 safety. I know what it takes to do the job, and I 17 understand how rules are to be interpreted and how to 18 apply them and how to motivate a workforce to comply to 19 understand it is not just an idea of being safe, we have 20 to be compliant at the same time. Just because we are 21 working safe doesn't mean that we're in compliance with 22 23 the rules. 24 First I would like to address OSHA's longstanding 25 tradition of Subpart F that applies to shipyard 0078 1 employment, regardless of geographic location of the shipyard activities. Geographic location can make all 2 3 the difference in the cost and practicality of the implemented rule. 4 5 And I understand the fact that regulations can't be written differently for all regions of the country, but San Diego and their 14 inches of precipitation a year is 6 7 8 not even a drop in the bucket compared to our rainforest 9 location with 165 inches of rain per year. It seems that we are all under wet, slippery conditions constantly. 10 Trust me, if any workforce is adapted to working in wet 11 12 conditions, we are. 13 So, again, I would quote your preamble. Whenever practical, standards shall be expressed in terms of 14 objective criteria of the performance desired. 15 With regard to snow and ice removal, I asked our yard superintendent for his thoughts. He is 70 years old 16 17 and a lifelong Alaskan. It would be inappropriate to 18 19 quote him, so I'll paraphrase. Removing snow and ice as it occurs is not reasonable. Providing safe access in a timely manner is reasonable. The steel foreman chimed in, trust me, the proposed 1915.81 (d), "The employer 20 21 22 shall provide appropriate waterproof footgear, such as 23 rubber overboots." There's ketchikan sneakers. Even my 24 25 15-month-old granddaughter has a pair. 0079 ASB has a 100 percent steel-toed boot policy, and

ASB has a 100 percent steel-toed boot policy, and I'm sure we buy more steel-toed rubber boots than anyone in the country. And if we had to buy two pair per year for each employee at a cost of \$75 each, the annual cost would be close to \$20,000 a year. That is just in rubber

I passed the rule proposal to our yard frontline 7 8 foremen and supervisors with an experience range of eight to 20 years and including all trades. There is a side 9 note to make at this point. Our workforce is gray, it's 10 11 across the board, it's all trades. There is no legacy workers today like there were four years ago. The kids 12 today are brainwashed into thinking they have to go to college. They get a job, get their \$50,000. A year after they get their degree, you will see a blue collar 13 14 15 worker like their fathers were. If this same trend 16 17 continues, in the not too distant future the tradesmen will be earning \$50,000 and the computer geek will get 15 18 19 bucks an hour. 20 The mature workforce is more fragile, but absolutely

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3 4 boots.

works safer and smarter than what they did 25 years ago. We are not our father's, and we are not our grandfather's workforce. Everyone has worked in and under the OSHA jurisdiction. If they're under 50, all they know is OSHA. We have moved, we are not what we were 30 years 0080

1 ago at the inception of the OSHA rules. 2 The painters were amazed at the notion of adding 3 their department to the world of the 10-second time of quick drench. This is to them ridiculous when working in the bottom of vessels and tanks. They say, hey, we 4 5 already have high vac and full tanks on, what's the 6 7 problem. We are not going to risk injury getting out of 8 confined spaces just because we got splashed with paint 9 or solvents. That's why we wear PPE, and that's why we do a job hazardous analysis before starting a job. 10

Our company is very job hazardous analysis centered. Every job -- if I walked up to the welders doing their work, painters, I will ask for their job hazard analysis, 11 12 13 14 which every man involved in the operation will have been a part of developing the JHA and will have signed off on 15 it. If there are particular things about the operation 16 17 that they are going through that are edging on what compliance with the standard would be, it's covered in the JHA. They talk about it, they're trained about it, they recognize the hazardous, and it actually helps 18 19 20 production in the job flow because they have to stop and figure out all the steps they go through, not just 21 22 recognizing all the hazards, but recognizing the job 23 process at the same time. 24

We have -- that is probably the hallmark of our 0081 1 safety program is the fact that job hazardous analys:

safety program is the fact that job hazardous analysis occur with everything including the sweeping down of the shop, because there are hazards involved with sweeping down the shop. Everybody has a job hazardous analysis.

5 If OSHA could just make one standard, you will have 6 a job hazardous analysis for everything you do, and if a 7 compliance officer showed up and he wanted to see it, it 8 would be covered. If it wasn't covered, that would be 9 problem. I know that's expensive, but nonetheless job 10 hazard analysis take us a long way and protect our 11 workers.

In my three and a half years at Alaska Ship and Dry 12 Dock, the ambulance has never shown up, the yard in its 13 entirety has never had a fatality, never had an 14 amputation, maybe a few minor stitches, foreign bodies in 15 the eye, but our owner is safety first. That is the 16 17 mantra. Everybody walks out the gate at the end of the day in the same way and in the same condition they came 18 in at the beginning of the workday. It is not something 19 that is pushed from the bottom up, as is the case most of the time; this is pushed from the top down. We can use 20 21 it, we can live buy it, and it is the way that we work. 22 23 The volunteer firefighters we have laughed at the

24 idea of the basket stretchers scattered all around the 25 yard. When their department responds, they need to be 0082

the ones to wrap an injured worker in their gear that
they trained with and use, not that of the workforce.
They're untrained people. There is a liability risk that
is not acceptable to them and the injury in their care.
They are the pros, not us.

6 The language of current rule 1915.98 (b), this 7 paragraph does not apply where ambulance services which 8 are available are known to carry such stretchers. So 9 it's already there. Why fix that which is not broken.

There is a stretcher rule there and it applies and it 10 11 makes sense. 12 In closing, I would first like to apologize if I It's not my 13 come across as rude or impertinent. intention. OSHA needs to rid themselves of lawyers until 14 15 the very end, get them out of the rulemaking right. The biggest problem with the standards is that they are not 16 user friendly. The legalese confuses the common man and is not needed. It just needs to be CYA approach to rule 17 18 19 writing. The best written standards in the country are right here in Wasington state. 20 Seven years ago Governor Gary Locke gave executive 21 22 order for clearer rule writing. Washington state's WISHA program has the most simply understood, clearest written 23 rules that I've ever came across. OSHA needs to think 24 25 about that. They need to write the rules to be user 0083 friendly to where I can hand them to our supervisors and 1 2 our foremen. They can read them and they can interpret 3 them and without question they can realize what they need 4 to do. 5 Thank you. JUDGE GEE: Thank you very much. 6 7 Mr. John Killingsworth. 8 MR. KILLINGSWORTH: Thank you. In my 10 9 minutes, I probably won't be able to say as much. I'm John Killingsworth. I bring 43 years of work 10 experience in various industries, mostly manufacturing. 11 Eighteen of those years has been in shipyards. I have a 12 13 couple of engineering degrees from the University of Washington, and I am currently employed by Dakota Creek 14 15 Industries, and I thought we were a small shipyard, but I guess we're a medium shipyard, medium-sized shipyard by 16 17 the discussion I heard today. We're located in 18 Anacortes, Washington. I speak on behalf of the Puget Sound Shipbuilders 19 Association, and I'm glad to be able to do that. We are 20 21 an association of professionals and competing businesses who are in similar jobs. We get together on a regular 22 basis and work together on educational and regulatory 23 24 issues. 25 I got into the business of saving lives about 15 0084 years ago and daily deal with confined space issues that 1 our workers face. Every job presents its unique conditions, and they all require analysis and planning in 2 3 order to successfully meet our customers' needs while 4 5 ensuring a safe workplace. Through daily job hazardous analysis, we identify 6 7 the risks associated with accomplishing the necessary 8 tasks and engineer methods that minimize risks common to 9 heavy industrial environment. I'd like to make some comments on the preamble. 10 On 11 page 72453, I'd like to quote a few lines under Hazards. "Working in shipyards is one of the riskiest occupations 12 in the United States. Shipyard employees are at risk due to the nature of their work." 13 14 Down a little bit, "The hazards associated with 15 these work activities are heightened because they are 16 often performed outdoors in all kinds of weather, on 17 board vessels, in confined or enclosed spaces. 18 "The safe coordination of these work activities is 19 also complicated by the fact that most shipyards are 20 21 multi-employer work sites where shipyard employees, ship's crew, contractors and subcontractors work 22 23 side-by-side and often on the same ship's systems at the 24 same time. 25 "The combination of these hazards presents a 0085 1 significant risk of injury to shipyard employees." I'll tell you, quite frankly, I find this preamble 2 overly exaggerated and unnecessary, I think. Why is it necessary to make such inflammatory statements? If I had 3 4 read this prior to applying to work in a shipyard, I 5 probably would have had second thoughts, because I didn't 6 7 know it was so dangerous. Anyway, then the section goes on a little further, and it says, "As this section illustrates, OSHA believes 8 9 the proposed rule will significantly reduce those risks." 10 Well, if I read -- in this section -- okay, let me get lost a little bit. The section goes on, okay. Down a little further there is a table. Table 1, 2002 Injury 11 12 13

and Illness Data Comparisons. The section presents 14 15 numbers that would scare anyone if you didn't realize 16 that it compares apples with oranges. You can't compare 17 shipbuilding with the total private sector or even 18 cleaning manufacturers. 19 Personally I work with real people with real skills and together we simply accomplish more than most of the 20 These inflammatory statements diminish 21 private sector. the thousands of tens of thousands of workers across the 22 nation. And don't forget, these are the people that are 23 generating the tax dollars that pay governments and 24 25 salaries. 0086 1 Now, I get back to the section where it says OSHA believes the proposed rule significantly reduces those 2 3 risks. You know, the numbers in the table, any numbers in any table can be made to say anything you want. But 4 to use these numbers as justification for the next level of detail in regulation is simply wrong. You know, we're 5 6 7 all in the business of reducing risk, we simply disagree 8 on the way to accomplish it. 9 I was exposed to more risk and experienced more hazards driving the 100 miles to this hearing this 10 morning than I'm sure I was exposed to for the last month 11 in the shipyard. Let's deal with some specifics. On lighting, 1915.82. There again the section 12 13 starts out with a table of numbers. Not that I have a 14 problem with these numbers. In fact, the numbers in this 15 table on lumens for specific work areas are somewhat 16 reasonable and they're achievable. But in my 43 years of 17 work experience, I've never had to carry a light meter 18 into any work area I've been in. In order to comply with 19 this section, however, I guess I'll have to. Will it reduce risk? I don't think so. 1915.82 (c), handheld portable lights. You've heard a lot about that. But under the current wording, this 20 21 22 23 wording implies that the use of a helmet-mounted portable 24 25 light would be a violation. I wouldn't say I would have 0087 1 to hold a handheld portable light in order to comply. You know, there's been so many advances in flashlight 2 3 products, too, why can't you just call them flashlights. 4 It's not an issue of being handheld, and it is portable, 5 and everybody understands what you mean by a flashlight. 1915.82 (c)(3), "The employer will ensure that only 6 7 explosion-proof, self-contained handheld portable lights 8 are used in areas that are not gas-free." The way I 9 interpret that and the way I'm sure a diligent inspector would interpret that, this means that a tank cleaner 10 entering an engine room prior to a marine chemist inspection must use that kind of a flashlight. 11 12 13 Now, these flashlights don't work for that. They are not explosion-proof. And I was going to bring a sample to show you what one looks like and intrinsically 14 15 say explosion-proof handheld light. I personally 16 couldn't. I can't afford them. The small one was \$300, the bigger one was \$500. And if you put a tank light 17 18 into a confined space, you're talking \$2,100. So I think 19 there is a specific case here where OSHA has 20 underestimated the cost to industry of such a 21 requirement. 22 Remember, our industry is so competitive that such 23 costs are not passed onto the customers. It comes right 24 25 out of whatever profit might be left over at the end of 0088 1 the job. 2 1915.84, confined spaces. You've heard the discussion about the definition of isolated spaces versus 3 confined spaces, and I think you need to do some work on 4 5 the definition of isolated spaces. We don't really know 6 what that means. We understand fully what confined spaces means, 7 because we understand 29 CFR 1915 Subpart B. This 8 9 happens to be the document that PSSA fully endorses, and through our local chemists has conducted several training 10 seminars to its members. We find it thorough, we find it workable, and we want to offer our compliments to the authors. It would be difficult to improve on it. 11 12 13 I would encourage OSHA to follow the lead of some 14 15 other agencies, some other branches of the regulating community trying to instill some reasoning into the 16 rules. Recently, Congress passed the Clean Boating Act 17

of 2008. And Senator Maria Cantwell's office explained 18 that the bill directs the EPA, that is the Environmental 19 20 Protection Agency, to develop reasonable management practices. And it goes on further and says to protect 21 boaters from unnecessary government red tape. In response to that, the regulated community through Vote US hailed this as a fabulous victory for common 22 23 24 25 sense. And it just goes to show what can be done when 0089 the voting public, the marine industry and our elected representatives in Congress were all together. 1 2 In another recent case, EPA administrator Steven Johnson signed a final rule October 7 that would 3 4 5 encourage businesses to recycle hazardous secondary materials instead of disposing of them as waste. The new 6 7 rule streamlines the regulation. I think that's the 8 point. The new job as regulators you must be aware of 9 the interim consequence of your good intentions. 10 The proposal by OSHA to regulate to regulate working 11 conditions at shipyards is anything but streamlining. In fact, it goes to great length, far too much detail in 12 an 13 effort to be thorough. What it creates is a Bible of opportunity for a diligent inspector to easily fill his quota of fines and citations. It needs to focus on what 14 15 will truly reduce risk and then stop at a reasonable 16 level of detail. 17 Thank you. 18 JUDGE GEE: Thank you, Mr. Killingsworth. Are 19 there any questions from the audience for the panel. 20 From the OSHA group. 21 MS. SHORTALL: We'll start with Ms. Watson. 22 MS. WATSON: Good morning, thank you for 23 I have kind of a mix of questions some will be 24 coming. 25 individual based on your testimony and the rest will be 0090 1 for the whole panel to answer. I'd like to start with 2 Rick. You had mentioned your vehicle, that you don't really have stop signs or that sort of thing. I'm just 3 4 5 curious, have there been any accidents at your facility 6 regarding vehicles? MR. BROWN: Not to my knowledge. MS. WATSON: And then you mentioned that you 8 9 work with a lot of contractors, and I was just curious how do you deal with that, especially with lockout/tagout. How do you kind of make sure that 10 11 everybody is in the loop, you know, like with group 12 13 lockout/tagout? MR. BROWN: We've developed a set of contractor 14 safety guidelines that we have our subcontractors sign, 15 16 and in that they have to follow, for instance, on like a 17 tagout specifically, they have to come on and actually use the lockout/tagout on Rule 1910.127 on our vessels 18 19 when they perform work for us. Is that what you are 20 getting at? 21 MS. WATSON: Yes. Are you getting that, like if you are hanging tags or locks, are you actually issuing them the materials to do that or is it they are 22 23 24 bringing it? 25 MR. BROWN: They have to bring their own at 0091 1 this time. MS. WATSON: You've also mentioned about the 2 3 cords and hoses, kind of asking OSHA to kind of have an exemption to just push them aside. Can you just explain 4 to me what you guys do when you're working on vessels 5 regarding hoses and cords? 6 7 MR. BROWN: Very similar to Al's testimony earlier today. As is on any vessel, you try and make a reasonable walkway, whether it's with S hooks or trees or 8 9 any combination therefore and try and make it as safe as 10 11 possible for passage. MS. WATSON: 12 Today, Kim and John, you guys both discussed job hazardous analysis, and I was wondering if 13 you could go into that a little bit, maybe give an 14 15 example of situations when you would use analysis like 16 that. MR. HODNE: We use it for all the operations. 17 It's a part of what they discuss with the employees before they go out. If you're in production release, 18 19 for instance, and inserted on the hull of a ship, they will 20 send down the three or four, whoever is going to be doing 21

that, and they will recognize what they need to do, what 22 habits will be recommended. They will look at staging in 23 24 place, they do a fire watch on the inside, they do fire watches on the outside, all of the PPE might be required, 25 0092 they go through the steps of the process with regards to that production and release the job they're going to do. 1 2 3 It's actually a three-step affair. It's the job steps, the hazards involved and the 4 It's three columns, straight across, this 5 abatement of. is what we're doing, this is the hazards that are a part 6 7 of that, and this is how we will abate that hazard, be it ear plugs, be it whatever. Those are expected with every 8 9 job. A lot of jobs are routine. They're done many times over and over through the year, so at that point we've 10 11 created a library where you can actually go online, pull 12 down the generic data for that operation, that particular process, and then depending obviously if there is any 13 14 changes, special conditions, it's raining, it's snowing, it happens to be a sun shiny day, they might not need to do snow removal before they have to do it. But then they 15 16 17 can read that particular hazard analysis for the 18 19 operation. MS. WATSON: Who is in charge of that, a 20 21 supervisor? 22 MR. HODNE: Every employee is trained on it. Every employee is responsible for them, whichever lead. 23 If the three of us were to go off and do a job and none 24 25 of us were a supervisor, but when the supervisor assigned 0093 the three of us to do the work, you get an JHA done, bring it by me for review. And the supervisor would sign 1 2 And quite often supervisors on new processes, 3 off on it. 4 they'll bring me the job hazard analysis. We do job 5 hazard analysis even for the very routine haul out and launch process of our dry dock. We do that 100 times a 6 year, and it couldn't be more routine. But if the wind is blowing, if it's pouring out, is 7 8 it sunny, is it raining, then I review and sign off one 9 every one of those job hazard analysis, and we have a 10 safety meeting right there at the gangway. The job 11 hazard analysis is gone over with our whole crew, they 12 all sign off on it, I've already reviewed it, and we go through, and that's done one very single thing we do. MS. WATSON: Could you just give me an idea of 13 14 15 how much time that takes out of your day to do that job 16 17 hazard analysis, just on average? MR. HODNE: On average, it's 10 to 20 minutes, 18 I suppose. We've been doing it for over a year and a 19 half it's been mandated, so they are better. In the beginning, they complained, like workers, it's their 20 21 right to do, to complain when you put something extra on 22 23 them. Today it's expected and it has been streamlined, it 24 25 happens easily. And like I said earlier, it actually 0094 1 increases the flow of production because they don't have 2 to stop and think about what they're doing, and it lays out all the processes and the steps that they are going 3 to do as well as the hazards. 4 5 MS. WATSON: John, would you say it's the same 6 for you? MR. KILLINGSWORTH: Yes. I would like to build on the job hazard analysis issue. It does not always 7 8 9 have to be a formal process. In order to explain that, 10 you have to understand the nature of our business. 11 There are two actual businesses that we're involved in, new building, which is working with nice clean models and a more structured environment, and the other is ship repair. Ship repair is more of a discovery process. The 12 13 14 owner will come into port thinking he has a list of 15 things he wants done. We will look over the job as much 16 as possible, but in the process of making the 17 preparations to accomplish what he wants you to do, you 18 19 discover that there are other things that need to be done, some of which present very unique conditions and 20 hazards, and that has to be dealt with. 21 22 When an employee encounters a situation like that 23 work stops, heads get together, they work it out with the owner and the project manager and come up with a suitable 24

solution thereby minimizing any risks to the employee.

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0095 But it doesn't always get written down. You have to 1 2 understand that the effort takes place, and that's part of the professional attitude that we've cultured in that 3 4 part of our yard. MS. WATSON: Do you have some sort of overall safety procedures that just say a hazard analysis will be 5 6 7 conducted? 8 MR. KILLINGSWORTH: Well, that happens actually 9 first at the project manager's level when he and the customer come up with the list of work in the beginning. 10 11 And then daily revisions to that occur on the job. MS. WATSON: Kim, and actually John as well, 12 you didn't mention the size and the number of employees. 13 I don't think you did. I apologize if you did. Could 14 you please just tell me the size. 15 MR. HODNE: About 125 production employees. MS. WATSON: And how large is your facility? MR. HODNE: Two and a half, maybe three acres. 16 17 18 MS. WATSON: And, John, can you please tell me 19 at your facility. 20 21 MR. KILLINGSWORTH: It depends what we've had going on. I've been there when we've had 30 employees. 22 23 Right now we're blessed with having hired our 300th recently. Sometimes we're doing work in two acres; 24 25 otherwise we might be spread out over 10. 0096 1 We happen to be on a piece of property in the Port of Anacortes marine terminal. So as demands increase, we 2 can spread out and use more, lease more of the land 3 that's available for our work. Right now we are blessed 4 with enough work to keep a lot of people working. 5 guess we've grown to be classified as large. I think it's small, but let's settle for medium. 6 7 8 MS. WATSON: John, thank you for bringing that 9 hard hat with the light on it. Is that normally what 10 your employees use? 11 MR. KILLINGSWORTH: These? 12 MS. WATSON: Right. MR. KILLINGSWORTH: Oh, more and more you'll 13 find versions of the head helmet-mounted light. It's 14 15 just hands-free and more practical. MR. HODNE: Less of a hassle. 16 MS. WATSON: In most cases you guys are wearing 17 hard hats, or the employees are wearing hard hats? 18 MR. KILLINGSWORTH: All cases. 19 MS. WATSON: That's something that would be 20 21 easy to --MR. KILLINGSWORTH: Oh, yeah. Some of these new products that are coming out on the market making it easy and affordable. The new LED technology that we're 22 23 24 25 experiencing has spurned a whole bunch of new products. 0097 1 Like I said, I wish I could have brought one of those intrinsically safe flashlights down to show you, but 2 3 sorry. 4 MS. WATSON: That's fine. I guess since we're on the lighting topic, in case of a loss of power -- and this is for the whole panel --5 6 7 what kind of procedures do you have in place if the power 8 goes off? MR. KILLINGSWORTH: I'll do you one better. 9 The typical on a Washington state ferry outboard might be 10 11 a space that you crawl into. I know it's kind of hard to regulate it because I'm an SEP, but it's lined with what 12 they call a cold tar epoxy. It's kind of like a musky 13 14 version of rhinoliner that you've seen on cars. It's just a very black substance, it's very resistant to corrosion and rust. That's the protection you want to 15 16 prevent the sips, but it soaks up every bit of light you can possibly put in there. I don't care how many lights 17 18 you put in there, it's tough to light a space like that. 19 I could guarantee we could not comply with the lumen 20 levels prescribed in that one table if you took 21 measurements in those kinds of spaces. 22 They are the 23 kinds of spaces that we normally regularly have to go into. If the lights go out, every single one of our employees are told that they better have some means of 24 25 0098 1 emergency lighting. It's easy nowadays with the flashlight technology we have to get enough light to get 2 3 out of such spaces.

generally speaking, though, when the lights go out, the call goes out to the electrician to figure out why. 5 6 Obviously if it's a breaker that's thrown, it's a matter 7 of chasing it down, and within five minutes the light is 8 restored. 9 So normally if there is a problem for a person in a very dark space with very little light that he cannot get 10 out, he's advised to just stay put. MR. HODNE: For us it's a part of new employee 11 12 orientation. It's 100 percent every employee when going into any spaces will have a portable light with them. 13 14 15 There is signs on stores, we provide them to them, they're right there. We go through literally thousands 16 of flashlights annually. 17 Don't get busted in a tank without your flashlight. 18 19 MR. BROWN: We don't require it, but I would say the vast majority of our employees that do go into 20 21 those kind of areas carry their own flashlights, and if the lights go out, the same thing, the call goes out and we get the lights back on as quickly as possible. And 22 23 they should just shelter in place. I think that's pretty 24 25 much standard practice with us as well. 0099 1 MS. WATSON: And you have responders that you can shelter in place that would come by and check on 2 3 them? 4 MR. BROWN: The lead man on that particular 5 vessel for us. For us, like I said, we work on several vessels. At our facility the work crews on each vessel and that would be the same if the power goes off on only 6 7 8 one vessel. The lead man usually gets the radio and the 9 response will be rapid. MR. KILLINGSWORTH: May I comment on the 10 11 frequency of checking on employees in confined spaces? MS. WATSON: Yes, please. MR. KILLINGSWORTH: Obviously there is a 12 13 The requirement that the lead check on his employees. 14 15 standard says something like frequently or regularly or whatever that is. But if anything happens unfortunate, 16 17 there would always be the case that we didn't check 18 frequently enough. We normally have several breaks during the day. Anybody who doesn't show up obviously is 19 chased down and accounted for. So I would say four times 20 21 a day is what we usually do. But obviously there are jobs that don't last that long. They may be in a space for a few minutes at a 22 23 time, and that employee while he's in there may not be 24 25 checked up on. So that requirement needs to have some 0100 1 reason added to it. 2 MS. WATSON: Now, is that with all spaces, the four times during that shift or day, or is it just 3 4 confined spaces? MR. KILLINGSWORTH: In our case we can pretty much check on employees four times a day, but in confined spaces, that's where we're talking about, the need is to be very diligent and perhaps more frequently would be 5 6 7 8 9 adequate. 10 But like I say, if anything happens, it may not be 11 frequent enough. MS. WATSON: For the whole -- go ahead. 12 MR. HODNE: For us, we all have our ID badges, 13 like many of us do now, and when anybody goes into any space on the guard that is around that hatch or whatever, 14 15 16 that ID tag is clipped on on the confined space permit on 17 the tag right there. So when the supervisors or anybody is walking around, you know you can see if you stick your head in there, if I have three tags, I better have three 18 19 men in the tank, and if there is four men in the tank, I want to know why I'm missing a tag. 20 21 On the other side of that, if I have three tags and only two guys down in the tank, if the other guy didn't 22 23 take a tag with him when he went up to the store to get 24 25 equipment, I want to know that because in case of an 0101 1 emergency, we're going to be looking for three, and if we only see two come out, he can explain to my widow why I went down into a hole looking for a ghost that wasn't 2 3 there and I ended up dead. So we press those very hard. 4 MR. KILLINGSWORTH: Our system works differently. Personally, as an SCP, I'm going to tanks 5 6 alone. It may be 20 spaces on a vessel that I visit

every single day. I'm not going to hang a tag at every 8 hatch as I go in and come out. That would be 9 impractical. 10 MS. WATSON: Rick, how about you for confined 11 12 spaces? 13 MR. BROWN: We don't have a formal system with I'd be working, again, with a lead man or on a 14 tags. 15 particular vessel. Frequent checks is same thing, in and 16 out for short visits, like John said, so I don't have a 17 formal system in place other than frequent checks and a lead man that is responsible for a particular crew on a 18 vessel. And if they are in a confined space, someone 19 will be checking on a fairly often basis. MS. WATSON: And for the panel, do any of your 20 21 yards or your procedures involve end-of-shift musters or 22 end-of-task musters? 23 24 MR. HODNE: Absolutely. The supervisors have 25 to account for the timecard at the end of the day. At 0102 the end of the day he's right there, and at the end of the shift he's gathering timecards. If he's missing 1 2 3 somebody who has punched out and not punched out, and he knows that he doesn't have anyone on extended hours, he's 4 going to go and find out where this person is. They look at it as a guy walking around and he's getting special 5 6 7 hours. He wants to know because he has to account for 8 his timecards at the end of the shift and all of the 9 numbers have to check out. If he has one that hasn't punched out, he's looking for that person. 10 MS. WATSON: Let's shift gears a little bit to medical and first aid. Could each one of you talk a 11 12 13 little bit about your program as far as training, training personnel on-site. 14 15 MR. BROWN: I'll start. Probably all of our lead men and supervisors are first aid and CPR trained. 16 17 We have a training room on site and conduct training, have conducted CPR and first aid and AED training. 18 19 have first aid kits located around the facility, fixed and portable, in several locations. We have an AED at 20 21 each facility as well. MS. WATSON: What's the number of AED's that 22 you have, just one per facility? 23 MR. BROWN: Just one at each one of my 24 25 facilities, yes. 0103 1 MR. HODNE: I would say that probably 15 to 20 percent of our workforce is first aid/CPR trained, and 2 3 the ambulance and first responders are three blocks from So there is a quick response there. 4 our facility. But in all honesty, the reality of it is they go through the training. I've been through it a dozen times 5 6 7 or more, as many people have, but they never get to use it. In the shipyard, a majority of what goes on is Band-aid first aid. You get a cut, you clean it, you put 8 9 salve it, put a Band-Aid on, do whatever. 10 For emergency trauma technicians, we rely on the experts. They don't use it much. It's almost a hazard in itself to have all of these first aid trained people. 11 12 13 We all can put Band-Aids on. We can do our own first 14 aid. We grow up through life doing that. 15 To put that requirement on them is almost a hazard 16 17 because they're stopping, they're fumbling, they're trying to remember what they were trained to do. They're 18 19 scared to death to get it wrong. They don't want the liability of it. The Good Samaritan rule does not always 20 21 apply. 22 But there again, they've got each other's back. They watch out for each other. They will render aid to whomever needs it, even if they are not first aid 23 24 25 trained. If I am not first aid trained, and John and I 0104 1 are working, and he gets a cut and he needs something, common sense, I'm an adult, I'm a thinking person. I going to render aid. I'm not going to not render aid 2 3 just because I've not been through a first aid class. 4 5 I guarantee the majority of the people in this room have probably never had to deal with a heart attack, 6 would not even be able to recognize when CPR was or was not needed or an AED. Is it a diabetic, is it a diabetic 8 9 reaction, is there something else going on there or are 10 they having a heart attack? It sounds good, it feels good. It allows you to 11

train people in it. But to put the emphasis on it like 12 we do, I have probably 20 first aid kits around, and I 13 14 put Band-Aids in baggies with a Band-Aid, it's in the 15 baggy and the wrapper, take it out and fling it on there so they can see, oh, that's a fingertip Band-Aid. I 16 17 mean, we facilitate as best we can. I know it's never going to come out of the rule, but if you look at it 18 board picture, there's a hazard to the whole first aid 19 rule also. 20 21 I don't want somebody that was trained a year and a half ago to come in and aiding me and he's trying to 22 think, oh, pulling a card out of his pocket, what am I 23 supposed to do. Because I was trained in what I'm 24 25 supposed to do, not everybody deals with stress in 0105 1 emergency situations the same. Some are good at it and some are absolutely horrid at it. 2 3 MS. WATSON: You mentioned a short response 4 time. How long does it usually take? 5 MR. HODNE: Two minutes. We drill those. MR. KILLINGSWORTH: We're three minutes. We're 6 7 in a small town. Anacortes has a small fire department, but they are very professional. We rely on them for 8 paramedic services. We actually have had their people 9 down and participated in our confined space training 10 programs and our shipyard competent person programs. 11 And when we do train, we probably train, oh, between nine and 12 of their staff in shipyard competent person skills. 12 13 They do have equipment, but they still do rely on 14 15 shipyard when it comes to anything that might happen on a vessel. We've come to an agreement that the shipyard 16 17 will, through its, you might say its confined space rescue team, handle the victim, as it were, from the vessel to the ground, and then we would rely on the 18 19 20 paramedics to provide the victim care during that period. When the victim hits the ground, however, the 21 paramedics take over using their own equipment and 22 23 provide whatever is necessary from there. That's the way 24 our drills go. 25 MS. WATSON: Do you have a basket stretcher or 0106 1 a type of stretcher that you would use to transport them 2 from the vessel to the pier? MR. KILLINGSWORTH: 3 We have basket stretchers wherever we may have the need to get somebody off a 4 5 vessel. However, the fire department won't use them. They insist on using their own backboards and equipment 6 7 in those scenarios. 8 MS. WATSON: Sanitation. I was just curious, do each one of your yards have a designated spot for employees to smoke, eat or drink? 9 10 11 MR. HODNE: We have designated areas where they cannot, and that's probably an easier way to state that. 12 13 We actually don't allow smoking on board customer vessels, that's foreboden. At the end of the gangway, 14 yeah. You're not going to smoke on the vessels. Beck we lease our facility from the state, so it's a state-owned facility, so they can't even smoke in the office buildings and such, so we're kind of regulated 15 Because 16 17 18 that way. It's more where they cannot. Everybody knows 19 where they can. 20 MS. WATSON: So there's adequate signage up to 21 22 sav that. MR. HODNE: Yes. MS. WATSON: On a number of the vessels, I 23 24 25 know, John, you said you do shipbuilding and ship repair, 0107 1 but do a lot of them have secondary power sources or are most of them you're finding it's a primary easy, you 2 3 know, lockout or tagout with employees trying to do work? MR. KILLINGSWORTH: If a vessel is dockside and 4 not hooked to short power, they would be on their own generator, but that doesn't happen so often. Most likely 5 6 7 scenario is they are on shore power, especially if the vessel is invariably shore powered and nobody is relying 8 9 on any of their auxiliary shipboard power. MS. WATSON: So most of the time you're not 10 having to worry about isolating a secondary source? 11 MR. KILLINGSWORTH: Rarely. I can't think of 12 it. We put people on shore power, that's it. We're not going to fire up another facility, mainly because those 13 14 facilities are water coolant, and once you pull a boat 15

16 out of the water. 17 MS. WATSON: Well, I'm just curious. There is a lot of vessels that have, you know, if we're talking about a military ship, they would have primary and secondary for most of their systems. So that's why I was 18 19 20 just curious with the smaller yards. MR. KILLINGSWORTH: We don't handle military 21 22 23 vessels. 24 MS. WATSON: Right, I understand that. Is it 25 same for both? 0108 1 MR. KILLINGSWORTH: Yes. MS. WATSON: For the entire panel, is your lockout/tagout system, is it primarily tags, locks; can 2 3 you go into a little bit of detail about what you use. 4 5 MR. BROWN: Our system for your shops is locks and tags, and the vast majority of the equipment we have in our shops is lockable at the equipment. So as far as 6 7 8 our power line site, I just kind of want to clarify, we are small, our actual trade group in Tacoma is probably -- the actual trades people who work on the 9 10 11 vessels for us is less than 40 total. Like I said in my description, our facilities cover a lot of ground for 12 13 supporting Trident Seafoods. 14 Back to the lockout/tagout, it's mostly lock. 15 Almost everything is lockable on the land side. And I think we have the same challenges on our vessels as every 16 17 vessel does as far as a mix of what's lockable and not. At some point you follow that closely enough to the 18 source and we have found ways to lock it out on our 19 vessels as well, at least that's what we strive for. 20 MS. WATSON: What kind of things do you use to 21 22 lock them out? 23 MR. BROWN: Just like the kit that Allen showed yesterday, the clamps for breakers, and we have been able to do retrofits, if we can install lockable breakers and 24 25 0109 1 the lock goes right on. There's a whole gambit of equipment that's out there, for example, and we've 2 supplied every one of our vessels. MR. HODNE: Same for us. 3 The JHA will again 4 identify what lockout/tagout is necessary, breaker lock, 5 we need chains for large valves, we'll chain those down. 6 7 And it's identified in the job hazard analysis so they know what they need to do. 8 9 The only problem that we have encountered once in my 10 years off a ship in dry dock is when the ferry workers came and actually removed one of our locks. That turned 10 11 into a blowup, so that ultimately ended up in a contract 12 13 rewrite for what goes on there. 14 But other than that, it's identified in the job 15 hazard analysis, and it's tagged, it's that simple, all the way down the chains, blanks, whatever the job hazard 16 17 analysis identifies. MR. KILLINGSWORTH: It depends. 18 Ideally in shipbuilding tagout seems to be a very effective process, 19 and usually that happens during systems startups. 20 21 Primarily it's dealing with electrical energy, but in ship repair, you're dealing with all kinds of energies, 22 23 hydraulic, hematic, electrical, of course. But we have to engineer means of securing these 24 25 systems even it means blanking out pipe systems before we 0110 1 can work on them. And it's very common practice. But locks don't work on pipes too well unless like 2 3 in the case of valves, you're using chains with locks. 4 Tags and the training and the principles of 5 lockout/tagout, I found to have been very effective. Fifteen years ago when I started work there, nobody 6 7 understood what lockout/tagout was all about. 8 So it's been something we've had to build a culture 9 around, and education has been the most effective tool 10 getting on top of those problems. MS. WATSON: How often do you do training in 11 lockout/tagout? 12 13 MR. KILLINGSWORTH: It depends on the new crew that might be coming in. But for anybody new coming into 14 the yard, they go through an orientation process in 15 general which touches on that, and at the craft level 16 they do regular monthly training sessions as needed as new people come in and join the staff. MS. WATSON: I just have one final topic or 17 18 19

question for the panel. I was just curious when, John, 20 you had mentioned hooking up to shore power, so dealing 21 22 with services such as steam and shore power, do you go on 23 board the vessel to inspect prior to to make sure the panels are in safe condition or that sort of thing? 24 25 MR. KILLINGSWORTH: I personally don't, okay. 0111 1 But our electrician, foreman, superintendent, whatever, 2 will have a conference with the boat skipper and the project manager to ensure that the system he's talking 3 about is secure and that he might be working on is 4 5 secure. 6 You said steam? 7 MS. WATSON: Yes. 8 MR. KILLINGSWORTH: We don't deal with steam. 9 MS. WATSON: So you're just running shore 10 power? MR. KILLINGSWORTH: Shore power would consist 11 12 of a power cord to a certain amperage service to 13 someplace on shore. We do deal with steam, and when I 14 MR. HODNE: passed around the proposed rule, our facilities guy, and I didn't get it in there because he wrote me two and a 15 16 17 half pages in response to this whole steam thing. And he had a real consternation over the fact of the five times 18 safety factor. He's calling the vendors trying to find 19 such a hose. Such a hose does not exist for a feed line. 20 250 psi is what all of ours are rated at, it's what 21 they're stamped at, it's where we work at. But if he's running at 80 or 90 psi, there's not one 22 23 on the market, it doesn't exist for the steam. He gets 24 together with the chief engineer of every vessel that 25 0112 comes in. Primarily Alaska Green Highway ferries that 1 2 use steam and there's only two of those boats, so we know the vessels quite well. They talk every time before 3 going on, and there is no problem. There's never been a 4 steam burn, because, there again, safety is the most important thing. These guys want to go home at the end 5 6 of the day. Common sense does apply, they're not idiots. They're thinking men, and they know what it takes to be safe, and they're proud of the work that they do. So the communication between vessel and shipyard is 7 8 9 10 11 constant, and familiarity is a good thing. MR. BROWN: We don't deal with steam at all for 12 supplying our vessels. For hooking up shore power, typically we -- we have a policy or program like John's 13 14 where we've got short power cables hooking up to our 15 vessels. Almost 100 percent of the time when they're on 16 our dock, we're hooked up to shore power. And we work 17 18 with the ship's crew when they come in from say a trip from up north, come in from Alaska, tied to the dock, we 19 secure ship's systems, work with the ship's crew to hook 20 21 up to shore power. MS. WATSON: Thank you for coming, and please, 22 if there is any questions you weren't asked or you 23 weren't able to comment on, please provide those in the 24 25 post-hearing comments. 0113 1 MS. SHORTALL: Mr. Bolon has questions next. 2 MR. BOLON: I don't have any questions, Sarah. MS. SHORALL: Mr. Daddura. MR. DADDURA: I'm just curious, Mr. Brown, you 3 4 5 talk about maintaining and working on your vessel or Was there ever an occasion where working on the 6 fleet. 7 job it's not typically your vessels? 8 MR. BROWN: No. 9 MR. DADDURA: Can either one, John or Kim, what type of vessel do you work on, what size? 10 11 MR. KILLINGSWORTH: We generally work on vessels larger than 85 feet and less than 350. 12 MR. DADDURA: You spoke of ferries? 13 MR. KILLINGSWORTH: Ferries. 14 15 MR. DADDURA: All ferries? MR. KILLINGSWORTH: No. We service the factory trawler market as well, tugs, barges, special services, 16 17 fire boats, things like that. 18 MR. HODNE: Pretty much the same for us. 19 Tugs, barges, fuel barges, all of the Alaska state ferry fleet, one of which is 429 feet, the Columbia. That is probably the largest ship that we've ever worked on, and that's 20 21 22 the only one of that size. The median average ship is 23

250 feet, so that's primarily where our market focuses. 24 25 MR. DADDURA: And you do build ferries, 0114 1 correct? 2 MR. HODNE: Yes, little ones. 3 MR. DADDURA: You do build? MR. KILLINGSWORTH: We have in the past built 4 We repair the current fleet of the Washington 5 ferries. 6 state ferries, but we don't get involved in the construction of ferries very often. MR. DADDURA: Thank you. 7 8 9 Back to working in isolated spaces. There seems to be some confusion. We have a confined space standard, 10 Subpart (d) and there is this little blip down here about 11 12 isolated cases on locations. 13 Is there a time when you send someone to do an errand or to fix something or install pipe bracket or 14 15 whatever, a small job where he's by himself? 16 MR. KILLINGSWORTH: In a confined space? 17 MR. DADDURA: Anywhere. MR. KILLINGSWORTH: Sure. Once in a while 18 we'll have a small case where like we say a pipeline breaks, so we have to go in and fix it. It will take one 19 20 person maybe a half hour or an hour or something like 21 22 that. 23 MR. DADDURA: But you have a time set that he 24 or she reports back? MR. KILLINGSWORTH: Correct. 25 0115 1 MR. DADDURA: Before their next job. MR. KILLINGSWORTH: Yes. Chances are they will 2 be in and out of that area several times, but if they 3 forget a tool or if they need another bolt or something 4 5 like that, they'll be in and out. It's easy to check on 6 them coming and going. 7 I think, Rick, you stated you use MR. DADDURA: 8 1910.147 for lockout/tagout of your vessels in your yard? 9 MR. BROWN: That's correct. MR. DADDURA: Do you gentlemen also use 1910 10 for your vessels as much as you can? MR. KILLINGSWORTH: I'm reticent to say yes 11 12 because of all the details that I'm not remembering, and 13 I'm not trying to -- that probably does not satisfy you, 14 15 but I'm sure we attempt to. MR. HODNE: I'm going to say no simply because I don't look at 1910. We have a lockout/tagout system. 16 17 We recognize the systems have to have them. 18 MR. DADDURA: That's fair and honest. 19 MR. HODNE: We follow that and tag it out. 20 MR. DADDURA: I guess for all three of you the question, far from the fact you're not following word for 21 22 word 1910's requirements, did you all start with 1910 and 23 basically develop your own programs? 24 MR. KILLINGSWORTH: Without the document in 25 0116 1 front of me going through line by line, I'm reticent to say yes. We do have a definite system in place. Our 2 electrical foremen and our superintendents supervises 3 4 that program. The other craft foremen understand as it 5 applies to their forms of energy, they do apply the principles as relevant. 6 MR. HODNE: And again, I'll say no simply 7 8 because I don't look at it as 1910; I look it as the 9 hazard of lockout/tagout and assess it. From our hydraulic shop, we talk about it often, and 10 they recognize all of the hydraulics, the different 11 12 things they work with, the electricians the same thing. 13 There is crossover. We just approach lockout/tagout as an issue, not as 14 15 1910 or 1915 or wherever it comes from, you know, this is it. I know I have the responsibility of protecting the 16 17 employees, and we have a lockout/tagout need and we have a lockout/tagout program. It's not a program that I 18 19 wrote, it's one that I inherited. But from my background, it's what you have to do to 20 get the work done, and everybody goes home at night. 21 I'm sorry, I just don't look at 1910. I don't look at the 22 lockout/tagout program the same as you do. 23 MR. DADDURA: The question is basically where 24 25 you did you get the information from to start or develop 0117 1 the idea of protecting your employees by locking out

2 hazards? MR. HODNE: Probably for me as a compliance 3 4 officer with WISHA. 5 MR. DADDURA: Where did you get it from? 6 MR. HODNE: Me? MR. DADDURA: Yes. Did WISHA have their own 7 8 lockout/tagout? 9 MR. HODNE: Well, my experience is, where my 10 true knowledge of lockout/tagout comes from my three 11 years as a regulatory compliance officer for the State of Washington. 12 13 MR. DADDURA: Did you read that somewhere or did you wake up one morning at WISHA and say, Hey, I'm a 14 15 lockout/tagout expert? 16 MR. HODNE: No, they trained me on it. 17 MR. DADDURA: Do you know what standard they trained you on; was it a state standard? 18 19 MR. HODNE: It's a WISHA standard. It's a 20 state-run thing. 21 MR. DADDURA: I understand. But you don't know where they got it from? 22 23 MR. HODNE: No. 24 MR. DADDURA: Rick? MR. BROWN: To the best of my understanding, 25 0118 1 1910 is what we tried and built our programs on. MR. DADDURA: Thank you. 2 Walking to working surfaces. Is there any confusion 3 there from your standpoint that walking surface is 4 5 anything that you walk on or is it a designated walkway you establish and maintain clear to get from space to 6 7 space? 8 MR. KILLINGSWORTH: Have you ever been on a 9 boat where you tear up all the deck boards and then go to 10 work? 11 MR. DADDURA: Definitely. MR. KILLINGSWORTH: There is no walkway. It is 12 all a working surface. It's very complicated. MR. DADDURA: When you're going to put that 13 14 15 thing back together, do you then have a walkway? MR. KILLINGSWORTH: Yes, then there is a 16 17 walking surface. MR. DADDURA: It's an established walkway, 18 19 correct? 20 MR. KILLINGSWORTH: Yes. MR. DADDURA: You try to maintain material free 21 and line free and things of that nature, correct? 22 MR. KILLINGSWORTH: We will try, yes. MR. HODNE: Same. They can double as a walking 23 24 25 surface and working surface all at once. 0119 1 MR. DADDURA: Mr. Brown? 2 MR. BROWN: It varies from boat to boat and vessel to vessel. They all come together and go in 3 4 different directions. 5 MR. DADDURA: Fair enough. 6 That's all I have. MR. KILLINGSWORTH: By the way, when we're on the upper deck and put people to work, we designate it as 7 8 9 a hazardous area and call attention to holes and 10 trip-and-fall hazards, so we don't go in there blindly. MS. SHORTALL: Mr. Perry has some questions 11 12 next. 13 MR. PERRY: Just a few quick ones, I think. John, you were talking about the injury rates presented as a preamble earlier. Could you tell the 14 15 panel what your recordable injury rate is for the most recent year, if you have that? 16 17 MR. KILLINGSWORTH: In fact, I looked it up for 18 19 2006 and it was -- 2006 was 20 and 19.2 in 2007. And we've been examining those numbers and developing 20 21 programs to make improvements in that area. MR. PERRY: That's your total? MR. KILLINGSWORTH: That's the total, yes. 22 23 MR. PERRY: Would you know lost workday rate? 24 25 MR. KILLINGSWORTH: I don't recall. Kim? 0120 MR. HODNE: I have one lost day for three injuries recordable for this year. 2 MR. PERRY: Rick? MR. BROWN: I don't know the rates off the top 3 of my head, but for '08 I think we have seven total 5

recordable injuries, all minor injuries, all minor. MR. PERRY: Thank you. 6 8 John, you had mentioned before, I think, and correct me if I'm wrong, I think you said you can't compare injury rates for shipbuilding ship repair with 9 10 manufacturing rates, I presume construction rates as well. Would you elaborate on why? 11 12 13 MR. KILLINGSWORTH: Yeah. I think comparing 14 shipyard work environment with the total work environment 15 you might see that in communities. You can't compare flipping burgers with working on steel ships. It just 16 17 doesn't work. The environments are different. And people have to be trained specifically in our 18 environment to survive. That may not be true if you're 19 selling real estate or driving a car or, you know, a bus. 20 We train our people coming in so that they can work in 21 that environment safely. We have several programs in the 22 23 community. 24 We work in a community where there are refineries, and there is a program in the community that everybody is 25 0121 1 used to called sea stock that applies -- might as well apply in the shipyard too. People are very aware of the 2 heavy work environment. It's not like working in a 3 hospital. 4 5 That's why I say it's hard to compare what you see out in the rest of the community with what might be in 6 7 the shipyard. MR. PERRY: I understand. Okay, thank you very 8 9 much. MS. SHORTALL: Ms. Wangdahl has questions now. MS. WANGDAHL: I just have a few. 10 11 Can you talk about your local EMS. Can you tell me 12 13 a little bit about that. 14 MR. HODNE: As a matter of fact, I did one just this last Friday with the confined space rescue team. 15 Probably quarterly at least we'll get together with them 16 and one of the vessels in the yard and put somebody down 17 in the thruster room. We've done it on our brand new dry 18 dock, and we explained to you earlier about dry dock. 19 Down at the very bottom in the crossover, we put one 20 of our people down there, and we have to extract them out and go through the whole deal. It's quarterly. 21 22 I also blow the alarm, which you can hear downtown 23 in Ketchikan and in the yard, and everybody comes and 24 25 they muster. We're getting ready, this coming November 0122 1 we're going to do a larger, expanded drill with the Alaska Green Highway system with one of their boats, the 2 3 local fire department, our people and the U.S. Coast 4 Guard, and we'll have a table propped in front of us and 5 we'll build a fire and there are four or five of us, and we do it often enough that it's rather boring, but it's 6 7 situations that you might have happen on a larger vessel, 8 so there's probably at least six a year. 9 MS. WANGDAHL: How long have you been doing 10 this? 11 MR. HODNE: That was part of John's original 12 compliance-based rescue team in '94. MR. KILLINGSWORTH: It was later than that. 13 14 MR. HODNE: '97? 15 MR. KILLINGSWORTH: Something like that. MS. WANGDAHL: Do you only drill confined space 16 17 rescue? 18 MR. HODNE: No, no, no. We'll do fire or we'll do -- our quarterly ones, while we won't have a drill per 19 20 se other than me setting off the alarm just to see if this guys remember how to and where to muster and do I 21 have any dead spots, because work is dynamic and it moves 22 23 around the yard, and I want to know is this alarm, are you hearing it the way that it needs to be heard. 24 25 Sometimes we have a dead spot in the yard. 0123 MS. WANGDAHL: Do you feel relying on off-site EMS is adequate? 1 Do you feel with your facility 2 3 MR. HODNE: Oh, absolutely. They're three blocks down the street. 4 5 MS. WANGDAHL: John, so you were the one that initially set up having the drills with the local EMS? MR. KILLINGSWORTH: Yes. I was the one that 6 started the confined space rescue team in our yard and 8 subsequent training efforts with the local paramedics.

10 MS. WANGDAHL: How often do you do this? MR. KILLINGSWORTH: Probably twice a year now. We've increased our frequency on that. 11 12 MS. WANGDAHL: Did you initiate it or did the fire department initiate it? 13 14 15 MR. KILLINGSWORTH: Initially I did. MS. WANGDAHL: And they had no problems doing 16 it; you have no problems scheduling? 17 MR. KILLINGSWORTH: No, we have a good rapport with the fire department. Like I say, it's a small town 18 19 and they are our neighbors and we work together on issues 20 like this, and they appreciate it. 21 MS. WANGDAHL: Rick, do you do anything 22 23 similar? MR. BROWN: I'm not directly involved, but I 24 don't think we've had any confined space drills like that 25 0124 with the local fire department, but I know our facilities 1 2 safety managers have the fire department come in, they are familiar, they walk the facility, make sure they know the layout of our facility and our vessels. 3 4 5 But I don't believe we've done any formal programs, drills, I should say. 6 7 MS. WANGDAHL: And, Rick, I just had one more question for you. You stated previously, I think it was in your original testimony or it may have been in an 8 9 answer to one of Ms. Watson's questions, but you stated 10 you put up temporary walkways for the crew on fishing 11 12 vessels? 13 MR. BROWN: We establish temporary walkways from the guard shack in that facility, and all I mean is 14 15 it's cones and caution tape, for example, so they can get directly to the particular vessel that we're crewing. 16 MS. WANGDAHL: Why don't you do this on a permanent basis for your own employees? 17 18 MR. BROWN: I don't think we really -- I need 19 to think through that answer real quickly. As our teams 20 21 go out to the different vessels, our maintenance teams, I don't see the need. My quick answer is I just don't see 22 23 the need. We just don't have, as far as I can think, issues 24 with traffic. We don't have that much traffic. 25 It's 0125 1 when they're crewing the vessels at the same time we're loading raw materials for the season, so there is a lot 2 3 more activity right at the time maintaining those vessels the last couple of days before a vessel is ready to 4 depart for a fishing season. We have a lot more 5 6 activity. MS. WANGDAHL: You don't have a lot of areas 8 where you're going to have pedestrians as well as your own vehicles on a regular basis; is that what you're 9 10 saying? MR. BROWN: That's fair, yes. MS. WANGDAHL: Thank you very much. MS. SHORTALL: Ms. Brinkerhoff has some 11 12 13 14 questions. MS. BRINKERHOFF: Mr. Brown, in your testimony you talked about efforts to isolate hazardous energy on 15 16 vessels, and I'm just wondering if you modify that at all 17 on your smaller vessels where your crews are pretty small 18 compared to your larger vessels. 19 MR. BROWN: Could you explain modify. MS. BRINKERHEOFF: Well, do you use the same 20 21 hazardous energy control program for your large vessels 22 23 as your small vessels? 24 MR. BROWN: I'd say that the vast majority of 25 our smaller vessels we try to put lockout/tagout kits on 0126 1 them and try to put a program in place that is similar. As far as experts go, it is the ship's crew who is 2 3 usually I would probably say the default, and we have a flight engineering staff that has various, like we'll 4 have full engineering for most of ours in one segment, 5 our catcher vessels, and that particular person could 6 7 certainly be qualified as a system expert. Do I understand your question? 8 MS. BRINKERHOFF: Yes, I think so, and it sounds like you're saying there is somebody on each of 9 10 11 your vessels, even the smaller ones. I think that's what 12 you're saying. 13 MR. BROWN: We've certainly extended the

14 program, our lockout/tagout program, as we try to build it on our larger vessels down to the smaller. It's not 15 16 complete by any stretch, but I say getting system experts, my first answer would be our default is 17 definitely the ship's crew. 18 MS. BRINKERHOFF: On the smaller --MR. BROWN: Yes, on the smaller. They know the 19 20 21 vessel the best. 22 MS. BRINKERHOFF: Mr. Hodne, which of your shipyard employees wear personal protective equipment? 23 MR. HODNE: Everyone. 24 25 MS. BRINKERHOFF: Everybody? 0127 1 MR. HODNE: Yes. We have 100 percent steel-toed boots and safety glasses and hard hats, and 2 then the PPE's goes up from there, ear plugs, tie backs, 3 Yeah, everybody. MS. BRINKERHOFF: 4 gloves. 5 But like the tie backs and the eyeglasses, who wears those? 6 MR. HODNE: Everybody wears safety glasses, and the tie backs, it depends on -- there again, I'll go back 7 8 9 to the JHA. The painters are going to be painting, they're going to be wearing it; if the services guys, 10 labor guys, are doing a bunch of grinding or things with dust, they'll have theirs. No grinding is done without full eye protection, actual eyeglasses, and they may be wearing a tie back. The hydraulic guys are messing with 11 12 13 14 fluids and they are in a greasy situation, they'll put the tie backs on. And that's the way they work. 15 16 17 MS. BRINKERHOFF: And that's all spelled out in 18 your job --19 MR. HODNE: Job hazardous analysis. MS. BRINKERHOFF: That's part of the abatement 20 21 section of the job? MR. HODNE: 22 Yes. MS. BRINKERHOFF: And my other question to you 23 was you mentioned that Washington state has the most 24 25 clearly written rules. Are you talking about WISHA? 0128 1 MR. HODNE: Yes. I think they changes their name to DOS or something. 2 MS. BRINKERHOFF: Right, I think it's DOS. And Mr. Killingsworth, I just wondered if your 3 4 5 company has any of those really expensive flashlights? MR. KILLINGSWORTH: Not yet. 6 7 MS. BRINKERHOFF: That's all I have. MS. SHORTALL: I have a few questions for you. 8 9 Mr. Killingsworth, I'll refer to you first. Mr. Killingsworth, in your facility, do you have any 10 spaces containing bulk quantities of combustible or 11 flammable liquids or gases or spaces containing quantities of liquid gasses or solids that are toxic, 12 13 corrosive or irritating? 14 15 MR. KILLINGSWORTH: No. MS. SHORTALL: I also wanted to know how far 16 17 the closest EMT facility is from your facility 18 mileage-wise. 19 MR. KILLINGSWORTH: Nine blocks. MS. SHORTALL: Nine blocks? 20 MR. KILLINGSWORTH: Less than a mile. I think 21 it's five-eighths of a mile the last time we measured. 22 And we are within their three-minute response radius. MS. SHORTALL: Does the three-minute response 23 24 25 radius mean the time for them to get from their facility 0129 1 to your shipyard? 2 MR. KILLINGSWORTH: Once they get the call, it takes them less than three minutes to get to our 3 facility. 4 MS. SHORTALL: So how long does it take them to get from their facility to an injured person who is in 5 6 7 the bottom deck of the largest vessel you may have at 8 your facility? 9 MR. KILLINGSWORTH: Again, it depends. If the injury is in a new building area, access is immediate. If it's on one of the vessels, it will be, depending on when the rescue team gets the victim out of the vessel, 10 11 12 13 however long that might be. When they come on-site, though, they go directly to 14 15 the victim and offer the victim care. MS. SHORTALL: Right. 16 MR. KILLINGSWORTH: We are not the experts in 17

victim care. We rely on the paramedics to do that. MS. SHORTALL: I'm just trying to understand 18 19 20 how long does it take them from their point of their EMT facility to get to that employee if that employee were 21 injured on the bottom deck of your largest vessel. MR. KILLINGSWORTH: Five, six minutes, 22 23 24 something like that. 25 MS. SHORTALL: Five, six minutes? 0130 MR. KILLINGSWORTH: It depends on how deep they 1 are in the vessel. I'm thinking of the largest vessel. 2 3 MS. SHORTALL: Mr. Hodne, how close is the furthest EMT facility from your shipyard? MR. HODNE: Two blocks. 4 5 MS. SHORTALL: Two blocks. 6 When you said it's 7 two minutes, did you also mean from the point of them getting from their facility to your facility? 8 9 MR. HODNE: To the ship side. We're very 10 small, and when the alarm goes out, the way is cleared, and we also have somebody at the gate to give directions to where they need to go. It's two minutes door to door. 11 12 13 MS. SHORTALL: Door to door. 14 MR. HODNE: Yes. MS. SHORTALL: It's been very fun, I've been looking at the websites for everybody, and I happened to 15 16 17 look at your Ketchikan Shipyard Development Plan. Is it fully developed now? 18 19 MR. HODNE: No, we're in the middle of it. MS. SHORTALL: Pardon? 20 MR. HODNE: We'll in the middle of it. 21 MS. SHORTALL: It looks like it's going to be 22 quite a large -- to me it looks pretty large and a lot of 23 different aisles and aspects to it. 24 25 MR. HODNE: It's going to be probably the 0131 1 newest shipyard in the country. Our footprint is -- does it say our footprint? I think it's going to be two and a 2 half acres. It's really quite small. But the way that we've designed it, we'll be able to utilize that space 3 4 5 that isn't utilized today. MS. SHORTALL: So how long will it take for 6 that EMT personnel to get from your gate -- same question -- to the bottom deck to reach an employee in 7 8 9 the largest ship that you work on or build or repair at your facility? 10 MR. HODNE: Well, from the main gate to the dry dock, that large ship would be on the pier side, is maybe 11 12 200 or 250 yards, so that distance is covered quickly. I lot of the gangway we'll have it cleared, or six minutes 13 14 15 or less. MS. SHORTALL: Where are the AED's located? MR. HODNE: We don't have AED's. 16 17 MR. KILLINGSWORTH: We rely on the fire 18 19 department for that. MS. SHORTALL: Mr. Hodne, I want you to tell me why your company decided it was so important to do the 20 21 job hazard analysis? 22 MR. HODNE: Funny you should ask. Our shipyard is only 15 years old. We had a pulp mill, before I got 23 24 there, it was a pulp mill, which was closed down some 10 25 0132 or 12 years ago. It put 600 people out. 1 And the owner of our company had a construction firm 2 as well, and he's a benevolent man, and he hated laying off his people in the off season. This state facility, 3 4 which we lease, was available. He didn't know 5 shipbuilding, ship repair from anything, but he knew that he was given an opportunity that was presented to him, so 6 7 8 he jumped into the shipbuilding, ship repair business 15 9 years ago. 10 What was the question? MS. SHORTALL: I want to know, I think it's 11 great that you do the job hazard analysis. You said it's 12 13 been triggered by management commitment down, so I wanted 14 to know -15 MR. HODNE: For me, to work through with loggers and fishermen displaced into a new industry, the 16 easiest way to get them is -- six feet or 10 feet tall is 17 not the average of our shipyard, so it shifted over. The 18 19 cultures changed and you're under new rules, and they're 20 stubborn, loggers are stubborn. 21 So going through the job hazardous analysis got them

to have to stop and recognize the myth, and do the steps 22 to recognize, which then gets them into a recognition of 23 24 the hazard. And actually in 2009, we're trying to push it 25 0133 1 forward. We're going to have a weekly \$100 incentive. don't believe in incentives at all, but I have to tell 2 you, they're going to know and they are going to give you 3 4 the rule; what is the standard; what is wrong with this picture, and they're going to give you 1915 dot dah, dah, 5 dah, dah, dah. And we're going to push the knowledge. 6 7 Besides, there's nothing to do up there except work, 8 drink and sleep. I would rather that they work, learn 9 and sleep. MS. SHORTALL: You told us that you had one 10 lost workday injury this year. What's your total number 11 of injuries this year? 12 MR. HODNE: Reportable, I think I'm at five or 13 14 And that's the little nicks and cuts and you put a 15 Band-Aid on it. MS. SHORTALL: When we were talking before 16 17 about the time for the EMT to get to your plant and then to get to the gangplank and then to get down to the 18 bottom of the ship, if you added it all up you're talking 19 about six to seven minutes total. I can't think of a 20 21 nice way to say it. MR. HODNE: 22 Just say it. MS. SHORTALL: Are you aware of the American 23 Heart Association's and Red Cross's statements, as well 24 25 as other studies, that suggest that in a situation where 0134 1 a person has stopped breathing or their heart has stopped, that the golden window of opportunity is one to 2 3 five minutes to get CPR started and an AED. We're now past that point, that golden window of opportunity, if you had an injury at the bottom of yours. 4 5 How is your company either dealing with that or planning 6 7 to deal with that? 8 MR. HODNE: You have to understand the culture and the attitude of Alaskans. It's not like the lower 9 48. When we say we're going down south, we don't mean 10 11 Seattle. It's very much a self-preservation idea. And these guys will do -- you have to recognize, we 12 are CPR trained, we are first aid trained, even though I 13 have a separate opinion about that. But we're going to 14 15 render aid as best we can. But then again, those AED's, they fail, they are not 16 17 100 percent effective. And I wish I brought my notes with me, because that same 70-year-old superintendent has 18 an opinion on AED's. And he surfs the net all the time, 19 20 and they have a 20 percent success rate, some 21 phenomenally low number. 22 People are putting way too much faith and way too 23 much credence in AED's. It's just the way it is. They're great, they sound great, on theory and paper it's 24 25 the right thing to do. But in practice and in outcomes, 0135 there is an edge, but they're not an end all/be all deal. 1 2 MS. SHORTALL: Mr. Brown, you use forklifts at 3 your facility, right? MR. BROWN: Yes, we do. 4 5 MS. SHORTALL: Do all your employees who operate forklifts wear seat belts? 6 7 MR. BROWN: Absolutely. MS. SHORTALL: How did you get that climate or 8 9 culture for you to tell your employees that you must wear 10 the seat belts when you're operating the forklift? 11 MR. BROWN: We made that the rule and we 12 enforce it. 13 MS. SHORTALL: What do you mean by enforcing it? What happens to an employee who gets caught without 14 15 a seat belt on? 16 MR. BROWN: We have a progressive system in place there that our shipyard competent person at our 17 facility and manager, and any manager at the facility is 18 encouraged to support, that if you see someone not 19 wearing a seat belt, we have a chit system where we write 20 them up and put them in their files. 21 If they're found -- this is one example -- like 22 23 driving a forklift without a seat belt on or any other number of violations, not wearing a hard hat, safety 24 25 glasses, et cetera.

0136 MS. SHORTALL: Do you think you could apply 1 2 that process or that system that you have to people using seat belts in other vehicles in which they might be 3 riding or operating when they're on your facility? 4 5 MR. BROWN: My comments in my testimony I mentioned that that might be a difficult thing. 6 We don't have that many personal vehicles enter into our facility 8 other than catching them right at the gate as they go in. My opinion is that might be a little bit difficult 9 for our facility, for example, to enforce. There are 10 very few personal vehicles we allow in, so it's a little 11 hard for me to answer that. 12 13 I don't think that's going to be easy. It's a lot easier and a lot more visible on every forklift that 14 you're going to see them if they're not wearing their 15 16 seat belt. 17 MS. SHORTALL: If you had a pickup truck and 18 people riding in the back of it, would it be pretty visible to see they're probably not in a seat belt back 19 20 there? 21 MR. BROWN: Yeah, but we don't do that at our facility, absolutely not. 22 MS. SHORTALL: Gentlemen, thank you so much for coming here today. Your testimony has been wonderful, 23 24 25 and we look forward to receiving your post-hearing 0137 1 comments as well. Thank you again. JUDGE GEE: Thank you very much. We'll have 2 our lunch break now. 3 It's 12:45 now. We'll start up at 1:45. 4 5 (Luncheon recess from 12:45 p.m. to 1:45 p.m.) JUDGE GEE: If there is anyone in the room who 6 7 has not signed in at the desk in front of the room, 8 please do so so we have a record of who is participating 9 and attending these hearings. Our first presenter this afternoon is Philip Dovinh. 10 11 Is that how you pronounce your name? MR. DOVINH: Yes, Your Honor. 12 13 JUDGE GEE: Please state your full name, spell it and your affiliation. 14 MR. DOVINH: Good afternoon. My name is Philip Dovinh, spelled P-H-I-L-I-P, last name, D-O-V-I-N-H, and 15 16 17 I work for Sound Testing, a company based here in 18 Seattle, Washington. MS. SHORTALL: Your Honor, I'd like to ask Mr. 19 Dovinh if he has additional copies of his testimony that 20 we could follow along with it. MR. DOVINH: I do. I only have one copy. 21 22 JUDGE GEE: Did you want to mark that as an 23 24 exhibit? 25 MS. SHORTALL: Yes, Your Honor. I'd like to 0138 1 mark first of all John Killingsworth's testimony as Exhibit 0180, Chris Kline's testimony from Icicle 2 Seafoods as Exhibit 0181, and Mr. Dovinh's testimony as 3 4 Exhibit 0182. 5 JUDGE GEE: So ordered. Thank you. Mr. Dovinh, you may being. 6 7 MR. DOVINH: Thank you. Thank you for the opportunity to share our concerns 8 9 regarding your proposed 1915 Subpart F, General Working 10 Conditions. 11 I'm not a commercial fisherman, I'm not a vessel 12 owner, and I do not own or run a shipyard or ship repair facility. I am an NFPA certified marine chemist and 13 chemical engineer for over 20 years. I'd like to share with you a little bit about what I do and why 14 15 lockout/tagout is such an important part of my life. 16 17 As a chemical engineer, I specialize in the safe handling, processing, categorization, treatment, 18 reclaiming and recycling hazardous materials, waste oils 19 and other waste means through the marine industry. 20 As a marine chemist, I am an expert in the field of 21 compliance-based entry, aqua and the controlled workers 22 exposure to hazardous and toxic materials in the shipyard industry. I also specialize in the control of fires and 23 24 25 explosions in the marine industry, tank forms, 0139 1 refineries, shore tanks, underground and aboveground 2 storage tanks. 3 In the shipyard industry, confined spaces are not

limited just to tanks, voids or cofferdams with limited access, but also include hull structures, piping and 5 6 other spaces which by their small sizes and confined 7 nature can readily create or aggravate a hazardous 8 exposure. 9 A confined space to me is any space that may be oxygen deficient or contain flammable or toxic materials 10 11 or hidden physical hazards. 12 I'm often privileged to be the first person to enter 13 these various confined spaces on shore and on the marine vessels, such as fuel tanks, crude oil tanks, fish oil 14 tanks, ballice tanks, voids and even sewage tanks to test for their atmospheric conditions. Once they require 15 16 testing, an inspection is completed and safe conditions 17 18 are ascertained, I issue a marine chemist certificate, a legal document that authorizes workers to enter and work 19 inside the confined spaces. 20 In a unique way, I am one of the foremost experts and the frontline of defense against atmospheric hazards 21 22 in all types of confined and enclosed spaces on ships, 23 marine vessels and shore tanks. 24 25 The types of marine vessels that I inspect range 0140 1 from crude oil tankers, bulk carriers, tank ships and tank barges, container freighters, Navy ships, aircraft 2 3 carriers, submarines, U.S. Coast Guard icebreakers and buoy tenders, NOAA research vessels, all passenger ship 4 5 carriers, tugboats, catamarans and all types of fishing vessels large and small. 6 7 That is how I have come to know many of the vessel owners, ship repairers, shipyard owners and operators and 8 their safety supervisors present here in the last two days of this hearing. In fact, one of the marine 9 10 chemists working with our company has successfully 11 entered, inspected and certified over 300,000 confined 12 spaces and tanks safely in his 40 yearlong career. have another 20 years to catch up to this giant. 13 14 Besides working as an NFPA certified marine chemist chemical engineer, I also hold classes in confined space 15 16 training, hot work, Benzene, lead, hexavalent chromium, 17 shipyard competent person training, fire watch training 18 and various supervisory-level safety training classes. 19 Most of these people that were here yesterday and today 20 21 have gone through my classes. I also represent the marine industry on the Seattle 22 Fire Code Advisory Board for nearly 10 years and helped develop various atmospheric rules. Currently I'm an 23 24 25 active member of the Marine Chemist Association. 0141 also a board member of the Marine Chemists Association 1 Executive Committee, and I'm also a member of the Puget Sound Shipybuilders Association. 2 3 Since my friends and associates in the commercial 4 fishing industry and shipyard industry have done such a wonderful job at voicing their concerns in front of your 5 6 7 panel regarding housekeeping of Subpart F, I'm here today 8 mainly to concentrate on 1915.89, control of hazardous energy, lockout/tagout. I hope to fill in some of the holes left open and 9 10 also to clarify other issues that might be helpful to 11 12 your panel. 13 First, I would like to remind everybody here that OSHA 29 CFR Part 1915, the shipyard industry standard, 14 15 including this proposed Subpart F, are meant to cover all employees of employers fulfilling maritime activities on 16 17 board vessels, vessel sections and landside operations on the shore, pier, terminal, yard, shipyard, machine shop, river banks, et cetera, as well as on vessels afloat or 18 19 in dry docks or in waiting docks, regardless of 20 21 geographical location. 22 The term ship repair means any repair of vessel 23 including but not restricted to alteration, conversions, installation, tank cleaning, painting and maintenance 24 25 work. Shipyard employment in our region, here in the 0142 1 Pacific Northwest, is comprised of the owners and operators of tank ships, tank barges, tugboats, carriers, container ships, cruise ships, bulk carriers, commercial 2 3 fishing industry, shipyards, independent vessel repairers 4 5 and then numerous subcontractors. I feel that the shipyard employment in our region 6

7 has not been adequately represented during the drafting

and initial development process of the Proposed 29C 1915 8 9 Subpart F. 10 In the mid 1990's during the development process of 29 CFR Part 1915, Subpart P, which I'm pretty sure Mr. Joe Daddura remembers quite well, fire protection in the 11 12 13 shipyard industry. Mr. Joe Daddura made several trips to the Seattle area and consulted with our local shipyards 14 15 and ship repairers. The representatives from the 16 shipyard industry in our region consulted with Mr. 17 Daddura and took him to various shipyards, ship repair facilities for his observation and evaluation. 18 19 Mr. Daddura was also given a copy of the Seattle Fire Department Administrative Rule 49.01, which I helped 20 develop, cutting, welding and other hot work on marine vessels for his review. Many of the components from our 21 22 23 local hot work regulation were considered and incorporated into the final version of Subpart P. 24 25 Although 29 CFR 1915 Subpart P is not perfect, but 0143 1 it was practical and realistic for our industry, and our industry did not have any major difficulty adopting its 2 3 requirements. 4 Today on behalf of our local shipyard industry, I would like to express our gratitude and thanks to Mr. Joe 5 Daddura for a wonderful job that he has done for us in 6 7 developing Subpart P. 8 When the proposed version of Subpart F, general 9 working conditions in shipyard employment came out, many people in our industry read it carefully and found that 10 it contained sections that were uncompleted, undefined 11 terminologies, ambiguous, impractical, unnecessary and too costly, impossible to implement or to comply with, 12 13 and maybe even in conflict with certain existing federal 14 15 regulations. 16 Your language used in Subpart F is often unclear, 17 confusing, open-ended and leaves ample room for erroneous or misinterpretations which may result in unnecessary or 18 19 costly modifications and potential citations. The data from the U.S. Bureau of Labor Statistics 20 shows that in 2007 commercial fishermen and related 21 fishing workers had the highest rate of fatalities, 100.8 22 per every 100,000 employed workers. The next highest was 23 logging at 87.1, and the lowest was education and 24 librarian workers at 0.2 per 100,000. 25 0144 The shipyard, ship repair industry has always been known to be one of the most dangerous professions. In 1 2 3 the Pacific Northwest, we have a very special marriage between these two industries. After completing fishing 4 working in treacherous conditions on the high seas, the 5 same fishermen go to various shores, piers, terminals, 6 7 dry docks, shipyards to perform ship repairs. But this 8 time they work in a completely different set of 9 treacherous conditions. There are numerous and many inherent risks and 10 11 dangers in both of these industries, even with the strictest of all regulations and safety measures taken. 12 13 The risks and the dangers remain. I believe that the best risk management is a 14 combination of workers awareness, available options, 15 training, site inspections, safety inspections, safety 16 programs, personal protective equipment, engineering controls along with regulatory guidance. It is important 17 18 19 to note that everyone in our industry appreciates OSHA's good intention to help our industry lower the statistics 20 of fatalities and accidents in the shipyard industry. 21 22 Many of us also believe that safety could also be 23 achieved in a voluntarily basis, a performance-based basis with some additional guidance from OSHA, but not 24 25 necessarily in terms of a new set of regulations. 0145 1 I also feel that the economic impacts as analyzed by OSHA grossly underestimate the cost of implementing the 2 3 proposed Subpart F by shipyard employment in our region. A large part of the shipyard employment in the Pacific 4 5 Northwest hinges closely to the success or failure of the commercial fishing and fish processing industry. 6 Because the commercial fishing industry in our area is cyclical, one bad year of commercial fishing may turn 8 9 into two or three years of terrible for the rest of the shipyard employment. I would ask you to carefully 10 consider this regional cyclical and economic issue when 11

you revisit the section of economic impact analysis. 12 The current conclusion made by OSHA that the proposed regulation is economically feasible definitely 13 14 is not appropriate because it doesn't reflect reality, 15 especially in the Pacific Northwest area. 16 17 Based on the current data from the U.S. Bureau of Labor Statistics, BLS, approximately 70 percent of all 18 shipyard accidents are related to atmospheric hazards, 19 20 mostly oxygen deficiency. The remaining 25 of all shipyard accidents are related to other causes, mostly 21 physical hazards that have to do with slip, trip and 22 23 fall. 24 Approximately five to six percent of all shipyard 25 accidents are related to sudden release of hazardous 0146 1 Not only that, the BLS also indicated that energy. workers who are non-native English speakers have a 2 3 minimum of at least 40 percent higher risk of death and 4 injuries on the job than their counterparts. 5 Mr. Alan Davis of American Seafoods mentioned in his testimony yesterday that there were as many as 80 different languages being spoken on some of his vessels. 6 7 8 I believe that by proposing the regulation 1915.81 9 housekeeping and 1915.89 control hazardous energy, lockout/tagout, OSHA has hit several nails right on the 10 head pretty hard. But OSHA hit the wrong nails. 11 In my opinion, to reduce the maximum number of 12 13 fatalities and injury rates in the shipyard industry 14 today, OSHA should concentrate on ways to help workers 15 improve atmospheric conditions in tanks, confined spaces, enclosed spaces and isolated spaces during the ship 16 17 repair. In the current 29 CFR 1915 shipyard industry, OSHA 18 referred to the term ventilation, ventilating, ventilate 55 times -- 55 times. This fact indicates that OSHA 19 20 knows that the risks associated with bad air, and that 21 OSHA recognizes ventilation is the single-most important 22 23 engineering control measure that a ship repair industry could use during ship repair operations. 24 25 Second, OSHA should concentrate on ways to help 0147 1 employees to better deal with the dangers of uneven 2 surfaces, slippery and wet conditions, gangway access, extreme temperature, guarding machines and equipment, 3 open manholes, open fish holes, open cargo holes, loud 4 5 noises, high pressures, heights, et cetera, and ways to minimize burns, cuts, scrapes, bruises by ship's 6 7 structure. 8 Yesterday somebody asked how much of the area on the 9 ship has to do with working and walking surfaces. I can 10 tell you during ship repair, every inch of that vessel 11 the ship repairers have to climb around and do the welding, burning, cutting or grinding. 12 13 Third, OSHA should concentrate on communication program to help workers in the shipyard industry better 14 understand the risks and hazards associated with their 15 work and ways to minimize or reduce them. 16 To summarize, there are three reasons, three main reasons that currently injure, hurt or kill the most 17 18 workers in the shipyard industry. 19 No. 1, hazardous atmospheric conditions; No. 2, slips, trips and falls; 20 21 No. 3, lack of or inadequate communication. The recent OSHA release of guidelines for the 22 23 shipyards ergonomics for the prevention of musculoskeletal disorders, OSHA publication 3341-03N 2008 is an exemplary example of OSHA's effort to help the 24 25 0148 shipyard industry to deal with ergonomic issues instead 1 of implementing another set of regulations. I have a 2 3 copy here if you wish to see it. This set of OSHA advisory guidelines on ergonomics is a great example to show that a general integral 4 5 reliance between OSHA and the shipyards can produce 6 exceptional results. In fact, many pictures and guidelines and suggestions included in this document came 7 8 9 directly from our local shipyards in this region. I strongly recommend that OSHA produce additional 10 safety guidelines on the subjects of ventilation, slips, 11 trips and falls, signs and communication, housekeeping as 12 13 well as lockout/tagout for shipyard industry. If OSHA were to continue implementing Subpart F for 14 our industry, in order to be most effective, I ask that 15

our shipyard industry be given a unified set of 16 17 lockout/tagout standards. By having a unified standard 18 on lockout/tagout, everyone in our industry from the 19 safety professionals to the chief engineers, from the skippers to the foremen, from the machine operators to the deckhands, from the ship superintendents to the 20 21 laborers, from the vessel repairers to the tank cleaners, 22 from the electrician to the mechanics, from the boilermakers to the pipefitters, from the port engineers 23 24 25 to the marine chemists, from the competent person to the 0149 fire watchers, everyone will be applying and working 1 under one set of lockout/tagout operations, regulations, 2 3 and that would truly enhance safety and minimize the loss of life, limbs and property. 4 5 I would like to give you one example. Although not perfect, the Hexavalent Chromium Standard that became 6 7 effective in 2006 -- I also have a copy right here, 8 Publication 3320-10N -- is another excellent example of 9 OSHA's abilities. 10 OSHA effectively revised one set of standards for 11 each industry, General Industry Standard 1910.1026, Shipyard Standard 1915.1026, Construction Standard, 12 13 1926.1126. In each of these standards, each industry has its 14 15 own independent set of regulations and applicable exceptions. They were well written. They were written 16 clearly and credibility is exceptional, and all of the 17 definitions were listed at the beginning immediately 18 right next to the scope of the standard. 19 I feel that OSHA proposed 1915.89, control hazardous 20 energy lockout/tagout is very confusing, incomplete. 21 The topics of hazardous energy and lockout/tagout needed to 22 23 be reevaluated, reassessed, rewritten, streamlined, simplified and unified. 24 25 Lockout/tagout operations and requirements on ships 0150 1 in the marine industry are completely and inherently differently from those of general industry. The procedures that work well in general industry may be 2 3 4 extremely dangerous or costly when trying to implement blindly in the shipyard industry. 5 For example, there are cargo lines, fuel lines, vent 6 lines, freon lines, ammonia lines, steam lines, hydraulic lines, thermal oil lines, heating coils, manifolds, tanks 7 8 9 and cascading piping systems that are continuous with 10 little or no valve in line. 11 Many electrical wiring systems are hidden behind bulkheads, overheads, under decks, control panels, 12 conduits, processing equipment, cabinets, control equipment and other structures or obstacles. 13 14 15 Piping system, refrigeration, fuel oil system, hydraulic systems often have piping, flanges or expansion 16 17 joints built inside other fuel tanks. These are also the same systems that need constant repair and hot work. 18 In 19 order to blank a valve, one would have to empty the fuel tank, ventilate it, clean it, gas free it before blanking can take place. If adjacent spaces are involved, at 20 21 least two or three or four more tanks would have to be 22 23 cleaned, would have to be emptied and gas free. When shipyard industry refers to lockout and tagout, 24 25 we normally mean a positive measure of some kind is to be 0151 1 used, not only just to lockout or tagout, but also closing valves, removing handles, splash zoning, 2 3 blanking, plugging, ballooning, stuffing with a rag, wedging, capping, drill, tap, plug, bandaging, securing manholes, closing doors and hatches, shutting portholes and ventilation ducts, tying ropes, duct-taping, guarding 4 5 6 7 machinery, posting signs in confined space entry when hot 8 work remains, re-energize, disconnect, pull the plug, 9 tank cleaning, isolation, building containment, jerryrigging, hanging fire blankets, water blanketing, et 10 11 cetera. 12 JUDGE GEE: Mr. Dovinh, you only asked for 10 13 Do you have much more? minutes. 14 MR. DOVINH: I have three more pages, Your 15 Honor. May I? MS. SHORTALL: Is there some way you can sort 16 17 of sum up the last four pages? We'll put it verbatim 18 into the record. 19 MR. DOVINH: These pages are very important.

20 This is the core of what we think the lockout/tagout is 21 lacking. 22 MS. SHORTALL: It's up to the judge. JUDGE GEE: I'll let you do it, but if you 23 could summarize it in any way at all, that would be 24 25 beneficial. We do have other witnesses to testify. 0152 MR. DOVINH: Thank you, Your Honor. OSHA purports for Subpart F, control hazardous 1 2 energy, only covers mostly electrical hazardous energy. 3 This is bias and lopsided because it does not cover the 4 5 rest of the other energy sources that might hurt workers 6 just the same or worse. I'm going to try to summarize. For example, the term hazardous energy could not be found anywhere in 29 8 CFR 1915. It is not defined. There is a definition for hazardous or toxic substances. There is a definition for 9 10 But there is no definition for hazardous 11 energy source. 12 energy. 13 There is a term other energy which is also not defined. Does it include kinetic, potential, gravitational or other sources of energy. It is 14 15 important to realize that any one of these energy sources 16 may be harmful -- may have harmful effects on the workers 17 being exposed, and certainly that message is the only 18 determining factor between life and death for the 19 20 workers. 21 In the shipyard employment, all of the strings, coils, tightropes and chains, suspending chains and 22 cables, harnesses, straps, and stacked objects that have 23 mass, structures and bulkheads, combustible fuels in cargos, combustible insulation, all of those have stored 24 25 0153 energy which this Subpart F has not covered. 1 2 Here's my conclusion. I have a feeling that you've been looking for an answer as to what our industry has 3 been doing in the past many years. If our industry 4 didn't have some kind of procedure to do lockout/tagout, the number of deaths and fatalities would have been 5 6 7 tenfold. And let me give you what I think has been 8 helping our industry. 9 The answer to these questions may include some of the following: No. 1, the good and the bad experiences that we gained in the last 150 years of building and 10 11 repairing modern ships has been applied to engineers, 12 13 port engineers, safety persons, competent persons, chemists and safety supervisors today. 14 No. 2, the good and the bad experiences gained in the mining industry for the last 200 years. The mining industry shares common problems with the shipyards, lack 15 16 17 18 of oxygen, confined spaces, toxic gasses, explosive gasses, lockouts and tagouts. 19 No. 3, the information from private companies and 20 21 the ongoing training, both volunteer, are required by OSHA, U.S. Coast Guard, NFPA ANSI regarding lockout and 22 23 tagout and hazardous flammable and toxic as well as control of hazardous energy have been trickled down into 24 our industry, and they are being put to good use by the 25 0154 1 shipyard industry. 2 No. 4, bad and good experiences means actual accidents and deaths. The findings and lessons learned 3 are updated, analyzed and shared among our industry 4 5 daily. 6 No. 5, workers performing unsafe operations are 7 either killed or crippled or no longer able to work and 8 no longer able to carry out additional dangerous and 9 risky behavior. 10 No. 6, economics and the demand for competent 11 employees drives safety. Sometimes poor economics also drives safety to the other direction. 12 Lastly, No. 7, existing safety standards, 13 regulations and programs already implemented in place as 14 required by OSHA 29 CFR Part 1915, U.S. Coast Guard 15 regulations and FDA 306, such as the competent person 16 17 program and the marine chemist program. After more than 20 years of working in the shipyard 18 industry and over 70,000 confined spaces later, I 19 strongly believe that during the actual ship repair 20 21 period, the shipyard competent person and their confined space and hot work program along with the marine chemist 22 inspection and certification, that is what has kept our 23

industry from having a very high accident rate regarding 24 25 the issues of lockout and tagout. 0155 1 Thank you for the opportunity to speak. Thank you for your generosity, Your Honor. JUDGE GEE: Thank you, Mr. Dovinh. Your entire 2 3 statement is part of the record, part of the written 4 5 record. MR. DOVINH: Thank you, I appreciate that. JUDGE GEE: Is there anyone in the audience who has questions for Mr. Dovinh? 6 7 8 9 OSHA panel. MS. SHORTALL: Yes. We'll start with Mr. 10 11 Daddura. 12 MR. DADDURA: Good afternoon, Philip. MR. DOVINH: Good afternoon, MR. DADDURA: Briefly for the record, how do you know so much about the industry in the Pacific 13 14 15 16 Northwest? What is your job function and what is your 17 direction when shipyards call you up; what exactly do you 18 19 MR. DOVINH: I've lived here for 32 years, and I've been a chemical engineer for over 21 years and a 20 21 marine chemist for almost 20 years. What I do is before, according to the current Coast 22 23 Guard and OSHA regulation 1915, before any repair is being done, performed on fuel oil lines, fuel oil tanks, 24 or any cargo or any tank that has hazardous or toxic 25 0156 1 substances, they are required to have a marine chemist perform the initial inspection to make sure it's safe. 2 And they require that I have to physically enter these confined spaces. In a way, I'm the guinea pig. I would do the initial entry, do the testing, and based on the permissible exposure unit of the American 3 4 5 6 Conference of Industrial Hygienists, PLV, we will measure and do the instrument test and then determine whether the space is safe or not. And then I would come out alive 7 8 9 and testify on a certificate saying that this space is 10 11 safe for hot work, meaning people can go inside and do welding, cutting and burning. 12 And then I also certify safety workers, meaning people can go inside safely without become exposed to any 13 14 15 of these toxic gasses. MR. DADDURA: 16 Everyone has standards to follow. 17 What is the standards that the NCA certified marine chemists follow? 18 19 MR. DOVINH: In the 29 CFR 1915, the standard is incorporated by reference. So it calls for the use of 20 NFPA 306. NFPA 306 is the detailed instruction, it's the Bible that regulate the marine chemists. We have to 21 22 23 abide by that. We get certified by the NFPA, recertified by them 24 25 every five years, and we then we go to seminars and 0157 1 training every year. The idea is to make sure we're not going to make stupid mistakes to blow up people or kill 2 3 people in these hazardous situations. 4 MR. DADDURA: You have reporting requirements also within the NFPA, correct? MR. DOVINH: Yes, I do. Every certificate that 5 6 7 I have issued in the last 19 years, they have a copy of that. They can always go back and see it. MR. DADDURA: When, God forbid, you make a 8 9 mistake or something goes astray, what happens; what do 10 11 you have to do or what could happen? 12 MR. DOVINH: If there is a incident on a vessel that has a written certificate, whether it is my mistake 13 or not, that doesn't matter, I have to immediately report 14 15 to the National Fire Protection Association within a 24-hour period, and then I have to send them copies of 16 17 what I wrote and write them a report. And then based on that, they will take further action. 18 MR. DADDURA: What further action might be 19 20 taken? MR. DOVINH: Well, I hope 20 more years, Joe, there will be none of it. I have done it for almost two 21 22 decades and I have plenty more to go, and I'm not going 23 24 to make any mistake. 25 But in case something like this happened, we carry a 0158 1 large sum of insurance, liability insurance and all that.

And I probably would no longer be a marine chemist. 2 What I do would be similar to a captain that runs, 3 4 that pilots a crude oil tanker. If he screws up once, 5 he's done. I don't plan to do that. MR. DADDURA: What is your -- I understand 6 7 you're a marine chemist qualification board as an 8 oversight for each marine chemist. 9 MR. DOVINH: When I was being certified, I 10 remember you were on that board. You were on the marine 11 chemist certification board. MR. DADDURA: Many years ago. 12 MR. DOVINH: That's right. And in the whole 13 United States there are 100 certified marine chemists. 14 15 There are not too many people that would go to school, college, get trained and then crawl in a ship tank and take all that liability. That's the reason why there are so few marine chemists is because of the liability. 16 17 18 We are insured by Lloyds of London. 19 We used to 20 until two years go and we changed to another company. We went to the maximum liability insurance. So the NFPA and 21 the marine chemist qualification board, they make sure we 22 23 don't screw up. MR. DADDURA: So you have oversight by an 24 25 independent third party, an independent board, something 0159 1 like a doctor has? MR. DOVINH: Many people think it's even more 2 critical, because on that board there are representatives 3 from the petroleum industry, from OSHA, from the U.S. Coast Guard, from the Navy, from the NFPA, from the 4 5 marine chemists, from people in the shipyard, and then 6 7 from the civilians and then from the general industry. There are 12 members on that board. And they have, 8 9 once we finish all of our training, we have to pass a 10 written test, and the final examination would be an oral examination, and all 12 members have to unanimously 11 12 certify us. 13 MR. DADDURA: Getting back to your work with the shipyards, when they call you, you're called the 14 15 utmost industry expert. MR. DOVINH: That is what I'd like them to 16 17 believe. MR. DADDURA: That is correct, though, right, 18 the buck stops with you. No one else is going to be 19 20 overriding. MR. DOVINH: We think we know more than anyone 21 22 about confined space entry. 23 MR. DADDURA: You've been in all the shipyards up here? 24 MR. DOVINH: Yes, I have. 25 0160 1 MR. DADDURA: Have you noticed certain things that aren't identical in terms of lockout/tagout? 2 MR. DOVINH: Very tremendously, sir. MR. DADDURA: So there's different ways of 3 4 doing different things in your dealings? 5 MR. DOVINH: That's correct. MR. DADDURA: Do you think it's a need for one 6 8 standard for everyone to follow to make it uniform all 9 across the country or just up here? MR. DOVINH: It doesn't have to be necessarily 10 11 a standard or requirement. It could be an industry consensus; it could be performance based; it could be 12 13 volunteer based. Up to this point, the marine ship repair industry does not have its own independence. There are some 14 15 sections, actually about three sections that I have in my 16 17 report, currently in the OSHA regulation. That's what we follow plus the requirements of NFPA 306. 18 19 So I mention that during the ship repair, there are two most important person; that's the marine chemist and 20 21 the competent person. These are the two persons that enter these tanks initially, and then repeatedly day in 22 23 and day out as often as necessary per your regulation to make sure that the pipeline is not leaking, to make sure that ammonia is not leaking, to make sure the oxygen is 24 25 0161 1 sufficient. And all of that has to do with lockout/tagout. 2 That's the reason why I mention the lockout/tagout is 3 very close and dear to my heart. 4 MR. DADDURA: 29 CFR 1915.15, main conditions. 5

Are you familiar with that section? 6 MR. DOVINH: I don't have the book here, but, 7 8 yes, I am. 9 MR. DADDURA: There is a requirement either to lock out to make sure no other materials come into the 10 11 space. 12 MR. DOVINH: Yes. It specifically states -may I get my book, it's right here? 13 MR. DADDURA: Sure. MR. DOVINH: I remember that it specifically 14 15 states that you have to use a positive means to lockout 16 17 or to blank. 18 Positive means in our industry it could be a wooden plug, it could be a pencil wedged into a hole, it could 19 be a wet blanket stuffed up into a pipe, any positive 20 means to prevent or to slow down or to prevent the spread 21 22 of fire or the spread of hazardous material into the 23 working area. It does not have to be a solid blank or lock or 24 25 chain or a cap. And NFPA 306 also requires a positive 0162 1 means has to be taken. And that's what's been happening throughout our 2 3 industry. It varies a lot, but they're all taking some 4 positive means. 5 MR. DADDURA: You've been to a lot of shipyards; you're the first one into the tanks. 6 What 7 lighting is available to you when you go into a tank? MR. DOVINH: What kind of lighting? 8 9 MR. DADDURA: Yes. MR. DOVINH: I carry explosion-proof Pelican 10 The U.S. Coast Guard, one thing we learned 11 flashlights. from them is to always carry two, one is a backup. MR. DADDURA: So the shipyards don't provide 12 13 14 you lighting into a space? MR. DOVINH: They do not. MR. DADDURA: Is there a reason why they don't? 15 16 17 MR. DOVINH: Many times the atmospheric conditions inside that tank may be flammable. And if 18 19 it's flammable, they're not going to use any type of drop lights or electrical tools in that space until it has 20 21 been inspected and certified by me that it's not 22 flammable. 23 I would be the one that would authorize the use of conventional electrical lighting or non-explosion proof 24 25 or non-intrusive tools. 0163 MR. DADDURA: Housekeeping, throwing out lines and things like that. When you get on board a ship, do 1 2 3 you see housekeeping problems or issues? MR. DOVINH: A tremendous amount of housekeeping problems. The ship repair industry, we like 4 5 to have you believe that everybody that works on that ship have extra pairs of eyes on our toes or on our 6 7 boots. In a way, it's true. 8 If they work around these things, they have ways to 9 walk the vessel without slip, trip and fall because 10 they're used to it. That's what they do. Somebody who is not familiar with that environment, I guarantee you 11 12 within minutes they will be tripping or slipping over 13 cables and plates and decks and things like that, because 14 15 the ship repair industry is always temporary, always rushed, always in a hurry, and it's always messy. It's 16 17 not clean like Boeing or Weyerhaeuser. MR. DADDURA: Have you ever had the opportunity 18 19 to board a ship at sea? MR. DOVINH: I have. MR. DADDURA: What kind of conditions does that 20 21 22 involve? 23 MR. DOVINH: It depends on the kind of ships. If it's a Chinese log ship or a Greek tanker, where they 24 like to give me alcohol and tobacco, or one of these 25 0164 1 Conoco Phillips crude oil tankers. It depends. Some of them follow housekeeping lockout/tagout to 2 Some of them don't. 3 the letter. I'll give you one example. Just a few years ago I 4 was working on these tankers in Port Angeles. This is 5 crude oil tankers, the equivalent of the Exxon Valdez that ran aground. In the control room they have panels that control valves. These tanks, 18 tanks, and between 6 8 each tank they have a slouch valve, slouch gate valve. q

By flipping a button on the control panel, they can open 10 that gate valve. And that's what they did for years. 11 12 They flipped the button, the gates open, and then they 13 took about a dozen of these caps that you use on the Nyquil, the cough medication, they used that to cap the switch. And that was their lockout/tagout for at least 14 15 12 years. 16 17 MR. DADDURA: So you couldn't push down on 18 them. 19 MR. DOVINH: That's right. So sometimes a very simple lockout/tagout procedure, 20 if it isn't visual, if it's in isolation, so they know 21 which valve is secure and which is not. 22 After we did this we found out that it was not 23 really safe because sometimes I would crawl all the way 24 25 to the bow. On my way back halfway, some of the slouch 0165 1 valve, the gate valve came down halfway. The hydraulic 2 system leaked. So we required them to bring in sections of 4 by 4 and block the valve up for us before we cross 3 through. And that's what they do now. 4 5 MR. DADDURA: Let's move on to I guess sanitation. Part of your function as a marine chemist is 6 you inspect CHT tanks, correct? 7 MR. DOVINH: I do. The shipyard competent 8 9 person often is qualified, according to your regulation, they can inspect CHT tanks, sewage tanks, CHT stands for 10 chemical holding tanks. But they don't. Ninety-nine percent of the time they say, let's call the chemist. 11 Ninety-nine 12 we get the luxury to crawl all of those too. 13 The sewage tank has biological hazards, germs, 14 15 millions of e-coli, millions of other coliform materials. But what we do is the potential of sewage, generally 16 17 methane gas, that's an explosive gas. 18 Also sewage tank has a potential of generating hydrogen sulfide gas. That is a toxic gas and it's also 19 an explosive gas. So when we test a sewage tank, those are the gasses we look for. 20 21 MR. DADDURA: Do you require the ship to lock 22 out all the toilets before you go into the tank? 23 MR. DOVINH: Definitely. MR. DADDURA: How is that done? 24 25 0166 1 MR. DOVINH: We have them pull the blanks, the flanges and put in pancake. Sometimes if that's 2 3 possible, we --4 MR. DADDURA: Pancake is what, just for the 5 record. MR. DOVINH: Pancake is a flat, metal plate that they would insert between the open flanges to 6 7 8 isolate potential liquid and solid flowing inside the 9 tank. 10 There are times that that is not possible because there is no flanges. Then we do not allow workers to go inside a sewage tank. We require them to wear either 11 12 13 full-face or half-face respirators, it depends on what we find initially by testing from the manual opening. 14 We 15 have them clean and vacuum the product from the manhole 16 opening. 17 And then from that, we can do additional inspection and look at the suction and the fuel lines. If they're 18 not leaking and if the tank is clean sufficiently, we 19 have workers wear proper PPE to go in. The first thing 20 21 they would do is to put a plug inside each one of these lines, and OSHA does allow you to do that. 22 MR. DADDURA: Let's move on to tank cleaning. Say you have a fistful of tanks you clean. The access to 23 24 25 the tank from the workers climbing in and out, what kind 0167 of conditions are they in? MR. DOVINH: Mr. Daddura is talking about heavy 1 2 bunker fuel, No. 6 fuel. This is yucky, dirty fuel, and they have a lot of BTU value, combustion value. Normally many of these tanks have only one manhole opening, so we would require them to do ventilation first. 3 4 5 6 7 MR. DADDURA: I just want to know the condition by the workers climbing in and out of the tank. Do you 8 9 get any product on the deck walking surface? MR. DOVINH: Yes, all the time, sometimes up to 10 11 their knees. MR. DADDURA: Pulling hoses out and things of 12 13 that nature?

MR. DOVINH: If there is a lot of product left, 14 we have them try to evacuate the remaining product 15 16 remotely from the deck of the vessel. And once it's down 17 to an inch or two, after proper ventilation and respirators and PPE, we allow them to go in under a 18 19 certification called Enter With Restrictions. 20 MR. DADDURA: I'm just basically getting into the conditions of the deck from the workers climbing in 21 and out of the tank, moving the hoses around, we have product on the tank top. 22 23 MR. DOVINH: Yes, we do. MR. DADDURA: Is it slippery? 24 25 0168 MR. DOVINH: Yes. MR. DADDURA: Is 1 2 Is it cleaned up immediately? MR. DOVINH: No. 3 MR. DADDURA: When is it usually cleaned? 4 MR. DOVINH: They use diesel to clean. MR. DADDURA: When is it usually cleaned up, 5 6 7 after the job has been completed, the tank has been cleaned, you send down the hose to clean up the areas 8 9 where they worked. MR. DOVINH: What they try to do is first 10 remove the remaining liquid, and then they try to go down 11 in and muck the tank, meaning they scrape the remaining 12 13 solid or waxy material first. And then they would go in and use container that has 14 either diesel or kerosene and then they spray the 15 bulkhead and spray the bottom and allow at least three or 16 17 four hours for the kerosene to suck in the black oil. And then they come back in and they pressure wash it 18 with a high pressure water. Sometimes they heat up the 19 water to about 120, 140 degrees to assist with the 20 21 removal. 22 And then all of the product is evacuated through a 23 vacuum hose into a vacuum truck. MR. DADDURA: And people are down there walking 24 25 around, right? 0169 MR. DOVINH: Constantly, they have to. MR. DADDURA: And the conditions are very 1 2 3 slippery and wet. 4 MR. DOVINH: Sometimes, not always, sometimes. The tank cleaners, these are special species. They know 5 how to handle all of these, and there are boots that 6 7 allow them to walk on the petroleum product without being 8 slippery. Technology is there, and that's what they use. 9 There are petroleum product resistant boots. Same thing 10 with gloves and rain gear. 11 MR. DADDURA: You really don't supervise anyone, do you? As I read your certificate, you really don't say, Hey, Joe, go in there and start work. 12 13 MR. DOVINH: I do, I do. OSHA regulation 1915 14 15 allow me to prescribe respiratory protection for workers, allow me to determine when it's safe for hot work and 16 when it's not, allow me to certify people to enter in toxic and hazardous chemical tank, we'll call them. 17 18 19 OSHA also allow me to give more verbal and written instruction to the ship repair industry, and they must 20 follow both verbal and written. There is no other 21 regulation like that in the industry. 22 MR. DADDURA: That's correct or in OSHA. MR. DOVINH: Yes. And my friends down there 23 24 25 can testify to you, that I'm very humble most of the 0170 1 time. 2 MR. DADDURA: I can see that by your testimony today. 3 4 That's all the questions I have. 5 MS. SHORTALL: Ms. Brinkerhoff has questions. MS. BRINKERHOFF: You mentioned a regulation or 6 7 proposed standard might conflict with another federal regulation, and I'm wondering which that one is. 8 MR. DOVINH: You ask a very tough question, and I'm prepared to answer that. 9 10 That has to do with the housekeeping part. 11 In the back of that part, if you read carefully, OSHA says we have to take care of vermin, pests. And the definition 12 13 of vermin includes birds. And guess what? Our industry 14 process fish and salmon all over Alaska. Eagle is a protected species. Eagle is a scavenger. Eagles like to hang around and mess up everybody's car. If we were to 15 16 17

follow your regulation, we would have to control those 18 To control them, we have to shot them or kill 19 birds. 20 them. 21 No. 2, there are seals and lions that would climb around on the dock, the same dock that these people are 22 23 trying to do ship repair. They are messy and stinky and noisy. To get rid of those pests, we would have to shot 24 25 them according to the current federal regulation. And 0171 1 environmental law, we cannot even scare them by noise, 2 let alone trying to get rid of them. That's what I mean. MS. BRINKERHOFF: I actually found that part of 3 your testimony really interesting. MR. DOVINH: Thank you. 4 5 MS. BRINKERHOFF: Because you talk about some 6 7 vermin being friends of workers, and I'm wondering which 8 vermin those are. 9 MR. DOVINH: You know, in the shipyard once in 10 a while you see a cat and the seagulls and different kinds of birds, even squirrels and even rats. And some 11 of these workers, these welders and pipefitters, they 12 13 look like macho, but they have a soft heart. They like to feed these animals. That's what relieves the stress 14 during the lunch and the break hours. I don't think we 15 should get rid of those animals. 16 MS. BRINKERHOFF: I have a question about your 17 Pelican flashlight. 18 Yes. 19 MR. DOVINH: MS. BRINKERHOFF: How much did that cost? 20 21 MR. DOVINH: It used to be \$26.99 and now it's 22 about \$35 each. MS. BRINKERHOFF: 23 Is that explosive --MR. DOVINH: It is. 24 25 MS. BRINKERHOFF: -- explosion proof? 0172 1 MR. DOVINH: Yes. That's the same kind the U.S. Coast Guard is using. 2 MS. BRINKERHOFF: How often do you need to tell 3 4 your clients they need to be using explosion-proof 5 flashlights? 6 MR. DOVINH: According to your Regulation 1915, 7 anytime the atmospheric condition rates above 10 percent 8 of the lower exposure limit or anytime the residues, the 9 coding or the product might regenerate, might regenerate over 10 percent, then they have to use explosion-proof 10 11 equipment. MS. BRINKEROFF: How often does that happen? MR. DOVINH: I don't let that happen. I mak 12 13 I make sure they use explosion-proof equipment and ventilate it 14 until it goes back to zero. OSHA allow up to 10 percent. 15 16 And we follow zero, because we like zero percent error 17 rate much better than 10. Once you ventilate down to zero and maintain a 18 19 continuous ventilation, there is no chance for anything to regenerate. If there is anything that regenerate, it 20 will get evacuated. That way the workers continue to use 21 conventional electrical tool. It doesn't have to be 22 intrinsically safe in that space. MS. BRINKERHOFF: Then as I was reading your 23 24 written comments, I'm not sure if I got this right or 25 0173 1 not, but were you saying that our proposed standard might also conflict with, especially the way hazardous 2 materials are handled --MR. DOVINH: Yes. 3 4 5 MS. BRINKERHOFF: -- might conflict with -6 MR. DOVINH: The core thing -- I've spent hours 7 and hours and hours reading your standards, because I have to know those standards. These people depend on me. 8 9 John can testify to that. These people call me day in and day out and ask me. 10 11 I can tell you I know your standard better than 90 percent of all of your inspectors here in Seattle. I can 12 tell you that. And Mr. Joe Fleck can tell you that, and 13 Mr. Woykowsi can tell you that. Because we have to know 14 15 them very well. We are the one the industry relies on. So the core, the crux of your hazardous energy has 16 to do with the term hazardous energy. But you don't define it. If you don't define it, you're leaving it to our industry to fumble in the dark to figure out what it 17 18 19 20 is. 21 I spent over 150 hours preparing 10 pages. It's

condensed, and I put a lot of thought into it. I know it 22 sounds very aggressive, because I need to get my point across to you. I'm not rude, but I need to get the 23 24 information across on behalf of our industry. 25 0174 I do safety training in Alaska, Texas, California, Washington and also Oregon, Maryland also and Baltimore. 1 2 3 So I always have to know the local regulations of those 4 states too. MS. BRINKERHOFF: I guess what I was asking was 5 is there any part of the proposed standard that conflicts 6 7 with any of those local regulations? MR. DOVINH: Well, it's not conflict, it's 8 9 incomplete. Right now it's top heavy, it's only biased towards the energy, the electrical energy. And I gave 10 you the statistics of 70 percent, 25 percent and five and 11 six percent. 12 You are basing on five and six of those percent, and 13 14 even half of that has to do with guarding equipment, 15 guarding moving parts, not pure electrical energy. So the whole standard you are putting the industry 16 17 through just for one part, and it's not even well defined; thus, it's flawed. 18 MS. BRINKERHOFF: 19 Thank you. I don't have 20 anymore questions. MS. SHORTALL: I have some questions. First of 21 all, Mr. Dovinh, thank you so much for coming to testify 22 at our hearing. 23 Do you know if in shipyards there are substances 24 25 other than corrosives used in shipyards that could cause 0175 1 immediate, acute and serious damage if an employee were splashed with them? 2 3 MR. DOVINH: Yes. 4 MS. SHORTALL: Could you tell me some of the 5 types of substances? 6 MR. DOVINH: Sure. There are tank washes that 7 carry ureae. Ureae is corrosive. 8 They also carry ammonia or ammonia nitrate. A lot 9 of these are components that they use to make fertilizer. And maybe halfway through after a year or two years the 10 owners decide to change, they want to change to carry diesel, they may have to send tank cleaners inside these 11 12 tanks to pressure wash and clean all of these materials 13 and remove them out of these tanks. It's called a change 14 15 of products. And during the washing, we take all kinds of precautions. We don't allow them to wear just the 16 17 goggles; we're talking about full-face SCBA respirators, 18 And even 19 fully encapsulated with suits and all of that. with that, there are times that just the rubbing of the 20 cuffs will blister and form bubbles around the wrists and 21 the necks and the ankles. There are potential. 22 23 Those are the times when we would require the tank cleaner to set up a continuous flow of eye wash station 24 25 on deck along with sodium carbonate eye wash bottles. 0176 1 MS. SHORTALL: The ammonia that you were talking about there, is that --2 3 MR. DOVINH: These are ammonia-based 4 fertilizers, corrosives. 5 MS. SHORTALL: I want to ask if there were substance other than corrosives. 6 7 MR. DOVINH: Acids? MS. SHORTALL: Another person suggested that 8 9 they viewed acids as a form of corrosives. I'm trying to 10 get at other things that are not currently covered by the 11 regulations -MR. DOVINH: Yes. 12 MS. SHORTALL: -- that if an employee were 13 splashed with them could result in immediate, acute or 14 15 serious damage. MR. DOVINH: Sure, I'll give you two. 16 Sewage tank is a hydrogen sulfide gas. Hydrogen sulfide gas is 17 explosive, toxic and it's acidic gas. If a high concentration of that is around, it would irritate your 18 19 eyes tremendously. And what happens is if you get 20 exposed to that kind of gas, the irritation of your eyes 21 causes the person to try to run and get away. 22 23 And many times it's not the gas that kills them, it's the physical hazard by bumping his head against the 24 25 bulkhead and bleeding to death.

0177 Another example is ammonia from refrigeration 1 2 system. That's corrosive, toxic and explosive. MS. SHORTALL: I've got very good examples now of the corrosives. I want you to tell me are there any 3 4 5 substances that are not corrosives that cause -MR. DOVINH: I'll give you the other one. 6 fishing industry has fish oil tanks. Fish oil tanks has this omega 3 oil from salmon roe and all that, good 7 8 9 stuff. It has about another 15,000 different chemicals, God knows what. We know that they burn our eyes every 10 time we get into it without ventilation and without 11 full-face respiratory protection. We don't know what it 12 13 is. MS. SHORTALL: And if a person didn't have all of that on and they were splashed with that, they could 14 15 experience immediate, acute and serious damage to their 16 17 eyes and --18 MR. DOVINH: Yes. MS. SHORTALL: -- their skin? 19 20 MR. DOVINH: Yes. 21 MS. SHORTALL: Do you --MR. DOVINH: What we do is we take measures, 22 23 because we are the ones who authorize them to go into those tanks. We take the responsibility. We have 24 25 cleaned the tank remotely from the manhole opening, okay, 0178 1 so by the time they finish, 80 percent of the produce would have been removed. 2 There is another way to clean these tanks. 3 They 4 have what they call butterworth tank cleaning systems. 5 These are mechanical nozzles that you put inside these tanks through the manhole opening, and they can spin at 6 7 high velocity, and you can space them in different areas 8 within the tank. 9 The mechanical nozzle would clean and get everything down to 99 -- remove 99 percent, and then the remaining 10 11 one percent the tank cleaner would go in after we authorize entry to clean up the remaining prior to the 12 13 rest of the workers going in for prepping or hot work or whatever. 14 Even though it's dangerous and toxic, there are 15 existing procedures that we can do safely. 16 The marine chemist program has been in place since 1922. We have 86 17 years of experience in the industry. 18 MS. SHORTALL: So in places where those types 19 of non-corrosive substances are present, are shipyards or 20 21 vessels today currently providing eye wash or quick drench facilities in case someone were to get splashed? 22 23 MR. DOVINH: I have seen some on vessels, and I 24 have seen various locations within the shipyard. 25 depends on how big the shipyard is. Some little 0179 1 shipyards may only have one in the front office, just for the owner, huh. 2 3 The bigger shipyards, like Todd Shipyard, they have them right at the entrance to the dry dock or the pier. 4 5 So there are stations. 6 Now, if I was running a job, doing inspection, and 7 if I knew that these are materials that could cause eye 8 irritation or burning, I would require them to have it. 9 MS. SHORTALL: Is a marine chemist present 10 every time a tank is cleaned? MR. DOVINH: Ballice tanks, water tanks, they don't have to have me. But they still have to have a 11 12 13 competent person who acts similarly to the capacity of a marine chemist. He has less training, less authority and less in term of capability to test for toxics, and less 14 15 experience when compared to a marine chemist, but he's 16 17 the king in his yard when it comes to safety. In fact, I can tell you there is only 100 marine chemists in the industry. It's not the marine chemists 18 19 that keep this industry safe. I must and all 99 of my 20 other marine chemist associates agree that it's a 21 competent person in these shipyards that keep them safe 22 23 from confined space entry to lockout/tagout de-energize it's the shipyard competent person program. 24 MS. SHORTALL: Changing the subject a little 25 0180 1 bit, I want to go back to sanitation. On fishing vessels as well as shipyards when you've been doing inspections, 2

3 do you see people drinking and smoking and eating

wherever they want or have you seen employers say you may 5 do that only in this area? 6 MR. DOVINH: As far as I know, the big 7 shipyards, medium shipyards and the small shipyards, they 8 all have some kind of policy in place. Whether or not 9 the employees follow it is a different thing. Now, if you were to ask me what about the fisherman 10 over at Fisherman Terminal, I don't think they have any 11 12 policy. MS. SHORTALL: So let's say the ones that do have those designated areas, what are they doing to keep 13 14 vermin out of those areas and the feces and the waste 15 that those vermin produce so --16 MR. DOVINH: They can't --17 MS. SHORTALL: Let me just finish. 18 So employees actually are eating and drinking without getting exposed to those types of waste contaminants? 19 20 MR. DOVINH: From what I've seen, most of the 21 22 areas where the workers and employees sit and eat, I do not see any animal waste. I do see garbage and coffee 23 cups and potato chip bags and things like that. I see 24 25 dirt and oil, but I don't see any rats running around. 0181 1 MS. SHORTALL: What are they doing to keep -MR. DOVINH: Most places have some kind of 2 3 laborer that sweep up the area periodically. But when 4 they can't find a place to sit, they'll sweep it up. 5 MS. SHORTALL: What are they doing to keep the vermin out of the area other than sweeping up? I know 6 7 when you go on a beach, you sit there, you start taking 8 out your sandwich, every gull in the area wants --9 MR. DOVINH: Sure. MS. SHORTALL: -- something. 10 What are they 11 doing to try to keep that away from those types of areas 12 so that employees won't be exposed to those contaminants? 13 MR. DOVINH: It's a simple question for you, but it's a difficult answer for me because that's out of 14 15 my jurisdiction. I have nothing to do with vermin in shipyards. 16 17 MS. SHORTALL: I'm not saying -- I'm just asking you because you've been around all of these places 18 19 what your observation is. MR. DOVINH: All of these years, I haven't seen 20 anybody using any kind of bait to kill them except for 21 the City of Seattle. I don't see any shipyard putting 22 23 bait or poison or anything. The only place is the City of Seattle, and they're 24 doing that because a lot of rats underneath the crawl 25 0182 1 space at the north police precinct in north Seattle. 2 Every month we come over and we do crawl space entry before these trappers and these cures went in and get rid 3 4 of the rats. 5 MS. SHORTALL: This is sort of just a frustration question for me, and maybe you can help me 6 7 We've had a number of employers come in here with it. and talk about some of the regulations that they have 8 difficulty with, and some of the regulations they've 9 10 having difficulty with have been OSHA regulations for 30 11 years. 12 MR. DOVINH: I agree. MS. SHORTALL: I'm sitting here going, well, 13 what have they been doing for 30 years. Can you --14 15 MR. DOVINH: Yes. MS. SHORTALL: -- help me understand. Are they just not been aware of --16 17 MR. DOVINH: Very simple. MS. SHORTALL: -- the regulation; do they just 18 19 don't think even though they say shipyard employment that 20 21 they don't apply to them? MR. DOVINH: Very simple answer. 22 MS. SHORTALL: What is that? 23 MR. DOVINH: Even the marine chemist, the 24 25 industrial hygienist, your own OSHA inspector and even 0183 1 people on your panel, I guarantee you, every one of us have difficulty with certain OSHA regulations. I don't 2 blame our industry. The general industry, the 3 construction industry, the petroleum industry, every single industry, they all have parts or segments of the 4 5 industry that have problems with the current regulation. 6 The mining industry has been around for 200 years.

They blow up mines and kill people hundreds of times, 8 9 still happening, still happening. 10 MS. SHORTALL: I'll give you an example. On the books currently existing regulation says shipyard 11 employers must eliminate slippery conditions as they 12 13 occur. And it's like everyone has come in and said, you can't require that, and I guess my first reaction is, 14 well, it's been there for 30 years. 15 16 Can you tell me from your own observation what 17 shipyard employers have been doing. Have they been eliminating slippery conditions as they occur or have 18 they not been or do they not understand the rule? 19 MR. DOVINH: They do understand. The rule that 20 you propose now, expanding on that a little further, and 21 it has to be expanded a little bit more. And because the 22 nature of the ship repair and the commercial fishing 23 industry, water, ice, slip, trip, I mean, that's part of life. These are risks that our industry know that we 24 25 0184 1 cannot get rid of. These are the same risks that you think that we can get rid of. That's the difference. 2 3 These risks will remain with us forever, and we cannot get rid of them. 4 5 MS. SHORTALL: I believe the risk remains, that there will always be slippery conditions that occur. 6 Are 7 you saying that because they have always occurred they 8 are not being cleaned up as they occur or are you 9 saying --10 MR. DOVINH: They try to clean them up. For example, on a deck of a steam vessel, they need to weld 11 on a deck and it's raining here in Seattle. They try to 12 put up a pump. They try to do cement to build a little 13 containment. They do that right now already, right now 14 15 already they're doing that. 16 But they cannot stop welding in the rain on the wet 17 They can only minimize and reduce. There are surface. tanks that has water and the competent person has been 18 19 trained, they know by experience. They're not going to send in a welder to weld inside because saltwater 20 transfer occur. So they will have that pumped out first. MS. SHORTALL: Going on to lockout/tagout, 21 22 during the regular course of replacing equipment, are shipyards and vessels now able to obtain replacement 23 24 25 equipment that is lockable, No. 1; and No. 2, how long a 0185 period of time would it take to have almost all the 1 equipment be lockable just simply through the normal 2 3 course of replacement? MR. DOVINH: I think there will always be some 4 equipment that cannot be locked. I'll give you an example. If you have these vent lines and fuel lines 5 6 7 that people need to be welding on because it has a pinhole leak, according to your regulations, they would 8 9 have to be blanked. That's what you say right now, you've got to blank it before you do the work. These 10 lines, the flanges that connect the section of the pipe 11 together are inside of a fuel oil tank. How can you 12 13 blank it? MS. SHORTALL: That's not my question. My 14 15 question was this: As shipyard employers and vessels are replacing equipment, have they been able to obtain 16 17 equipment that is lockable? MR. DOVINH: I think some. 18 19 MS. SHORTALL: If we were to give a significant period of time, such as 10 years, for employers to as 20 they change out equipment get lockable equipment with the 21 22 few exceptions that you're mentioning there, would we be 23 able to see these employers move to almost full lockable 24 equipment? 25 MR. DOVINH: You know, I've been around only 0186 1 for 20-some years, I'm not that old. I'm still a kid, especially in Joe's eyes. I don't think that even 10 years or 20 years in the industry might be able to change 3 out everything. 4 5 I think the best option is that there are vessels that have the old equipment. The next best thing for 6 them is to scrap that vessel and buy another one that is 7 15 years younger that they might be able to upgrade 8 9 equipment in a more effective manner. Some of these vessels, it cost more money to upgrade and change 10 equipment out. It might take forever. 11

MS. SHORTALL: I'm not talking about going in 12 and upgrading today; I'm talking only about when you go 13 14 through the normal course of replacing pieces of 15 equipment, not forcing anyone to replace equipment, but now this piece of equipment is worn out and it no longer 16 17 works and we've got to get something new. MR. DOVINH: Yes. 18 19 MS. SHORTALL: Do you think by and large 20 shipyard employers and vessels will be able as they move 21 down the road to replace that equipment with lockable equipment? 22 23 MR. DOVINH: I answered that already. believe some of them they can, but not all of them. 24 And 25 some may take a shorter amount of time; some maybe they 0187 1 can never do it. I just don't know. I don't think it 2 can be done. MS. SHORTALL: I appreciate you trying to hazard a guess for me. Oops, I used the word hazard. 3 4 5 Mr. Dovinh, thank you ever so much for coming here and giving your testimony and for the time that you spent 6 7 in developing it, and we look forward to your comments 8 during the post-hearing comment period too. Thank you 9 again. MR. DOVINH: Thank you very much. JUDGE GEE: Thank you, Mr. Dovinh. 10 11 Let's take a five-minute break. 12 13 (Recess from 3:04 p.m. to 3:15 p.m.) MS. SHORTALL: Your Honor, I would like to ask 14 if anybody other than Mr. Tinker has written testimony 15 they would like to give to me to put into the record. 16 MR. DIXON: I have an exhibit. 17 MS. SHORTALL: Your Honor, I would like to enter into the record the hard copy of Mr. Tinker's Power Point presentation as Exhibit 0183, and the Grass Grow Back Starter Kit with Grinder Cost Sheet as Exhibit 0184. 18 19 20 21 JUDGE GEE: Thank you. So ordered. 22 23 Our next panel is a combination of the panel that was previously identified as Panel 4 and 5. The members 24 25 of this panel are Frank Townsend, Dick Webster, Robert 0188 Tinker and Doug Dixon. We will being taking testimony from Mr. Townsend, Mr. Webster and Mr. Tinker. It's my 1 2 understanding that Mr. Dixon testified in Washington DC. 3 So he will be available today for questioning. 4 Mr. Townsend, would you like to begin, please, and please state your full name and affiliation. 5 6 7 MR. TOWNSEND: My name is Frank Townsend. I'm 8 the owner and operator of Petersburg Shipwrights, Incorporated in Petersburg, Alaska. I have a hard act to follow there. I took the 9 10 11 shipyard competence from Phil. I'm a very small company, and that's why I came today to testify was that a lot of 12 13 the regulations are for larger shipyards. People may think a shipyard is a shipyard, but I have five employees 14 working in the field, and I feel that some of the regulations are just expensive. 15 16 17 I was telling one of the fellows I got cited for not putting signs on my mezzanines last year. The shipyard 18 is 55 years old, and I didn't have the weight regulations 19 20 on them. 21 There are regulations in here that are probably 30 years old that I have no idea how to read them, you know, 22 23 how to interpret them. So I hired Amy Duz to help me, and she gives me a phone call every now and then and 24 says, it looks like chromium is going to be your next 25 0189 1 battle. So last year I rebuilt my mezzanines instead of 2 upgrading my staging. So I think maybe there should be a thought about how much it costs the small shipyard to 3 4 5 comply or not do the business, which is what we decided to do with the chromium. We no longer weld stainless. 6 7 It's kind of a sad way to go, but that's what happens. I believe the AED question, somehow if you're going to require them, there should be a distance or the time to get to one. I have a state ferry system on one side 8 9 10 of me within a block, and I have the Coast Guard based on 11 the other side within a block. 12 13 I just had an incident at the shop where a young man basically dropped a grinder, and it ran up his arm. It 14 was totally guarded. It came up and cut him on the neck. 15

He was bleeding pretty good. He got himself out of the 16 17 hole. 18 But by the time the people got there, it was less than five minutes, there was a defibrillator and a cage 19 basket already there. The local EMT's had arrived one at 20 a time with each one of their components, and they didn't want our components. We had a backboard all ready to go, 21 22 but like other fellows have said, they like to use their 23 24 own equipment. 25 I'm probably rambling in all directions, but I was 0190 1 trying to get what would affect me. I've got some great But I do believe that regulations should be cost 2 ideas. effective, however, however that works. I know it 3 doesn't work. People like to save lives. But when we're 4 5 clumped in with the 10 to 50 employees, it makes it really unreasonable for us to comply. 6 7 Thanks. JUDGE GEE: Mr. Webster? 8 9 MR. WEBSTER: Good afternoon, my name is Richard Webster. I'm with Marine Industries Northwest. 10 11 We are a small shipyard operated in Tacoma, about 30 miles south of here. 12 13 The shipyard has been in existence since 1976. I've been with them since 1979. My original venue is 14 15 treasurer, but I've been with safety and environmental compliance as well. 16 17 We have a dry dock at our facility. We have a way in which we can haul vessels out, and we've also got 18 about 400 feet of dock space located on about three to 19 four acres. It's hard to tell, but three to four acres. 20 We're averaging five union workers, six trade 21 unions, probably 40 to 125 depending on the season and 22 23 the amount of job activity. Customers are primarily 24 commercial tug and barge operators, intercoastal transport companies, the small ones, we do several of 25 0191 1 them that go between Seattle and southeast Alaska and up into the Anchorage area. We do some work for the Navy, 2 fighting barges. We don't get the big equipment in, but 3 we do a lot of the barge and some of their base 4 equipment. We do a fair amount of work for the Army. 5 They've got a landing craft based down in Tacoma. 6 7 they've got their equipment plus their support equipment, so we do a fair amount of work with them. 8 Haven't done much work with the State of Washington 9 because our facility isn't big enough, and the vessels 10 11 have a bigger compartment than what we can offer. We've got support shops for our tools and supplies 12 and basically everything that is bought for jobs that come into the yard. We don't have a big inventory space. 13 14 15 But the job site is the job, which takes care of the land side. And based on these new regulations, we've got some 16 17 confusion when you're talking about the job site and the job, and some of these activities is a very fine line 18 between which is the job site and the job when you repair 19 because you need to start taking things apart, you're 20 putting things back together at the same time as you're 21 taking things apart in the next phase. And it becomes a 22 23 very complicated environment very soon. So even though your job activity could be over in 24 25 that corner, you could be staging, you've got equipment 0192 1 coming in and out. We've got six different crafts involved, and you might have boilermakers in there for an 2 hour or two and then they've got to pull it back, you put 3 4 a pipefitter or a machinist come in and may do some work, 5 and then they go back and pursue their activity. So there is a lot of working coming and going. 6 7 It makes it very difficult when you're talking about pulling back leads and extension cords. We try to keep 8 them out of their way. But to pull them back when they're not working, you get into a definition of if you 9 10 need it 15 minutes from now, then you pull them out and 11 then put them back in 15 minutes. 12 13 Color coding is one thing I wanted to talk about. We work on an awful lot of barges, 400 feet long, 99 feet 14 wide, go into the bottom of those to renew the structure, 15 because they're either wasted away or they've got a new 16 17 type of deck load and they need extra reinforcing for that load. You go in there and you are going to find beams down there anywhere from 12 to 18 inches high, 18 19

perhaps as high as 24 inches. Are we suppose to color all of those yellow? Because yellow is the color for 20 21 22 hazards, we are supposed to be identifying blocking 23 hazards. If it was in our facility and we had that, we would 24 25 have to painted that yellow, so do we have to paint all 0193 1 of those yellow too. You take the working planks off the 2 engine compartment and you're back down into the members of the vessels. Do we have to start color coding all of 3 this yellow, red, as hazardous? It's just part of the 4 5 work environment. 6 When you remove the manhole you have a frame around 7 it, it's a tripping hazard. We've already got a cone 8 around it. Do we have to paint it yellow? These all 9 need to be color coded, as I understand. What else did I have to say here. 10 Oh, this eye wash drenching situation. It's my 11 12 understanding that the language has been changed from 13 caustic to hazardous material. Spray cans are a, quote, hazardous materials. Do we need an eye wash station next 14 15 to wherever there was a can of spray paint? The paint that we're applying to the vessels is hazardous material. 16 From an environmental aspect, that's all hazardous material. Where we store all of this hazardous material, 17 18 do we need an eye wash station there? 19 I can appreciate for the caustic soda, but just for 20 something that may have caused a problem and happens to 21 be hazardous, it just seems to be totally overkill. 22 There were a lot of ambiguous statements in this 23 24 coding that I wanted to point out. But there was a 25 comment I want to make real quick, because it just 0194 crossed my mind, and that's on this flashlight, what you 1 2 saw this morning when John had a light on his hard hat. It would be much more effective if you're in a confined 3 space or you're down in the bottom of a barge, there's 4 5 probably 99 percent chance that you're going to have to climb a ladder or some other way that got you in there. 6 If you have something in your hand and then you have two 7 hands on the ladder when you're trying to get out, I 8 thought that was a very blatant hazard. 9 10 There is no call for that at all. When you're trying to get the employee out safely, it would be much 11 better to have something that he could clip on rather 12 than something that he has to hold in his hands when he's 13 trying to get out of it. Chances are he's going to drop 14 15 it. 16 You used the terminology over and over again, adequate, adequate. Adequate number of first aid kits, adequate number of -- adequate supplies. Let's see, the 17 18 term adequate is just begging for definition. What's adequate is just like you were saying with regards to frequent inspections. If there is an accident, then 19 20 frequent inspections. If there is an accident, then they weren't frequent enough. What is adequate? If I have 30 21 22 guys down there, then you'll have 30 definitions of what 23 adequate is. 24 25 I love the 35 foot rule for hot work. Everybody 0195 1 knows what 35 feet is up, down, either way, to the next compartment. Adequate to 35 different people is totally 2 confusing. It's either ripe for abuse or just punitive 3 penalties as this gentleman was talking about. The 4 5 inspector comes in, he says that's not adequate to me, 6 and here you are, he's up in Petersburg. Work area is also an awkward definition. You've got 8 work location and work area, but you really don't define 9 what it is. So is it like 35 feet from that corner with that welder over there, or is it within 10 feet. You 10 11 haven't -- you guys haven't had your visit as far as the vessels yet. It would have been very helpful if you had 12 it before you heard the testimony so then you can see how confusing these vessels become. You take them all apart 13 14 and you still only have the confines of the deck of the 15 vessel to have as your workspace. It gets very, very complicated as to why you maintain space and working 16 17 18 conditions. So it would be helpful to have work area were much 19 better defined than it is right now. 20 21 You cannot make the risk disappear by more rules for

22 language. You've got plenty of rules that have already 23 been in place for a number of years.

Education would be extremely helpful. We work with 24 25 WISHA on our land site operations. I think OSHA has just 0196 1 come up with Mike Bronkowski. I may have mispronounced his last name. That's been the last couple of months 2 3 he's been signed as the and he's been an advocate for as a noncompliant adequate where an employer could call 4 up and ask their advise and get some input. that's extremely helpful. 5 I think 6 7 The membership in the PSSA that we are involved in 8 for the small shipyard standpoint is extremely helpful 9 because we get the insight from the marine chemists and that which we don't have. I wear several hats. The 10 people at the larger shipyards, they've got people with single hats and they can really focus, but it's really 11 12 nice to get their oversight and also their insight. 13 One thing I didn't mention which I wanted to go back 14 15 to is we do dockings, we do about two dockings a month. 16 At a small shipyard we have smaller jobs, they don't stay 17 as long, and it's something I wanted to point out. On our dock-side work, we do about 10 dock side jobs a month. At least one half of them are less than 100 man 18 19 hours in the job. If something comes in, it's there for two or three days, you set up, you have an immediate small repair that they need to take care of and it's gone 20 21 22 away in two or three days. 23 We also do voyager care work out of our yard. We do 24 about six of those jobs a month. About two-thirds of 25 0197 those are less than 100 man hours. Based on the lack of 1 clarity, our costs could go up considerably as far as the 2 staging and the pull back requirements which is going to 3 4 increase and that we're going to have to bill our 5 customers. 6 One thing I don't think OSHA wants is for the work 7 to go away because our customers are economic entities as 8 well. Their costs go up, they're going to try to find a 9 cheaper way to do it. All of our customers have their own berthing 10 stations where they have their vessels when they're not being used. And if they start going to basically, I just call them pickup truck operators, where they don't have a 11 12 13 facility through OSHA to visit anywhere close to their 14 15 pier site, you're not even going to have a place to 16 inspect. At least with the shipyards you can maintain an idea as to what the culture of safety is within that shipyard. 17 18 19 You have a place to visit, you have a place to inspect. If you drive the small jobs out of the smaller shipyards, 20 21 you won't find them, and employees certainly are not going to be safer. 22 Those are my comments, and I appreciate the ability 23 to share them with you. 24 25 JUDGE GEE: Thank you, Mr. Webster. Mr. 0198 1 Tinker. 2 MR. TINKER: Thank you, Judge Gee. My name is Robert Tinker, and I appreciate the opportunity to share my comments. I'm representing Fishing Vessel Owners 3 4 5 Marine Ways, Incorporated, referred to as FVO. That's the term that we refer to ourselves as. 6 7 We're located at the Port of Seattle Fisherman's Terminal since 1917. We like to advertise ourselves as a 8 9 medium-sized shipyard located within the Port of Seattle 10 Fisherman's Terminal. Looking at the above pictures, starting on the left side, which is a view of the water -- a view from the water looking at the two main railways used to pull 11 12 13 vessels out of the water. 14 15 And moving right, we have moorage for dockside repair along with an approximately 300-foot concrete 16 17 pier. This is an aerial view of the Port of Seattle 18 Fisherman's Terminal, outlined in green, which includes 19 20 FVO's approximately two-acre shipyard, on the east side 21 outlined in yellow. 22 The operations we conduct are not limited to the site. However, the majority of the services we offer and perform do take place within the yellow boundary. 23 24 25 The primary exception to that is our outside 0199 1 machinist staff of five employees that regularly perform

2 service to vessels on and off site. 3 Vessels we repair are primarily small commercial 4 fishing vessels, typically under 100 feet. The hulls are 5 predominantly wood, steel and aluminum, and we repair approximately 113 vessels a year. 6 7 Our haul-out facilities are made up of two marine 8 railways, 300- and 500-ton capacity, operating 9 approximately 60 times each year. 10 I hope these general pictures and description of our operations bring additional understanding of small to 11 12 medium-sized shipyard. 13 With that being said, on behalf of FVO, I'd like to say that many elements of the proposed rule will be and 14 have been spoken about at length today. And while time does not allow that I comment on all of these elements as 15 16 well, I would like to express my support for the comments of my colleagues. In addition, I would like OSHA to note my support of 17 18 19 20 the written comments of the Puget Sound Shipbuilders 21 Association, specifically oppose a feeling in our industry approach to lockout/tagout in shipyards. This 22 23 approach does not adequately acknowledge or address the challenges we face while working in a maritime 24 25 environment. 0200 Along with my colleagues, I encourage OSHA to study best practices and work harder to find a solution that is 1 2 practical and will adequately protect our employees. 3 I also ask that OSHA provide specific definitions in 4 the final rule as well as language that is precise and 5 achievable. 6 7 FVO currently employees 32 people today, and 8 personally in the last year I've seen our numbers spike 9 up to close to 50 employees and back down. I would like 10 to share a perspective from a small business like FVO associated with effectiveness and cost issues pertaining 11 to the proposed general working conditions in shipyard 12 13 employment. 14 To start, specifically 1915.93, designated lanes of Given the capacity of the work areas in our 15 travel. relatively small site, we feel it is more effective to 16 educate our employees of hazards associated with 17 pedestrians, bicycles and motor vehicle traffic rather than install lanes of travel that will routinely need to 18 19 FVO feels that be broken to perform our service. 20 educating increases awareness, while the lanes of travel and control devices encourage the employee to take the 21 22 danger that is still present for granted. Eye wash stations. We have three eye wash stations 23 24 25 located on the vicinity of the primary areas that 0201 chemicals are being applied and fabrication is being 1 performed. Given the proposed rule of 10 seconds from 2 3 any location, that would mean we would have a single employee using a chemical such as WD 40, carburetor 4 5 cleaner, anti-splatter, that we would need to at least triple the amount of eye wash stations and line this 6 300-foot concrete pier within approximately 100 feet on each side to be within 10 seconds. And that's up in the 7 8 9 far left corner of the yellow outlined area there. I would just like to expand on that a little bit. 10 Our eye wash stations, I feel in the last year that I've 11 been there, have been adequate. We have had a rash of 12 eye injuries with just foreign objects entering the eyes, approximately six in the last year, and working with our 13 14 consultant and really pushed for double eye protection and encouraged that with our employees. But as far as 15 16 chemicals in the eye, we feel the three in the positions 17 that they are are sufficient. 18 19 First aid, 1915.87, we need clarification on work location. If we interpret that as each vessel that the 20 21 services are being performed on on our site, then we'll need to increase our first aid stations by approximately 22 300 percent. The first aid stations we currently utilize 23 are available to all employees without restrictions, and 24 25 this amount is sufficient for our site. 0202 1915.88(d)(2), sewered toilets. The legal intent is 1 to have a sewer toilet that has necessary lighting and 2 heating and proper facilities to sanitize hands available to every employee. In the interest of temporary growth

in employment, requiring the use of a minimum of one

3 4 5

portable unsewered toilet facility that does not require 6 7 heating or running water. Frankly, the portable toilet 8 used will be primarily used as a urinal and the cost associated with portable toilets is a difference of \$85 9 per week for a toilet that is unheated and equipped with 10 11 hand sanitizer which includes regular inspections and servicing needs as compared to greater than \$2000 a week 12 13 for portable facilities equipped with heat and running 14 water, plus additional costs for servicing. 15 Cost of this \$2000 is approximately greater than five percent of our weekly payroll as we are right now. 16 17 A site our size could have an additional cost of approximately 50 hours per employee per week. 18 These few issues that I brought up in hopes that 19 OSHA recognizes the economic impact versus the 20 21 effectiveness associated with the proposed rule for small business. I've personally only been a part of the 22 shipyard industry for 11 months and have appreciated 23 24 OSHA's local participation with the Puget Sound 25 Shipbuilders Association. 0203 1 In addition, I also have enjoyed the pleasure of participating with the OSHA inspection at FVO this 2 summer. And I look forward in the future to learning 3 more through the services offered by OSHA. 4 5 Thank you for this opportunity to share my comments and I appreciate your time and consideration. JUDGE GEE: Thank you, Mr. Tinker. 6 7 Is there anybody in the audience with questions for 8 9 the panel? 10 MR. RAINSBERGER: Is this the appropriate time to ask Mr. Dixon a question? 11 JUDGE GEE: Yes, please identify yourself and 12 13 your affiliation. MR. RAINSBERGER: My name is Al Rainsberger. 14 15 I'm the president of the Puget Sound Shipbuilders Association, and I'm the safety director at Foss 16 17 Maritime. I gave testimony first thing this morning. I just noticed that Mr. Dixon brought what looks to 18 I didn't know what the purpose 19 me to be a palm sander. of that was. Can I ask him that question? 20 21 JUDGE GEE: Sure. MR. DIXON: Thanks for asking that. But my 22 question that I was going to ask is a similar one of the 23 three panel members. This is a palm sander. Do you guys 24 25 ever use these in your shipyards? 0204 1 MR. TINKER: We have them in our carpenter shop. 2 3 MR. WEBSTER: We have them in our carpenter 4 shop also. 5 MR. DIXON: This is a rather standard device throughout he shipyards and also in the 79,000 or 6 7 whatever fishing vessels that we're talking about. All of the wood vessels -- there are a lot of wood vessels 8 9 out there, but oftentimes the steel ones too, have this have this type of device there. 10 11 And, Sarah, this is really directed towards that one comment about the 30 years have you guys really been 12 violating OSHA regulations for 30 years, and the answer 13 is absolutely yes. There is no deadman switch on here. 14 15 It's a portable electrical device. It violates 1915, I forget what it is. It's a direct violation. It's been 16 17 going on for 30 years. And this is just a small part of it. 18 And the other 19 issue that I testified in DC that I couldn't find any 20 with deadman switches, I did get pointed out by one of our colleagues when they saw my testimony, back east we 21 found some that range from \$900 to \$1600 without even the 22 23 vacuum device that the policy is demanding. So \$900 to \$1600 for a replacement for this, and it's not even a 24 25 vibrating style, but it's air actuated. And most of the 0205 1 smaller vessels don't have air on board that can power this type of thing. It is an electrical device. It just 2 3 does not have the deadman switch. When you get into the conditions where our policy is 4 5 now for grinders and putting us into a position, it's a tremendous cost, it's a tremendous burden. 6 But really, my request to you was not just to look at the new regulations but the 30-year-old regulations 8

and find a proactive way to take the things that are not

really safety inherent here and find a way to help 10 rewrite the 30-year regulations so that we can be 11 12 compliant and have a safer operating thing and identify what is safe and what isn't. 13 Then I have a second question for these guys, and 14 15 that is, I'm preparing at OSHA's request, going through our OSHA 300, seeing what our loss records are and severe versus none. Have you guys had any deaths at your 16 17 18 shipyards in recent history? MR. TINKER: I have personally asked the president of FVO who has been there 35 years, and the 19 20 company has been since 1917, and he says we have not had 21 any facility in the whole history of the company. 22 MR. DIXON: And how about significant serious 23 24 accidents? 25 MR. WEBSTER: I'll answer for our company. We 0206 have had no deaths. We've about been in business since 1 2 1979. We have had one serious accident, and it was a split ring coming off of a forklift, and the guy was 3 reinflating the tire, and the split ring came off. 4 5 That's been our serious accident. MR. DIXON: Is that part of the new regulation 6 7 that's being tightened up or is that a violation of the old regulation? 8 9 MR. WEBSTER: I'm not sure if it's a violation underneath either one of them. We weren't cited for, and 10 it would have fallen under WISHA anyway. 11 MR. TOWNSEND: We've had no deaths. 12 The only serious accident that we've had since I owned the company 13 was this young man that set the grinder on his arm. And 14 it was human error. But I think it could have been. 15 MR. DIXON: Did that grinder have a deadman 16 17 switch on it? 18 MR. TOWNSEND: It did. MR. DIXON: My nephew was recently in here 19 three weeks ago buying a grinder in our shipyard that has 20 a deadman switch on it. The problem with a deadman switch is when you take it off, if your hand falls off 21 22 the grinder, you drop it, that's what happens. That grinder wheel is going at 10,000-plus rpm's. The deadman 23 24 switch doesn't do anything for you. 25 0207 1 And here's something that requires a deadman switch and it's not going to hurt anybody. And I challenge you 2 guys, how many people on the panel actually have one in their house or have used one in their lifetime. 3 4 5 Can I have a show of hands; is that fair? MS. SHORTALL: I think, Mr. Dixon, we are giving you an awful lot of leeway here --6 7 8 MR. DIXON: I understand. MS. SHORTALL: 9 -- when this is not the issue 10 before us today. 11 MR. DIXON: But here is another example of the 30-year-old rules where we do need to take a good look at 12 them and find a different way to make us safer. 13 That's all we're asking. 14 JUDGE GEE: Is there anyone else in the 15 audience that has a question for the panel? 16 17 How about the OSHA panel? MS. SHORTALL: Yes, we have questions. Amy 18 Wangdahl will start in just a second. 19 Mr. Townsend, you said you had a number of ideas, 20 but then you didn't give any. Could you just maybe give your ideas and then we'll go into questioning. We'd love 21 We'd love 22 23 to have your ideas. MR. TOWNSEND: You want my ideas? Well, the definition of a shipyard. I went around and around with 24 25 I went around and around with 0208 Amy. I'm not a shipyard, I'm just a little boat yard, but OSHA says I'm a shipyard. That was one idea, do I 1 2 really, being as small as I am and doing what I do, do I 3 qualify as a shipyard. 4 5 The fellow hauling the boats out with a trailer and putting them in a side yard, is he a shipyard? He's my 6 7 competition. It's a one-man operation. He doesn't have any OSHA standards doing that. I just want some clarity. 8 What was the other one? The other one was the 9 isolated, enclosed and confined. Those definitions, it 10 11 would be nice to have them a little crisper. And those are the two things that I have here. 12 13 MS. SHORTALL: Thank you very much, and we'll

begin the questioning with Ms. Wangdahl. 14 15 MS. WANGDAHL: Mr. Tinker, what is your capacity at FVO? 16 17 MR. TINKER: I was hired in November of 2007 in environmental compliance. Since then I have taken on 18 19 additional responsibilities including a system safety 20 task. 21 MS. WANGDAHL: Can you go back to the slide where you showed where the quick drench and the first aid stations are located. Can you explain to me, let's start 22 23 with the first aid stations. All we can see is the 24 building. What's inside the building? 25 0209 1 MR. TINKER: Well, basically we have a first aid station to the far left, top one is in our storeroom, and that's been in the main front building, and that's 2 3 equipped with, our, you know, all our internal safety supplies and that's where we keep our storage of safety 4 5 6 supplies to restock. 7 The primary thing that goes through is filling it up 8 and restocking with antacids and cough drops, which is 9 the big one. The two lower ones that are both inside the machine shop is that lower left one that's at the opposite end of 10 11 the building, which is where the welders shop is, and the 12 13 boilermakers one is the one next to it on the right. MS. WANGDAHL: About how many employers will be 14 15 working in those building on a typical day? MR. TINKER: The store comes and goes because 16 we have one employee that runs the -- does purchasing, 17 but that's the easiest access for all employees. 18 In the middle of all of those is the railway that 19 stems from the water, and we can sidestep two or three ships, so we'll have employees primarily working in that 20 21 22 area, along with those two railways, so that's the 23 easiest access for them. The welding shop can be, you know, three, four. I don't typically see more than four people. 24 25 0210 1 The machine shop has about four people regularly 2 working there. MS. WANGDAHL: And then the eye wash stations, again the top left is in the store again? MR. TINKER: Right in the store. 3 4 5 MS. WANGDAHL: And then the center green X is 6 7 in the welding shop? 8 MR. TINKER: In the welding shop. MS. WANGDAHL: The far right? 9 MR. TINKER: That is called our winch room, and 10 11 that is the closest access to basically all the chemical 12 storage. Our chemical storage is the building next to that just below that. 13 And so, yes, you have a drench station between the 14 machine shop and the welders. The store is just as accessible for anybody in that center area. Pretty much 15 16 17 all of them are very accessible, I would say well within 18 10 seconds. 19 MS. WANGDAHL: Were these here before you came 20 on board? 21 MR. TINKER: Yes, they were. MS. WANGDAHL: So you may not be able to answer 22 this question, but the decision to put them in these 23 locations, do you know what made that determination? 24 MR. TINKER: I do not know. 25 0211 1 MS. WANGDAHL: But they seem to be centrally 2 located? 3 MR. TINKER: Yes. MS. WANGDAHL: What other provisions have you 4 made for first aid; do you have CPR trained --MR. TINKER: I can get this information for 5 6 7 you, get that to you if you like, but personally I don't 8 know. MS. WANGDAHL: So if there is an accident, what's the procedure, do you know that? MR. TINKER: For accident procedures? 9 10 11 MS. WANGDAHL: Yes. 12 MR. TINKER: They are reported to the supervisor. The supervisor is not required to report the 13 14 15 accident directly to us at the time, but the person that had the accident comes straight to the office and reports 16 17 it to, I believe our Human Resources person, and when she

is not there, I have paperwork necessary to, along with 18 the superintendent has paperwork necessary to file a 19 20 report and to get medical help if they need to go to an additional facility. 21 22 MS. WANGDAHL: What if the employee can't get 23 to you; do you have someone on-site that can treat them or do you rely solely on 911? 24 MR. TINKER: We have somebody -- we rely, in 25 0212 this picture -- let me get to that picture again. 1 Yes, when we rely on 911, we have dock 1, 2 and 3 is the 2 cement dock on the left, dock 4 is the one next to it on the left. At the end of that dock is a fire department, 3 4 5 and that's the proximity of medical services for us, emergency medical services. 6 7 MS. WANGDAHL: Are they staffed 24/7; is it a 8 volunteer? MR. TINKER: Yes. No, it's not a volunteer. MS. WANGDAHL: Mr. Webster, what sort of 9 10 provisions have you made for first aid at your facility? 11 MR. WEBSTER: All of our foremen have formal first aid training, all of shipyard competent person at 12 13 the shipyard is first aid trained through the Red Cross. 14 They come on site and do it twice a year depending on the 15 number of people we have that need certificates. If it's on-site, we probably have at least 12 people there. MS. WANGDAHL: I'm sorry, I know you said this 16 17 18 in the beginning, how many employees do you have? 19 MR. WEBSTER: We average 85. 20 We've got two shifts that go between 45 and 50 and 125. 21 MS. WANGDAHL: Mr. Townsend, have you made any 22 provisions for first aid? 23 MR. TOWNSEND: At least half of our staff are 24 25 trained in first aid CPR. 0213 1 MS. WANGDAHL: That's guite a bit considering there's five employees? 2 3 MR. TOWNSEND: Well, there's nine altogether, 4 but we have some part-time help in our store, so they're not in the field. 5 MS. WANGDAHL: And I believe you said you have 6 a fire department fairly close? MR. TOWNSEND: They were at the site within 8 three minutes. A person with a cell phone on the dock 9 called immediately. Matter of fact, we called twice. 10 The people in the store heard someone yelling, and they 11 called and someone else called. 12 MS. WANGDAHL: How is he today? MR. TOWNSEND: He's fine. He's pretty well 13 14 stitched up. But the dead switch, he didn't let go of it. It had a hold of him. That was the problem. I can 15 16 17 see the problem with the switches. He didn't want to let go of it. It went towards his neck. He's got a nice 18 19 little slice on his neck from a grinder. MS. WANGDAHL: 20 And that's the only serious accident that you've had? MR. TOWNSEND: We've had some soft tissue 21 22 23 accidents. MS. WANGDAHL: This question is for everybody. 24 Do you issue flashlights or any sort of portable 25 0214 handheld? Mr. Webster, you were referring to the light on the hard hat that Mr. Killingsworth brought in. What 1 2 3 are all of you doing currently? MR. TOWNSEND: We have disposable flashlights 4 5 available everywhere, but we also have halogen 6 flashlights available in the metal shop and in the shed 7 that they have. MS. WANGDAHL: Do you require employees to carry them with them at all times or just as needed? 8 9 MR. TOWNSEND: No, we don't. They're 10 11 available. Okay. 12 MS. WANGDAHL: MR. WEBSTER: We have flashlights that are 13 available. The only ones we require to carry are the electricians that go in and pre light the areas, put the 14 15 temporary lighting in. They wouldn't have any backup, 16 17 but they are required. Again, I think it was brought up earlier when those go out, if it's a circuit breaker or something that gets 18 19 flipped, within a matter of minutes the lights are back 20 21 on.

But they available throughout our facility. We've 22 23 got hundreds of flashlights. 24 MS. WANGDAHL: Mr. Tinker? MR. TINKER: Definitely we have hundreds of 25 0215 1 flashlights available throughout the facility. The only requirements that I know of are inside the job boxes that 2 3 are typically put on each vessel prior to work starting 4 there. 5 But I don't believe that -- but I can find out for sure -- but I don't believe each employee is required to 6 7 carry one at all times. 8 MS. WANGDAHL: Mr. Dixon? MR. DIXON: All of our electricians and 9 machinists generally carry them and they are available in 10 11 our store. They don't have to buy them. Any employee can have one at any time for any use. 12 13 MS. WANGDAHL: Are the electricians required or 14 is --15 MR. DIXON: No. MS. WANGDAHL: -- it just typical? 16 17 MR. DIXON: It's just typical that they have 18 them, yes. 19 MS. WANGDAHL: Okay. MR. DIXON: I'll tell you about a 20 darkness-related accident that might be interesting. 21 We were dry docking a boat and the dry dock crew was on the 22 bow of the vessel, and it was a small passenger vessel, 23 maybe 150 feet with all cabins. 24 25 In order to get to the aft end of the boat, you had to walk -- well, you didn't have to, but in this case our guy elected to walk from the bow to the stern to handle the line. And this vessel had just come in but to 0216 1 3 4 owner's crew. 5 And unbeknownst to us, they had left a manhole open. And our guy went interior and, of course, it's a dead 6 7 ship because it's going into dry dock. It got towed in or whatever, so the drop-off crew dropped it off. And he 8 9 walked internally in a dark area where the crew had left a manhole open and fell into that manhole. He didn't get 10 hurt too bad, it was a small ship. 11 But still, that's a case where had he had a 12 flashlight to go from the bow to the stern and he was 13 required to carry one, then he may have seen that open hatch that was left by the crew. 14 15 We get into circumstances, you know, lots of times, 16 17 and, you know, you talk about these lights, like the guys are the ones who break the chemical ones for if you are 18 in a confined space that you have something special, and we're going to look into those and just then these little 19 20 portable things for our guys that do occasionally but not 21 normally want to carry the bulk of having a regular 22 23 flashlight around. It's not a big cost, and I don't have in mind 24 25 looking at that sort of thing. We respect you for a lot 0217 1 of the things that you bring up that really can, we can 2 see, have a value to them. 3 MS. WANGDAHL: Thank you. Mr. Dixon, you had answered this line of questioning in DC. I would like to ask the remaining three. What sort of lockout/tagout programs do you have in your 4 5 6 7 facilities, if any? 8 MR. TOWNSEND: We have locks and tags on all of 9 our electrical. 10 MS. WANGDAHL: Who is responsible for making 11 sure equipment is locked out? MR. TOWNSEND: Everybody. 12 13 MS. WANGDAHL: Okay. MR. WEBSTER: In our electrical department we've got locks and tags also. That is the 14 15 responsibility of the foreman of that shop from the 16 17 electrical standpoint. The other two crafts that we're primarily concerned 18 about are the pipefitters and machinists, and they're 19 handling hydraulic lines and other lines that might be 20 charged to make sure that the pressure has been relieved 21 or the lines have been blanked off so something can't be 22 23 turned on and product goes through those lines. They are 24 just tagged off. 25 MS. WANGDAHL: When you use tags, are you using

0218 1 an additional measure; is there something else you do 2 besides just tagging? 3 MR. WEBSTER: We tag, put banks in, and there's other ways to do it. Our typical experience is with 4 5 sewage lines. There always seems to be one flush left in some toilet, so you try to use blanks. MS. WANGDAHL: Mr. Tinker? 6 7 8 MR. TINKER: Concerning lockout/tagout, I know 9 I'm not very familiar with our lockout/tagout. I could forward you our policy on that. I know that we have a whole wall of tags and locks used by machinists when 10 11 they're working on it. But I'm not really familiar with 12 13 it. 14 MS. WANGDAHL: Thank you. Mr. Townsend, I think you're the smallest employer 15 that we have had throughout this whole process, so I do 16 17 appreciate you coming. When you reviewed the proposed 18 rule, I'm sure there were a few things that jumped out at you that you thought, no way. Do you seem to remember 19 20 any of those? 21 MR. TOWNSEND: The basket seems unrealistic in 22 my situation. 23 MS. WANGDAHL: Is that because you are relying 24 on off site? 25 MR. TOWNSEND: We have backboards that we have 0219 1 used over and over, the cranes that pull out the baskets. And I think we had the fellow at the hospital before the 2 crane got set up. We generally work on two or three 3 projects at a time. You don't find two people working on one job very often. They're in the same compartment 4 5 one job very often. They're in the same compartment. That's about the only. 6 7 MS. WANGDAHL: That was the one biggie? MR. TOWNSEND: The AED, that just seems 8 9 unrealistic. I think it's a great idea and it's wonderful to have the training. If they were a thousand 10 11 dollars, I'd have one. MS. WANGDAHL: Just because you just mentioned 12 it, do you frequently have employees that are working 13 14 alone? 15 MR. TOWNSEND: Yes. MS. WANGDAHL: What kind of spaces are they 16 17 working in? 18 MR. TOWNSEND: Oh, like an engine room, usually there's one man in it and one man outside on most of 19 those type of projects. 20 21 MS. WANGDAHL: Is communication maintained 22 throughout the job? 23 MR. TOWNSEND: We have radios and everybody has cell phones. We use both. MS. WANGDAHL: Thank you very much. 24 25 0220 MS. SHORTALL: Mr. Daddura has questions next. MR. DADDURA: You mentioned job box. What is a 1 2 3 job box? 4 MR. TINKER: Like a steel box approximately half the size of this table, about this tall, that holds 5 tools necessary for working on the vessel. 6 7 MR. DADDURA: So there's a gang box you send 8 down to the work site to the vessel; is that what it is? MR. TINKER: That's what a gang box is, yes. MR. DADDURA: Okay, just wondering. 9 10 11 Disposable flashlight; what is that? MR. TOWNSEND: Did I say it? MR. DADDURA: Yes. MR. TOWNSEND: I think I did. 12 13 14 That's what they You can't change the battery, so they're 15 are. 16 throw-aways once they go dead. 17 MR. DADDURA: So they're a light stick. You wanted a definition of shipyard. Why do you 18 19 think you need a definition of shipyard? MR. TOWNSEND: Well, I believe there are haul 20 out facilities that are not OSHA standards, they don't use OSHA standards, they're uninspected. I'm saying like a brownell trailer. If you have a brownell trailer in the parking lot away from the water, you're not under the 21 22 23 24 25 shipyard standards, yet you're my competition. 0221 1 MR. DADDURA: I'm not sure I understand that. 2 You're saying there is pickup truck companies picking up 3 from --

MR. TOWNSEND: No. He backs down the ramp and he picks up a boat that I would haul last year, but he's 5 6 got no facility; he's just a parking lot with boats in 7 it. Is he a shipyard? MR. DADDURA: 8 Well, we don't go by definition 9 of shipyard. We go by the definition of shipyard employment. He's doing your type of work, he's your 10 competitor, he's definitely falling under the same standards. That is defined in the regulations. 11 12 MR. TOWNSEND: Okay. MR. DADDURA: I'm curious from all four of you 13 14 if you would give me your definition, if it's different, 15 16 of a work site versus a work location. In your own 17 words, what do you think it means? MR. TINKER: I can start. 18 I would consider the work site and work location -- basically I would like to 19 consider RER a work location along with a work site. 20 MR. DADDURA: A work site would be what? MR. TINKER: I would like to say they're the 21 22 23 same. MR. DADDURA: It would be the same? MR. TINKER: The same, yeah. 24 25 0222 1 MR. DADDURA: Mr. Dixon? MR. DIXON: I think they're synonymous. 2 3 would have to read it. Do they show up in the regulation? 4 MR. DADDURA: I just want your interpretation of what you think the --5 6 7 MR. DIXON: Work site and work location to me 8 it means the same thing. 9 Do you want me to help out on the shipyard versus 10 boat yard? MR. DADDURA: No, not shipyard versus boat 11 12 yard; it's shipyard versus non-shipyard. 13 MR. TOWNSEND: That's what we want. MR. DADDURA: Mr. Webster? 14 15 MR. WEBSTER: Well, the shipyard would be --MR. DADDURA: No, the work location and work 16 17 site. 18 MR. WEBSTER: I would say that the workplace is where the actual work activity stage is taking place, within a reasonable radius right around that spot. I 19 If 20 you've got a 400-foot vessel and you only have activity 21 in one hole and a tank down in one end, so you've got an 22 awful lot of access there. You've got a lot of walking 23 before you even get to where the actual work activity is. 24 25 MR. DADDURA: The work location then would be 0223 1 what? 2 MR. WEBSTER: The work site would be where the actual physical work is taking place. 3 MR. DADDURA: Right. MR. WEBSTER: And th 4 5 And the work location would be barge 450-16 or some identifiable geographical spot. 6 MR. DADDURA: Okay. MR. TOWNSEND: I think the work location could 7 8 be as big as my shipyards, all of my property, and the work site may be in the stern of the boat. 9 10 MR. DADDURA: Thank you. That's all I have. MS. SHORTALL: Mr. Bolon has questions next. 11 12 MR. BOLON: Mr. Townsend, could you describe your shipyard. Is it a dock; do you have shops? MR. TOWNSEND: Sorry. After everybody else 13 14 15 described theirs, I thought about that. I have a split 16 railway. It's 400 feet, two carriage railway, end to end, two separate docks, floating metal shop and a floating boathouse that I can put a 58-footer inside and 17 18 19 about a 4000 square foot store and inventory. 20 21 MR. BOLON: The proposed standard on lockout/tagout, it's a comprehensive program that 22 requires that you have to have a written program as well as do training and other things. So I would ask each of 23 24 25 you, in your lockout/tagout, although you may have some 0224 1 of those components, do you have a written program; do you have that kind of comprehensive --MR. TOWNSEND: Yes, we do. I actually hired, 2 3 on the recommendation of an OSHA inspector, I hired a 4 5 safety officer, and she's been working on MSDS work all year, and we have a lockout/tag out program. 6 MR. WEBSTER: We have a written one also.

MR. TINKER: Yes, we have a written one also. MR. DIXON: We have a written one also. We 8 9 10 have a board in the tool room with locks and tags and that sort of business and try to keep a log. 11 MR. BOLON: That's very much. 12 13 MS. SHORTALL: Ms. Brinkerhoff has questions 14 next. 15 MS. BRINKERHOFF: I'm wondering if each of you 16 can tell me what are your most common types of accidents 17 at the shipyard. MR. TOWNSEND: I would say objects in the eyes. 18 Dust would probably be the most common. Like I say, 19 lately it's been soft tissues, sprains and pulled muscles 20 and that sort of thing. 21 MS. BRINKERHOFF: Sprains from tripping? 22 MR. TOWNSEND: Tripping or falling. MR. WEBSTER: Probably our most prevalent one 23 24 25 would be debris in the eye. We use a lot of positive 0225 1 ventilation because they're working with chemicals, so they've got positive ventilation. So as the guys are 2 3 coming out of that, it gets blown off their clothes. They're actually working, but the actual activity of leaving a space with the velocity of the air going over 4 5 them, it blows up into their eyes and you get a lot of 6 7 grit. And the other one would be sprains. Part of that is just the repair nature of the business. The other is the 8 9 age of our workforce. We're getting a lot more sprains a 10 lot more easier than we used to. 11 MS. BRINKERHOFF: We heard that from people who 12 have testified. 13 MR. TINKER: As I said earlier, yeah, we've had a lot of foreign particles in the eyes in the last year, 14 15 16 and a lot of this is due to a large majority of grinding 17 and welding operations around one vessel, and when you push to get it out in a certain time. 18 In a sense, I would say that's all our injuries other than maybe a sprain or a pulled muscle. Once that 19 20 21 boat was done, then our next one we had gone to double eye protection, and we had no foreign particles. 22 MR. DIXON: We have a lot of eye losses. We do a lot of lost control or shipyard analysis of these 23 24 things, so we went and spent a lot of effort in getting a 25 0226 1 protective Rayban style that kept the dust out. So we've 2 really brought that down. 3 So we are in the sprain and stress type thing from the aging workforce. We're into the hearing loss that 4 5 gets filed right at retirement so they can have continued 6 care through their -- they get a free --MR. TINKER: RV. MR. DIXON: Yeah, they get an RV and then they get hearing aids for life, just because they've been around noisy things. But at retirement time, 60-year-old 7 8 9 10 11 people often lose their hearing. We get some stress and strains and the phony strains 12 13 and we get the fraudulent claims and that sort of business. We've lost hundreds and hundreds of thousands 14 of dollars on fraud, people using the system to bilk us. 15 MS. BRINKERHOFF: I think somebody earlier 16 mentioned they counted up the number of times we used the word adequate in the proposed rule. I'm wondering if you 17 18 have an opinion. Would you rather us be more specific 19 about what we mean or do you prefer if we're going to 20 21 publish a rule that it be performance based, it would be kind of non-specifc, non-descriptive? 22 23 MR. TOWNSEND: I think as long as the inspector was using the same definition would be adequate. That's 24 25 been my complaint. What's serious and what's not 0227 1 One year it's serious and the next year serious. That sort of thing, the inconsistency. nothing. 3 MS. BRINKERHOFF: Okay. MR. WEBSTER: I think I was the one making the point, and I didn't count the number of times it was used 5 as Phil had done in your report, but I know it was used quite often. And if we all had to describe something in 6 here, we'd probably have 15 different definitions of what 8 9 each of us thought something was adequate. If you could give us some examples, it would be 10 helpful. It certainly would help reduce the number of 11

Monday morning quarterback fines when OSHA comes in and 12 13 decides, well, it happened, so I guess it wasn't adequate 14 enough. 15 It's the same thing that someone had mentioned earlier today about frequently checking things. It's always frequently enough until something happens, and 16 17 then it's not frequently enough. 18 Maybe some examples of what you consider adequate 19 20 would give us guidance and also give your inspectors 21 guidance. MS. BRINKERHOFF: Thank you. 22 Mr. Tinker? MR. TINKER: I'm very happy with what I've 23 heard from more experience than me that these gentlemen 24 25 have shared. 0228 1 MS. BRINKERHOFF: Mr. Dixon? MR. DIXON: I do like the word adequate. 2 gives us a leeway of making some determination of what we feel is right for our particular situation. Maybe it 3 4 5 needs to be more expanded to other things, but then we have the conundrum of what the inspector feels or if there is an accident. So if there is some way that you 6 7 your legalese can come up with something that would 8 9 satisfy both, that would be great. MS. BRINKERHOFF: Thank you. MS. SHORTALL: I have a few questions then. First for Mr. Townsend. Well, first I want to thank you 10 11 12 for coming all the way down from Alaska, such a small 13 ship or boat yard, whatever you need to call yourself. I would maybe for clarifying as Mr. Daddura was saying, we define for purposes of whether you're covered under 1915, we define it by the type of employment you're 14 15 16 17 doing; are you doing ship repair, shipbuilding, ship breaking and related activities. So that's how you end 18 19 up coming in by doing ship repair or -- we haven't 20 defined how small it has to be. It's more looking at the 21 concept of repairing a vessel. And we do define vessel, 22 23 by the way. MR. TOWNSEND: Same thing. 24 Amy said, shipyard 25 standards, and I said, are you sure they're for me, 0229 because we do small vessels. Ninety percent of our vessels are 58-foot zingers. 1 2 We have some actually larger 3 MS. SHORTALL: ones who are doing smaller vessels like you and have many 4 5 more employees than you. So it's a hard issue. I'd like to go to the issue of you wished that we 6 could give you a better definition of isolated to give 7 you more guidance or to be a little bit more specific. 8 If in the final rule we ended up saying you had to check 9 10 on a person frequently and check on them at the end of a work shift, if they are working by themselves out of the visual or audio contact of another person, would that 11 12 13 help? 14 MR. TOWNSEND: That means you could talk to 15 them on the radio? Right. And say, hey, it's break time. MS. SHORTALL: 16 MR. TOWNSEND: 17 And if he doesn't come out, then you could go check on 18 19 him. 20 MS. SHORTALL: Yes. Would that help you 21 somewhat? MR. TOWNSEND: That would help. MS. SHORTALL: I guess the other way, even if you didn't have radios, let's say all of your radios went 22 23 24 25 down or you are in the process of getting something new 0230 1 and you have a person who is working by themselves and they're out of range of sight and they're out of the 2 range of if they were hurt they can't even shout for help, because nobody is close to hear them, would that 3 4 5 end up taking care of some of the problems you are having 6 with the definition? MR. TOWNSEND: My whole shipyard is isolated. MS. SHORTALL: Pardon? MR. TOWNSEND: Every job we do would be 8 9 isolated. That was my fear was that it was like a 10 blanketed -- because my employees 90 percent of the time 11 12 work alone. 13 MS. SHORTALL: Work alone. How physically, what are the dimensions of your --14 MR. TOWNSEND: I have approximately an acre and 15

a quarter. Sometimes we have three jobs in the water. 16 17 There's one on each pier. That means it's two men on the railway and the other three are scattered throughout the 18 19 vard. 20 MS. SHORTALL: Is that one of the reasons why 21 you've instituted using radios is because everybody seems to be in a different spot in your yard? 22 MR. TOWNSEND: We're trying to do a lot with a 23 24 smaller number of people, so if you need help, you ring 25 instead of hiring another guy. 0231 1 MS. SHORTALL: When you're doing servicing of equipment, do you ever have more than one employee 2 3 servicing the same piece of equipment or system at the 4 same time? MR. TOWNSEND: It's possible. MS. SHORTALL: And when you do have that, do 5 6 7 both people put a lock or a cap on it? MR. TOWNSEND: No, one person is responsible. 8 9 Their name goes on the tag. MS. SHORTALL: I see. And what if that person 10 11 left the facility and another person comes by. Do you ever have the danger of that person thinking, oh, I guess 12 13 I can remove this tag now, not realizing that there is another person working? 14 MR. TOWNSEND: No. I've had fellows come to me 15 and say, can I take this tag off, and I said no, there's 16 nothing on the other end of the cord. You may want to 17 use that piece of equipment, just send it out. So if he would have turned it on, it would have been a live wire So if he 18 19 20 somewhere. 21 MS. SHORTALL: Mr. Tinker, on your, if we could go back to the slide that you had that had where your first aid is located, you were questioning where the 22 23 24 placement is, would that constitute either adequate or 25 readily accessible. 0232 1 Would you feel better if, for example, we in a final rule said that first aid supplies and first aid providers 2 3 must be located within three to four minutes of response time to the injured person; would that end up taking care 4 of some of your concerns about whether you placed the items in a central enough location? 5 6 7 MR. TINKER: I believe it would. MS. SHORTALL: What about you, Mr. Dixon, if we 8 9 changed from using the term adequate and using the term readily accessible so using a term like your first aid 10 11 supplies and providers must be within three to four minutes of where the injured person is located. 12 MR. DIXON: We would like to see the way it is, I believe informally, enforced right now, which is if you're doing work in the city of Seattle, that it's 13 14 15 assumed that the city of Seattle when you dial 911, 16 17 whether it's three minutes or seven minutes, they are the primary one that's going to respond and you are therefore 18 19 covered. Now, we at the shipyard have 15 first aid trained 20 guys, AED's, and we're a small enough yard that we meet 21 the current rules either way. 22 But I'm a little concerned for all of the boats at 23 Fisherman's Terminal or on some dock, you know, wherever 24 25 they are within a city where an engine vendor goes down 0233 1 to, you know, turn the valve cover lining down there. He thinks that they're all fine because -- everybody thinks 2 3 they're fine because they're within Seattle and something happens to them on that boat, somebody is going to call 4 5 911 and they're going to come and take care of it. I can't say that that's three or four minutes. 6 The 7 fire department won't guarantee it. They'll say under 8 normal circumstances, yes, we're probably going to be 9 there in five minutes. Of course, we all know the AED's are not very effective after five minutes or so, but sometimes they 10 11 help, and you need to get the people on the AED, if you 12 really want to be real about this, in the first one or 13 two or three minutes to have a good, more than 40 percent 14 chance of saving the guy's life, and there's all sorts of 15 curves and things that you can look at. 16 17 I don't know how to answer your question. In the

18 real world, right now, depending on how you interpret 19 your regulations, there's probably over 50 percent of the

20 people working in ship repairing activities that are not 21 compliant with your regulations. 22 MS. SHORTALL: Given that you haven't been able to get a guarantee from the Seattle emergency services 23 that they can get there within that golden window of 24 25 opportunity every time, what do you think is the 0234 appropriate response of employers? MR. DIXON: I think the appropriate response is 1 2 3 if there is an established 911 medical response 4 organization within your work area, then that should be 5 6 MS. SHORTALL: What do you mean work area? MR. DIXON: For example, and this is a great example, this happened today. We're restoring a 7 8 100-year-old Viking ship that's in the Nordic Heritage 9 museum, and I had to send my machinist up before we take 10 it down to the yard to change the wheel bearings in order 11 12 to tow it down there. I only sent one guy there. I sent him just there by himself. 13 14 I asked the guy at the museum to check on him every 15 20 minutes to make sure when he's pulling those tires off there to redo the wheel bearings and send him to get new 16 17 tires, that everything is okay and there is no problems. And the guy had a cell phone and all that sort of thing. 18 But certainly he wasn't within the three or five 19 minutes of my first aid kit, which happens to be down at 20 the shipyards, and he wasn't within that of my AED. 21 So here he is in the parking lot of a museum doing this work, and if he got hurt, then it might not have been 22 23 discovered for 10 or 15 minutes depending on how often 24 25 this guy was checking on him. 0235 That guy would have called 911, and 911 would have 1 2 been there within say six minutes, depending on traffic 3 and other situations. So did I violate OSHA today? I don't know. 4 5 MS. SHORTALL: What about you, Mr. Webster, would it help if we had a certain time limit that we put 6 7 on instead of saying adequate or readily accessible? 8 MR. WEBSTER: I've got several questions here. 9 One is you had mentioned medical supplies versus aid? MS. SHORTALL: I'm saying both. MR. WEBSTER: Those are two different animals. MS. SHORTALL: I'm saying would it help if for 10 11 12 both medical supplies, meaning first aid kits, and for first aid providers or outside services that you might 13 14 15 bring in, instead of saying they had to be readily accessible, if we said they have to be no more than three 16 17 or four minute distance, response time distance between where they're located and where the injured worker is. MR. WEBSTER: I think that's a very supporting 18 19 proposition. We've got areas that we work on that you 20 could take 10 minutes just to get to them. You've got a string of popcorn almost to follow the guy in. Every 21 22 three minutes you'd have to drop off a first aid kit so 23 he could get to it. 24 25 If you're in the bottom of a 400-foot barge going 0236 1 across 18-inch beams every six feet, that's not practical. Or if you are in a draft alley on one of the 2 Washington state ferries, that takes you 10 minutes to get in the engine room. There's different compartments 3 4 5 there. Three to four minutes just isn't --MS. SOHRTALL: Let's look at the ship that you 6 7 talked about that would take you a long time to get to 8 the bottom of it. Do you keep first aid kits on larger 9 vessels that you're servicing? MR. WEBSTER: On the very large ones, we will have a job box again. They are in there. But that stuff is on the main deck. By the time you are going to crawl 10 11 12 down a ladder and go maybe 50 feet across the bottom of 13 the vessel, you're certainly outside of the three- to four-minute range. 14 15 MS. SHORTALL: You also said, as I recall, you have your supervisors trained in first aid; am I correct? 16 17 MR. WEBSTER: Yes. 18 MS. SHORTALL: What about line of production 19 20 employees? MR. WEBSTER: We have some of our lead men trained in some of our larger crafts, which is primarily 21 22 23 boilermakers is our largest craft. Some of those are

24 trained. Our competent persons are trained, also some of 25 our foremen. 0237 If there is someone down at the 1 MS. SHORTALL: bottom deck or level of a vessel who gets injured, is it 2 3 more than likely that person is working alone or will there usually be either a lead person or supervisor or 4 5 someone else in the general vicinity who might have first 6 aid training? MR. WEBSTER: There would be people in the 7 8 general vicinity who would have first aid training. 9 MS. SHORTALL: Is that one of the reasons you 10 end up training --MR. WEBSTER: Yes. MS. SHORTALL: -- additional? 11 12 MR. WEBSTER: Yes. MS. SHORTALL: So in essence, at least the 13 14 first aid provider very likely could be within three minutes because of the --MR. WEBSTER: It's a possibility, but it's also 15 16 17 a very sporty possibility based on just the actual job 18 19 site problems. MS. SHORTALL: What about you, Mr. --MR. WEBSTER: It would be the same thing if 20 21 you're on the 30th floor here and you had to have access to the lobby in three minutes but the elevators are out and you've got to take the stairwell. It would be a lot 22 23 24 different time frame than just dropping down on the 25 0238 1 elevators. MS. SHORTALL: Certainly. What about you, Mr. 2 Townsend, would it help if we said something like three 3 to four minutes, would that give you the type of 4 5 certainty or guideline you're looking for? 6 MR. TOWNSEND: If you consider that the aid car 7 is coming and your injured man is already there and they're going to meet at some point, that works. That's exactly what happened. We stopped the bleeding before 8 9 the car got there. By the time we got him on deck, the 10 11 aid car was there. MS. SHORTALL: Thank you very much. 12 Once again, I just want to thank all of you for coming here 13 today and participating in our hearing, and we really 14 look forward to your post-hearing comments. And I know a 15 number of you were sitting here either today, and in the 16 case of Mr. Tinker, I know I saw you yesterday as well. 17 I am hoping that you will take the opportunity if 18 there was anything that you heard that we asked or talked about with another panel that you would also like to comment on in your post-hearing comments, please feel free to do so. Our whole purpose in this hearing is to 19 20 21 22 gather as much information as possible to give us the 23 most complete record that we can get, and we appreciate 24 25 your help with that. 0239 1 Thank you again. 2 MR. WEBSTER: Thanks for the opportunity. 3 MS. SHORTALL: We're done, Your Honor, with our 4 witnesses at this point. 5 JUDGE GEE: Did you want to address the 6 post-hearing comments? 7 MS. SHORTALL: Yes, I would at this point, Your 8 Honor. 9 As mentioned in the Notice of Proposed Hearing, that in our pre-hearing order and in the post-hearing order, 10 Judge Steven Purcell, who presided in the Washington DC hearing on September 9 established a post-hearing comment 11 12 13 period. 14 Customarily, this is divided into two parts. The 15 first part is a period of time for submitting additional information and data relevant to the rulemaking, 16 including information data that during this hearing we 17 18 may have asked you to submit. 19 For example, in the case of Mr. Dixon, we asked if he could provide a list of recordable injuries, and he's 20 going through with that. So it's time to get that data 21 and information in. 22 The second part of the submission or the second part 23 of the post-hearing comment is for submission of final 24 25 written comments, arguments, summations, briefs, any 0240 1 closing thoughts that you would like to give the agency

as we begin the deliberations and moving to a final rule. 2 In most special rulemaking, the post-hearing comment 3 is a total of 60 days long, 30 days for the first part and 30 days for the second. But because of special time 4 5 constraints for a number of the interested parties in 6 7 this rulemaking, Judge Purcell granted our motion to 8 allow 61 days after the close of the hearing in Seattle, 9 Washington until December 22, 2008 since the 60th day 10 falls on a Sunday for the first part of the post-hearing 11 comment period for interested parties to get additional information and data, and Judge Purcell also granted our 12 motion to allow an additional 60 days until February 20, 2009 for the second post-hearing comment period for 13 14 15 interested parties to submit final written comments and briefs. 16 17 The post-hearing order that Judge Purcell has signed is already in the docket of this rulemaking and it is 18 available for anyone to view on www.regulations.gov, and 19 20 it is the following Exhibit No. OSHA-S049-2006-0675-0169. So if you have any further questions, you can 21 22 consult the post-hearing order. So in essence, what we are doing and what Judge Purcell granted was for us to double the amount of time 23 24 25 that we currently allow for the post-hearing comment 0241 period to allow for interested parties here to have 1 adequate time to participate in that. 2 3 JUDGE GEE: Thank you. So pursuant to the provisions of 29 CFR Part 1911, as provided in the Notice 4 5 of Proposed Rulemaking, the pre-hearing guidelines signed by Judge Purcell and the post-hearing order issued Judge Purcell, the record will reopen at the close of today's 6 7 8 hearing and will remain open until December 22, 2008 for 9 the submission of additional information and data. 10 The record will then close on the receipt of the 11 information and data, but will remain open until February 20, 2009 for the submission of final written comments, 12 13 arguments, summations and briefs. MS. SHORTALL: Your Honor, may I add for the 14 record that in the folder all the participants received, 15 there should be a copy of that post-hearing order. If it 16 17 doesn't make it all the way back up to Alaska with you, Mr. Townsend, you can always go back on 18 If you didn't by any chance have 19 www.regulations.gov. one of those, we should still have some copies at the 20 table outside of here, right outside the entrance here. I want to add one thing about the folders that you 21 22 23 received. They were prepared by Ms. Wangdahl and Ms. Watson, which is something we've never done before, 24 25 hearing participants before. They felt very strongly 0242 1 since the majority of you who participated in the hearing were new to the process, they wanted to make sure 2 3 everything was collected and everything you would need, you wouldn't miss getting. So special compliments to 4 5 them, and I hope you appreciate their consideration in making you feel like you've got everything you need to be 6 7 active participants in this hearing. Thank you. 8 JUDGE GEE: Thank you. 9 Let the record show that all persons and 10 organizations who reported their notice of intention to 11 appear have been extended the opportunity to do so. Let the record also show that in every instance 12 13 following the presentation of oral comments and testimony that an opportunity has been extended for questioning of 14 15 the witnesses, first by the public hearing attendees and then by members of the OSHA panel. 16 17 On behalf of the Department of Labor, I wish to publicly thank all of the witnesses who gave of their 18 19 time and thought and expended their own funds to attend and contribute to this hearing. 20 Further, I want the record to reflect the 21 Department's appreciation for the promptness, preparation 22 23 and attention exhibited by the OSHA panel. To all participants, thank you for your interest in 24 25 this very important matter. 0243 This public hearing on the proposed standard to update OSHA's Standards on General Working Conditions and 2 3 Shipyard Employment is hereby adjourned. Thank you very 4 much.

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(Hearing adjourned at 4:37 p.m.)

7 8 9 CERTIFICATE STATE OF WASHINGTON)) ss. COUNTY OF KING) I, KIMBERLY MIFFLIN, Notary Public in and for the State of Washington, do hereby certify: 7 That the annexed and foregoing Transcript of the Informal Public Hearing on OSHA's Proposed Rule on General Working Conditions in Shipyard Employment was taken by me stenographically and transcribed by me; I further certify that said hearing, as above transcribed, is a full, true and accurate transcript of the informal public hearing. IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal this 7th day of November, 2008. KIMBERLY MIFFLIN CSR NO. 2349 NOTARY PUBLIC in and for the State of Washington, residing in Kent.