

**THIS CASE IS NOT A FINAL ORDER OF THE REVIEW COMMISSION AS IT IS
PENDING COMMISSION REVIEW**

Some personal identifiers have been redacted for privacy purposes

**UNITED STATES OF AMERICA
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION**

SECRETARY OF LABOR,

Complainant,

OSHRC DOCKET NO. 13-0900

v.

SUNCOR ENERGY (U.S.A) INC.,

Respondent.

Appearances:

Jennifer Casey, Esq. and Kristi Henes, Esq., Office of the Solicitor, U.S. Department of Labor, Denver, Colorado
For Complainant

Patrick Miller, Esq. and Rodney Smith, Esq., Sherman & Howard, LLC, Denver, Colorado
For Respondent

Before: Administrative Law Judge John H. Schumacher

AMENDED DECISION AND ORDER

I. Procedural history

This proceeding is before the Occupational Safety and Health Review Commission (“the Commission”) pursuant to Section 10(c) of the Occupational Safety and Health Act of 1970, 29 U.S.C. § 651 *et seq.* (“the Act”). In response to a complaint that an employee had fallen and was seriously injured, the Occupational Safety and Health Administration (“OSHA”) initiated an inspection of Suncor Energy LLC’s (“Respondent”) refinery, located at 5801 Brighton Boulevard in Commerce City, Colorado, on January 14, 2013. (Tr. 37, *Citation and Notification of Penalty*). As a result of the inspection, OSHA issued a Citation and Notification of Penalty (“Citation”) to Respondent alleging two serious violations and one other-than serious violation of the Act with a proposed total penalty of \$12,000.00. Respondent filed a timely notice of contest,

bringing this matter before the Commission. On December 2, 2013, Complainant filed a *Motion to Amend Complaint and Citations to Allege, in the Alternative, Violations of Part 1926 and/or Part 1910*, which the Court granted on January 21, 2014. Accordingly, in Citation 1, Item 2, Complainant has pled a violation of a general industry standard, and, in the alternative, a violation of a construction standard. A trial was held on October 20–24, 2014, in Denver, Colorado. Both parties have filed post-trial briefs.

II. Stipulations

The parties submitted a set of Joint Proposed Stipulations to the Court. The Stipulations are as follows:

1. Jurisdiction of this action is conferred upon the Occupational Safety and Health Review Commission by section 10(c) of the Act.
2. At all relevant times, Respondent was engaged in business affecting commerce within the meaning of section 3(3) and 3(5) of the Act and was an employer within the meaning of section 3(5) of the Act.
3. Respondent timely contested the citation at issue herein and the penalties proposed, pursuant to the provision of section 10(c) of the Act.
4. The parties stipulate to the authenticity of their exhibits, but not to the relevance or truth of the matters asserted therein.
5. In October 2012, Respondent was engaged in a Turnaround at Plant No. 2 of the Commerce City, Colorado refinery.
6. Respondent conducts Turnarounds at the Commerce City, Colorado refinery approximately every five (5) years.
7. One of the projects associated with the Fall 2012 Turnaround was the re-tubing of Heater 401.

III. Jurisdiction

As stipulated to by the parties, the Court finds that jurisdiction of this action is conferred upon the Commission by section 10(c) of the Act, 29 U.S.C. § 651 *et seq.* Further, Respondent has also stipulated that it is an employer engaged in a business and industry affecting interstate commerce within the meaning of section 3(5) of the Act, 29 U.S.C. § 652(5). *See Slingluff v. OSHRC*, 425 F.3d 861, 866–67 (10th Cir. 2005).

IV. Factual Background

A. Witnesses

Thirteen witnesses testified at trial: (1) Compliance Safety and Health Officer (“CSHO”) Robert Klostermann; (2); Michael Lynham, OSHA Region 8 Assistant Regional Administrator; (3) Thomas Stockton, Suncor Chief Operator; (4) Troy Mota, Mistras Inspector; (5) Jacob Applegate, Mistras Non-Destructive Examination (NDE) Technician; (6) Elmer Perez, Mistras Technician; (7) Kelly Fulton, Mistras Regional Safety Manager; (8) Shane Ping, Suncor Turnaround Manager; (9) William Schwartzkopf, President of Sage Consulting and Respondent’s designated expert; (10) Tye Hansen, Safway Construction Manager; (11) David Mollendor, Suncor Pipefitter and Turnaround Mechanical Coordinator; (12) Seth Calkins, Suncor Safety Team Lead; and (13) Tina Rutledge, former Investigation Coordinator and current Area Operations Cross-Functional Team Manager for Plants 2 and 3 at Suncor.

B. Respondent’s Business Operations

Respondent operates a refinery in Commerce City, Colorado and employs approximately 500 employees. (Tr. 691–692). The refinery has three separate plants, which collectively refine approximately 108,000 barrels of crude oil per day. (Tr. 368–69, 694–98; Ex. R-1). Through the

refining process, Respondent produces gasoline, asphalt, jet fuel, diesel, propane, butane, and miscellaneous byproducts. (Tr. 698).

According to Respondent, the three plants (1, 2, and 3) operate independently of one another. (Tr. 694–97). Plant 2 has 12 separate operating units. (Tr. 700–701). Each of the units performs different functions. (Tr. 369–70). The incident giving rise to this case occurred in what is known as the Reformer Unit, which uses a combination of heaters and reactors to increase the octane level of the petroleum product. (Tr. 758–59). The incident giving rise to the present case occurred in Heater 401 (H-401), which is a part of the Reformer Unit in Plant 2. (Tr. 370).

C. Turnaround Operations

Approximately every five years, the refinery performs what is known as a turnaround. (Tr. 698). A turnaround involves shutting down a significant portion of the refinery—in this case, all of Plant 2—to perform capital projects, regulatory inspections, cleaning, and maintenance. (*Id.*). Some of these projects involve construction. (*Id.*).

Due to the scope and complexity of a turnaround, Suncor dedicates an entire group, known as the Turnaround Management Group, to plan, schedule, and direct the turnaround. (Tr. 698–99). This group is managed by Shane Ping and has a full-time staff of approximately 12 employees, which include schedulers, planners, inspectors, and logistics personnel. (Tr. 699). The staff carries out a multi-step process to carry out the turnaround. These steps include gathering information about the projects to be completed, logistical planning, integration of tasks into a schedule, preparation of equipment for execution, carrying out the tasks, documenting engineering or equipment changes, and completion. (Tr. 703–708). The combination of planning and execution can take approximately 24 months to complete. (Tr. 701).

The planning phase of the turnaround that took place in the fall of 2012 was initiated in October 2010. (Tr. 702). Because Plant 2 was scheduled to be completely shut down,

Respondent characterized this turnaround as “Class 1” turnaround, which involves more than 200,000 man-hours, three or more units in the refinery, and 20% capital projects. (Tr. 700, 708-709). According to Respondent, the turnaround involved 17 different capital projects, most of which involved modifications to existing equipment. (Tr. 709–10; Ex. R-3); *see also Resp’t Br.* at 6–7 (detailing specific projects). The projects identified as “capital projects” cost Respondent \$24 million; however, the turnaround as a whole also included other projects costing an additional \$36 million.¹ (Tr. 709–711). In addition, the turnaround also involved 35 separate contractors, two shifts per day, 200 employees per shift, and approximately 250,000 field labor hours. (Tr. 712–13). Due to the large number of projects, Respondent created and adhered to detailed schedules, which identify the project, necessary steps, labor hours, and scheduled start/stop times. (Tr. 736–739; Ex. R-7).

Respondent has a maintenance department that performs routine maintenance on a day-to-day basis during normal operations. Mr. Ping testified that this typically involves activities such as instrument calibration, checking motors and circuit breakers, and oil changes. (Tr. 752). During a turnaround, the 60-man maintenance department either continues to perform maintenance on the parts of the refinery still in operation or can work in turnaround-specific jobs, such as coordinators. (Tr. 755–56). Ping also testified that, although they perform preventive maintenance during turnarounds, he estimated that only 10% of the turnaround projects are of this sort. (Tr. 757).

D. Heater 401 Project

The work performed on H-401 was one of the identified capital projects. (Tr. 42–43, 709; Ex. R-3). H-401 is one of three heaters in the Reformer Unit. (Ex. R-12 at 0065). It is a cylindrical structure that measures nearly 14 feet in diameter on the outside and almost 12 feet in

1. According to Respondent, the additional projects are also capitalized. (Tr. 710).

diameter on the inside; the bottom floor is approximately 10 feet above grade; and the top of the radiant section was approximately 47 feet above grade. (*Id.*). The three heaters are tied together at the top in what is known as the convection section. (Ex. R-2). The heater itself is powered by four gas-fueled burners, which heat the petroleum product traveling through the heater tubes. (Tr. 759–760). Heater tubes run vertically from the bottom of the heater until they reach the top, at which point they converge towards the center. (Ex. C-1; Ex. R-12). H-401 was fast-tracked as a turnaround project because inspections revealed that the vertical portions of the heater tubes, also known as the radiant section, were thinning to the point that they would fail prior to the next scheduled turnaround. (Tr. 760–61, 787–88, Ex. C-26 at 3).

According to Ping, during the planning phase of the project, Respondent determined that it needed to upgrade the metallurgy in the tubes. (Tr. 733). Prior to the turnaround, Respondent had been using tubing that was designed for temperatures of 1100-degrees Fahrenheit. (Tr. 763–64). This tubing was identified as A335 Gr P-22 (“P-22”), which indicates that it is a Chrome-Molybdenum (“chromoly”) base steel containing 2% chrome. (Tr. 764). It is considered to be one of the lowest grades of chromoly. (Tr. 765). Notwithstanding its designed operating temperature, Respondent had been operating at 1200-degrees Fahrenheit for at least a few years prior to the turnaround. (Ex. R-5 at 2). In response, Respondent contracted with Tulsa Heaters, Inc. to design, fabricate, and deliver new heater tubes constructed of P-91 grade chromoly, which is comprised of 9% chrome and is designed to withstand higher temperatures.² (Tr. 768).

The complexity of replacing the heater tubes is reflected in the personnel required to carry it out. With respect to the H-401 project alone, Respondent fielded a management team, which included a project manager, a project engineer, a project controller, a project scheduler,

2. Contrary to Complainant’s assertion that this upgrade was only based on the improvements in technology that occur with the passage of time, Respondent points out that P-22 chromoly tubes are still available on the market. (Tr. 766). Further, the Court does not glean much from Tulsa Heaters’ characterization of the tubes as “replacement in-kind” other than that they were compatible with the existing system. (Ex. R-4).

quality control, a field coordinator, multiple engineers, a project estimator, a turnaround planner, a turnaround coordinator, a metallurgist, and an inspector. (Tr. 769–770; Ex. R-5). In addition to Tulsa Heaters, Respondent contracted with RECON Refractory and Construction, Inc. to weld the tubes; Mistras Group to perform examinations of the welds performed by RECON; Winslow Crane to aid in the removal and insertion of the tubes into the heater; Safway to construct scaffolding; Superheat to perform heat treatment for specialized welding required by P-91 tubes; Western Refractory to remove and replace refractory within H-401; RSC to provide medium-sized tools; and Total Safety to provide hole watches and general safety support for confined space entry into H-401. (Tr. 715–723; 774).

E. Safe Work Practices and Policies

The parties agree that H-401 is a permit-required confined space. Accordingly, Suncor required all employees and contractors entering into the space to comply with its confined space program.³ (Tr. 89–90, 382–84, 1185–86; Ex. C-2, Suncor Confined Space Entry Safe Work Practice (“SWP”)). Pursuant to this program, Respondent’s operations department was responsible for prepping the space for entry and for issuing confined space permits.⁴ (Tr. 385–95, Ex. C-2). According to Stockton, the confined space was prepared by ensuring the removal of hazardous substances from the pipes and “blinding” them to prevent additional substances from entering the confined space, isolating energy sources, and performing lockout/tagout. (Tr. 388–389). As permit issuer, Respondent’s confined space supervisor was responsible for knowing the hazards associated with the specific confined space; ensuring that the permit was correctly filled out; and terminating the permit at the end of entry operations. (Tr. 389–90, Ex. C-2). That said,

3. Respondent implements a contractor vetting program to ensure it hires safety conscious contractors. (Tr. 1015). The employees of the contractors that are hired are required to go through orientation training, which includes basic refinery safety principles and site-specific training on issues such as fall protection, scaffolding, and confined space entry. (Tr. 1020–21; Exs. R-36, R-37).

4. Respondent does not use a specific confined space permit; rather, it uses its own Safe Work Permit, which can be used for confined space entry.

Respondent's confined space program also requires contractors to "inform operations of any hazards confronted or created in permitted confined spaces, either through a briefing before or during the entry operations." (Ex. C-2 at 4).

In order to enter into H-401, a contractor communicates with Suncor operators to "jointly fill out the sections of the permit relating to job preparation and special personal protective equipment required for the job." (Ex. R-33 at 6; Ex. C-8). The permit itself can be initiated by the contractor entering information into the computer system, or by the operator doing so on the basis of the information received from the contractor. (Tr. 1072–1074). Once submitted, the operator determines the conditions associated with the work to fill out the portions of the permit dealing with equipment and site prep. (*Id.*).

Because the lion's share of the work in H-401 was performed from a scaffold, contractors were also expected to comply with Respondent's policies on scaffolds and fall protection. (Exs. C-3, C-5). As a general rule, Respondent's policy required fall protection for work performed at elevations of four feet and above that is not protected by guardrails. (Ex. C-3 at 8). That policy had a strict prohibition against tying off to the scaffold. (Ex. C-3 at 7; C-5 at 13). In H-401, however, there were no approved tie-off points on the structure itself, thus Respondent had to modify its fall protection plan for the turnaround to allow for tie-off points on the scaffold. (Tr. 1055–1062). These alternative tie-off locations were supposed to be identified with a white tag that would be appended to the existing scaffold tag. (Tr. 1059–60; Ex. C-4).

In order to address the condition of the scaffold system, Respondent utilizes what are known as scaffold tags. (Ex. C-5, C-6). These tags contain information regarding when the scaffold was built, who built it, the competent person's signature and date, the load-bearing characteristics, and inspection records. (Ex. C-5 at 14–15). Tags are color-coded: green means no problems and no fall protection required; yellow tags indicate that the scaffold is incomplete

in some respect, as in guardrails; and red tags indicate that the scaffold should not be used. (*Id.* at 15). One of the spaces on the yellow tag requires the drafter to indicate whether the guardrails are complete and another provides a space to indicate what specific hazards or deficiencies are present on the scaffold. (Ex. C-6). The tag also has a checkbox to indicate whether a harness is required—according to Stockton, Mollendor, and Calkins, “harness required” is the equivalent of “fall protection”. (Tr. 433, 999–100, 1051). Although Respondent provided the tags, it was the obligation of Safway to complete the information on the tag. (Tr. 1051; Ex. C-6).

Throughout the turnaround, various modifications had to be made to the scaffold. (Ex. C-31). These modification requests were submitted to David Mollendor, Respondent’s mechanical coordinator for the turnaround. (Tr. 992–96). Once he received a request—typically from a contractor—he would contact Safway to schedule and carry out the modification.⁵ (Tr. 993–94). Mollendor testified that he would not ask the requestor, whether Safway or a contractor, what the nature of the modifications were; instead, he only communicated who had made the request. (Tr. 994). Mollendor claimed that this was due, in no small part, to the fact that he was responsible for carrying out such requests multiple times a day throughout the turnaround. (Tr. 997). The change order gave no indication as to the nature of the modifications made by Safway. (Tr. 996–97; Ex. C-31). If Safway modified the scaffold such that fall protection was required, it was supposed to notify Respondent of the change so that the white-tag procedure discussed above could be implemented. (Ex. C-4).

The foregoing safe work practices and policies were relayed to contractor employees and supervisors through training programs, regular safety meetings, and the distribution of materials related thereto. (Tr. 1020–21, 1037–56; Exs. C-17 to C-22). In some instances, training was coupled with testing materials to ensure that they were understood. (Tr. 1042, 1045).

5. In some instances, however, the contractor would submit a modification request to Safway, who would then communicate with Mollendor. (Tr. 998).

Respondent's Safety Department also performed safety audits during the turnaround, which were intended to identify gaps in knowledge or execution of the permit process. (Tr. 1086–88; Ex. R-24, R-25). The scope of these audits, however, did not include an actual inspection of the work inside H-401. (Tr. 1109, 1138–40).

F. Scaffolding inside H-401

The space inside H-401 was accessed in two ways. Employees entering the space used a ladder that accessed the lower part of the heater. (Ex. C-1 at 1). In order to take out the old tubes and insert the new ones, Respondent hired Recon to remove a three-foot diameter hole in the roof. (Tr. 800–801). The tubes were flown in and out of H-401 using a crane provided by Winslow Crane. (Tr. 800).

Safway was hired to install scaffolding inside H-401 so that other contractors could access the tubes for welding, non-destructive examination (NDE), and heat treatment. (Ex. C-1 at 22–23). The scaffold was erected on October 17, 2012. (Ex. C-6). Due to the shape of the heater, Safway installed a three-tier scaffold, with outrigger platforms located approximately 20 inches above the top tier and approximately 25 feet above the heater floor. (Tr. 45–46; Ex. C-1). This platform was designed to provide contractors with more direct access to the tubes, but a three-foot gap remained between the outrigger platform and the heater tubes, which run along the wall of H-401. (Tr. 45; Ex. C-1). The consensus was that the entire scaffold had a complete set of guardrails as of the date that the scaffold was erected. (Tr. 429, 944).

According to Respondent's records, Safway was issued six individual permits to modify the scaffold inside H-401. (Ex. C-16). Neither the permits nor the change orders indicate that guardrails had been removed or when; however, Tye Hansen testified that a Safway crew removed some planks on the scaffold to permit the insertion of new heater tubes, which would have required removal of guardrails. (Tr. 950–51; Ex. C-24). Unfortunately, no one could testify

as to when exactly the guardrails were removed or which contractor had made the request. The yellow scaffold tag attached to the entrance of H-401 indicated that Safway had inspected the scaffold on October 26 and October 28, 2012. (Ex. C-6). The tag was labeled “Incomplete Scaffold”, noted that guardrails were not complete, and indicated that a harness was required. (Ex. C-6). In the section of the tag for identifying deficiencies, Safway only noted that the access gate was missing. (*Id.*). Even though the tag indicated that guardrails were incomplete, there were no white tags on the scaffold to indicate an approved tie-off point. (Tr. 1121).

G. The Accident

On October 29, 2012, Mistras was scheduled to perform examinations of the welds done by Recon. (Tr. 451–52). Mistras’ turnaround coordinator, Elmer Perez, initiated a safe work permit, which was approved by Tom Stockton, who served as Respondent’s turnaround coordinator and permit issuer. (Tr. 364, 367–68, 371, 569, 580; Ex. C-8 at 1). The permit was requested to allow two Mistras employees, Troy Mota and [redacted], access to H-401 to examine the welds performed by RECON. (Tr. 512, 580; Ex. C-8 at 1). Jacob Applegate, another Mistras employee, received the permit from Mr. Stockton. (Tr. 513).

As previously noted, portions of the permit were filled out by Mr. Perez—according to Stockton, all of the sections above “Equipment Preparation and Condition” were the responsibility of the contractor. (Tr. 396–97). The permit also has a section entitled “Rescue/Fall Protection”, which includes six check boxes: body harness, lifeline, yo-yo, rescue device, other, and N/A, for “not applicable”. (Ex. C-8). The N/A box had been checked on Mistras’ permit. (*Id.*). Stockton testified that the form was prepopulated in the system that way and that he made no attempt to correct the entry because he said that he had no information to indicate that fall protection was required. (Tr. 429). Based on the information available to him at the time, Stockton testified he only would have checked “body harness”, which, for purposes of confined

spaces, means a harness for rescue. (Tr. 408, 429). He believed, as did the hole watch⁶ hired by Respondent, that the scaffolding was green-tagged. (Tr. 429; Ex. R-34 at 00034; C-7 at 9).

Once Applegate had retrieved the permit, the Mistras crew performed a job safety analysis (JSA), which identified a potential fall hazard from an elevated surface. (Ex. C-19). The JSA also stated the need for fall protection and a harness. (*Id.*). Mota and [redacted] entered H-401 wearing a harness, but did not use a lanyard, yo-yo, or any other fall-restraining device. (Tr. 482). Applegate served as primary hole watch due to the use of radiation during the non-destructive examination process. (Tr. 501–504). Applegate did not recall any specifics of the conversation he had with Mota and [redacted] prior to their entry into H-401.

According to Mota and Applegate, they understood the yellow tag’s “harness required” requirement to mean a harness for rescue purposes, because nearly all confined space entries require a harness. (Tr. 479, 521). In support of this proposition, Complainant notes that the permit indicated that fall protection was “not applicable”, that it only identified a missing access gate as a deficiency, and that no white tags were present on the scaffold. (Ex. C-6). Applegate also testified that the fall hazard/fall protection information in the JSA referred only to the general hazard of working at elevation and that guardrails were considered a form of fall protection. (Tr. 536–37).

After Mota and [redacted] entered H-401, [redacted] inspected the welds from the outrigger platform and Mota assisted him from a lower level in order to reduce his exposure to radiation. (Tr. 455–56). Around 9:55 a.m. on October 29, [redacted] fell through the gap in the scaffolding and the wall of the heater and landed on the ground 25 feet below. (Tr. 87–88; Ex. C-7 at 5). As a result of the fall, [redacted] is now paraplegic. (*Id.*).

6. Respondent hired a contractor to perform hole watch services for confined space entry. (Ex C-7 at 9).

H. Post-Accident Inspections

As noted earlier, Complainant initiated an inspection of the refinery in response to a fall protection complaint and concluded that Respondent violated the Act in multiple respects. (Ex. C-9). In addition to Complainant's inspection, Respondent and Mistras also performed their own investigations of the accident. (Tr. 628, 1167; Ex. C-7, C-21).

Kelly Fulton, Mistras' Mountain Region Safety Manager, performed an inspection on behalf of Mistras. In his report, he noted that the Mistras JSA identified a potential fall hazard and also noted that "[i]ndividuals performing work did not stop the job due to unsafe conditions or unsafe scaffolding." (Ex. C-21 at 2). That said, Fulton also testified that the yellow scaffold tag should have indicated "100% tie-off" and that, as it was written, the yellow tag did not necessarily inform entrants that a lanyard or other fall-restraining device was necessary. (Tr. 648-49).

Tina Rutledge, who worked as an inspector for Respondent at the time of the accident, concluded that the root cause of the accident was a product of human error; namely, [redacted]'s failure to follow procedures. (Tr. 1172; Ex. C-7). She noted, "The contractor did not tie off because he chose not to follow or heed the caution and direction of the yellow tag on the scaffold on the day of the incident." (Ex. C-7 at 2, 8). Notwithstanding the training Mota and [redacted] received, Rutledge found that they failed to follow Respondent's or their own fall protection and scaffolding rules. (Ex. C-7). In addition to her "root cause" analysis, Rutledge also found that: (1) there were "inconsistencies in the understanding of the actual working conditions of the scaffold in the heater"; (2) detailed records of H-401 scaffold modifications were not kept; (3) there was insufficient notification to the appropriate individuals that the scaffold had been modified and required different PPE; (4) there were discrepancies in the confined space entry permit issued for H-401; and (5) "[t]he parties involved in issuing, reviewing and accepting the

permit did not engaged in an effective dialogue to ensure all identified hazards were documented on the permit.” (Ex. C-7 at 2–3).

V. Applicable Law

To establish a *prima facie* violation of Section 5(a)(2) of the Act, Complainant must prove by a preponderance of the evidence that: (1) the standard applies to the cited condition; (2) the terms of the standard were violated; (3) one or more of the employees had access to the cited condition; and (4) the employer knew or, with the exercise of reasonable diligence, could have known, of the violative condition. *Ormet Corporation*, 14 BNA OSHC 2134 (No. 85-0531, 1991).

VI. Discussion

A. Construction Versus Maintenance

As noted at the beginning of this Decision, Complainant requested and received leave to amend his *Complaint* to allege an alternative basis for the violation described in Citation 1, Item 2. The original Citation Item cites 29 C.F.R. § 1910.146(d)(4)(iv). Part 1910 standards govern general industry, including, as is germane to the present case, so-called maintenance activities. *See Gulf States Utility Co.*, 12 BNA OSHC 1544, 1546 (No. 82-807, 1985) (quoting dictionary definition of ‘maintenance’ as “[t]he work of keeping something in proper condition”). The amended Citation Item cites 29 C.F.R. § 1926.451(g)(1). Part 1926 standards govern construction work, which is defined as, “work for construction, alteration, and/or repair, including painting and decorating.” 29 C.F.R. § 1910.12(b). *See Jimerson Underground*, 21 BNA OSHC 1459, 2006 WL 741753 at *2 (No. 04-0970, 2006) (“Work that involves replacing existing equipment is considered ‘work for . . . alteration’ and, therefore ‘construction work,’ under this section.” (quoting *United Telephone Co. of the Carolinas*, 4 BNA OSHC 1644, 1646 (No. 4210, 1976))). *But see Pub. Utils. Maint., Inc. v. Sec’y of Labor*, 417 Fed. Appx. 58 (2d

Cir. 2011) (“[W]hile painting performed as a part of a construction project would be considered construction, painting performed as maintenance . . . would not be.”); *Gulf States Utility Co.*, 12 BNA OSHC 1544, 1546 (No. 82-807, 1985) (holding that replacement of damaged insulators, although a “repair”, constituted maintenance governed by Part 1910). Respondent contends that the plain language of 1910.12(b), its regulatory history, and Complainant’s prior interpretations all support the determination that the work on H-401 was construction. Complainant, however, argues that the Court should adopt its reasonable interpretation of the standard, which would characterize the work on H-401 as maintenance. *See Unarco Comm. Prods.*, 16 BNA OSHC 1499 (No. 89-1555, 1993) (holding that Court may defer to agency’s reasonable interpretation of standard when plain meaning and regulatory history do not clarify standard’s applicability).

According to *Solis v. Summit Contractors, Inc.*, “Our first step in interpreting a statute is to determine whether the language at issue has a plain and unambiguous meaning with regard to the particular dispute in the case.” 558 F.3d 815, 823 (8th Cir. 2009) (citing *Robinson v. Shell Oil Co.*, 519 U.S. 337, 340 (1997)). The particular dispute in this case is whether the removal and replacement of heater tubes in H-401 constitutes maintenance or construction. As noted above, the work on H-401 was one part of a larger project involving \$60 million in capital improvements to Plant 2 of the Suncor refinery. The work on H-401 involved: (1) a precise timeline for the work, expected to take 3–4 weeks, which was developed months in advance of the actual project; (2) specially ordered engineered steel, chro-moly tubes; (3) hiring multiple contractors; (4) removing a sizeable portion of the roof to remove and install tubes; (5) use cutting torches to remove existing tubes in their entirety; (6) removing refractory; (7) using a crane to both remove old tubes and insert new tubes; (8) installing new thermocouples; (9) upgrading the metallurgy of the pipes; and (10) utilizing specialized welding techniques for upgraded piping.

Respondent focuses its argument on the term “alteration”, which *Merriam-Webster* defines as “mak[ing] different without changing into something else.” *See Resp’t Br.* at 43 (citing WEBSTER, n.d. Web. 20 Nov. 2014 (www.merriam-webster.com/dictionary/alter)); *see also Jesco, Inc.*, 24 BNA OSHC 1076 (No. 10-0265, 2013) (citing favorably to dictionary in plain meaning analysis). Indeed, the Commission has found that a particular type of work is construction based on this plain reading of the standard. *See Jimerson Underground*, 21 BNA OSHC 1459, 2006 WL 741753 at *2 (replacing existing sewer line); *Ryder Transp. Svcs.*, 2014 O.S.H.D. (CCH) ¶ 33,412, 2014 WL 5025979 at *2 (No. 10-0551, 2014) (installing new electrical equipment); *United Telephone Co. of the Carolinas*, 4 BNA OSHC 1644, 1646 (No. 44210, 1976) (removal and erection of telephone poles and transferring of lines). Merely replacing something, however, does not necessarily constitute construction. *See Gulf States Utility Co.*, 12 BNA OSHC at 1546 (replacing damaged porcelain insulators with epoxy insulators is maintenance because “lines were simply maintained in the same condition they were before the insulators were damaged”).

Based on the foregoing plain language interpretation, Respondent contends that the upgrade from P22 to P91 chro-moly tubes, the upgraded thermocouples, and the modifications to the body of the heater during the turnaround constituted an alteration. Complainant, however, argues that H-401 does not perform any differently than it did prior to the turnaround. The idea behind the upgraded tubes was to allow for a higher operating temperature—1200-degrees Fahrenheit. (Ex. C-26). The lower grade tubes, however, had been operating at that higher temperature for a few years prior to the turnaround. (Ex. C-26 at 3). In response, Respondent argues that it risked failure by running H-401 at higher temperatures, which is no longer the case now that it has installed the upgraded heater tubes. Further, Respondents points out that H-401 was significantly altered to accommodate the work—approximately one-third of the roof was

removed, *all* of the tubes were removed and replaced, and a scaffold was installed inside of it to facilitate the removal and installation of the tubes.

The Court agrees with Respondent. The Commission has consistently applied the plain meaning of the term “alteration” in determining whether a particular type of work is construction. *See Jimerson*, 21 BNA OSHC 1459; *Ryder*, 2014 O.S.H.D. (CCH) ¶ 33,412; *Active Oil Svc., Inc.*, 21 BNA OSHC 1184 (No. 00-0553, 2005) (holding that conversion from oil to gas heat was an alteration of temple and surrounding property). This is not a case where an employer was merely installing a liner or sleeve into an existing system to prevent a breakdown of the system itself. *See Public Service Co. of Colorado d/b/a Xcel Energy*, Nos. 08-0634 & 08-0635. Rather, Respondent removed the physical tubes, which are a sizeable and integral part of the refining process and replaced them with tubes of higher quality, which were designed to withstand higher operating temperatures. (Tr. 237).⁷ Coincident with that change, Respondent also installed new thermocouples to accommodate the increase. This process involved removing a significant portion of the heater’s roof, utilizing a crane to remove and insert the tubes into the heater, and constructing a three-tier scaffold within the heater to provide access to the welders—who had to use specialized welding techniques for the upgrade in steel—and the NDE technicians, who inspected the welds.

Although H-401 still performs the same function as it did prior to the turnaround, it was not “simply maintained in the same condition” *See Gulf States Utility Co.*, 12 BNA OSHC at 1546. Respondent made a conscious decision to upgrade the metallurgy of the tubes in order to accommodate the higher temperatures at which the heater was running. Whether Respondent should have been operating the old system at higher-than-recommended temperatures is not before the Court, but the fact that it did so does not compel the conclusion that the installation of

7. CSHO Klostermann agreed that the heater tubes were a major component of the heater.

higher-quality tubes was not an alteration. Rather, but for the upgrade in tubes, the system would likely break down or fail much sooner if the replacement was truly one-for-one. (Tr. 765–68). In other words, simply because the system was operating at the higher temperature prior to the turnaround does not, of itself, mean that the metallurgical- and component-related upgrades were not alterations. As such, the Court finds that the work on H-401 was construction.

Notwithstanding the foregoing conclusion, and as an alternative to it, the Court will also address the remaining two steps in the regulatory interpretation hierarchy—regulatory history and the reasonableness of Complainant’s interpretation. As noted above, there is a fair amount of crossover in the terms used to define construction. For example, not all construction work involves an alteration. *See Brand Energy Sol’ns LLC*, 2015 WL 1957888 (No. 09-1048, 2015) (agreeing with Secretary that “whether a structure is altered during work project is not necessarily determinative”). Likewise, not all work that maintains the structure or equipment in normal operating condition is maintenance. *United Telephone*, 4 BNA OSHC at 1646 (holding that telephone pole replacement is construction). Regardless of which interpretive tool is applied, however, the Court still finds that the work performed during the turnaround of Plant 2 was construction.

Contrary to Respondent’s analysis, the Court does not find that the applicable regulatory history provides any additional insight into the interpretation of 1910.12(b), at least as it is applied to this set of facts. OSHA’s Part 1926 standards were adopted, in part, from the Contract Work Hours and Safety Standards Act, 40 U.S.C. § 3704 (“CSA”), which covered certain contracts involving the Federal Government that involved “construction, alteration, and repair, including painting and decorating.” 40 U.S.C. § 3704(a). OSHA utilized this terminology when it defined “construction work.” *See* 29 C.F.R. § 1910.12(b). Section 1910.12(b) further directs regulated parties to 29 C.F.R. § 1926.13, which provides:

The terms *construction, alteration, and repair* used in section 107 of the [Construction Safety] Act are also used in section 1 of the Davis-Bacon Act (40 U.S.C. 276a), providing minimum wage protection on Federal construction contracts, and section 1 of the Miller Act (40 U.S.C. 270a), providing performance and payment bond protection on Federal construction contracts. . . . The use of the same or identical terms in these statutes which apply concurrently with section 107 of the [Construction Safety] Act have considerable precedential value in ascertaining the coverage of section 107.

29 C.F.R. § 1926.13(a); *see also* 29 C.F.R. 1910.12(b). The Davis-Bacon Act (“DBA”) uses roughly the same definition of “construction” as the one provided in 29 C.F.R. § 1910.12(b). It states:

The terms construction, prosecution, completion, or repair mean . . . [a]ll types of work done on a particular building or work at the site thereof, including work at a facility which is deemed a part of the site of the work within the meaning of paragraph (l) of this section . . . , including without limitation . . . altering, remodeling, installation on the site of the work of items fabricated off-site; painting and decorating

See 29 C.F.R. § 5.2(j)(1)(i)–(ii).

Part of the problem with using the DBA to define construction in the context of the OSH Act is that the OSH Act and the DBA have different aims. “The language of the [Davis-Bacon] Act and its legislative history plainly show that it was . . . enacted to . . . protect . . . employees from substandard earnings by fixing a floor under wages on Government projects.” *United States v. Binghamton Const. Co.*, 347 U.S. 171, 177 (1954). The OSH Act, on the other hand, was enacted to assure safe and healthful working conditions for working men and women by enacting standards suited for that purpose. *See generally* 29 U.S.C. § 651. “In other words, the reason for characterizing a particular industry, i.e., as construction versus maintenance, is to ensure that employees receive adequate protection against safety and health hazards that may be present in their particular profession.” *Public Svc. Co.*, Nos. 08-0634 & 08-0635 (citing different Parts of 29 C.F.R. that govern industries such as construction, marine, and agriculture).

As discussed by Judge Augustine in *Public Service*, under the DBA, “the primary considerations are the location and object of the work and the parties to the contract.” *Id.* This is confirmed by the structure of the DBA, which defines the terms “construction, prosecution, completion, or repair” to mean “[a]ll types of work done on a particular building or work at the site thereof . . .” *Id.* § 5.2(j)(1) (emphasis added). These are not the primary concerns of the OSH Act. As such, courts have held that while statutes such as the DBA have considerable precedential value, they are not determinative. *See CH2M Hill, Inc. v. Herman*, 192 F.3d 711, 719 (citing 29 C.F.R. §§ 1910.11(b) & .12(c) (“Thus, while the Secretary may have referenced other federal statutes as having precedential value, she clearly did not adopt the definitions of these statutes and their regulations in their entirety.”); *Underhill Constr. Corp. v. Sec’y of Labor and OSHRC*, 526 F.2d 53 (1975). Although there may be instances where the regulatory history aids in the interpretation of the term “construction”, the Court agrees with Judge Augustine that such is not the case here.

If the applicability of a regulatory provision cannot be determined with resort to the plain meaning, legislative history, or related provisions, the Court may defer to a reasonable interpretation developed by the agency charged with administering the challenged statute or regulation. *See Unarco Comm. Prods.*, 16 BNA OSHC 1499 (No. 89-1555, 1993). In assessing the reasonableness of the Complainant’s interpretation, the Court must consider whether the interpretation “sensibly conforms to the purpose and wording of the regulations.” *Martin v. OSHRC (CF&I Steel)*, 499 U.S. 144, 151 (1991) (internal citations omitted). This evaluation takes into account whether Complainant has consistently applied the interpretation and whether the regulated parties have been provided with adequate notice. *Union Tank Car Co.*, 18 BNA OSHC 1067, 1069 (citing *CF&I Steel*, 499 U.S. at 150, 157–58). “The weight of such [an interpretation] in a particular case will depend on the thoroughness evident in its consideration,

the validity of its reasoning, its consistency with earlier and later pronouncements, and all those factors which give it power to persuade, if lacking the power to control.” *Simpson, Gumpertz & Heger, Inc.*, 15 BNA OSHC 1851 (No. 89-1300, 1992) (citing *General Elec. Co. v. Gilbert*, 429 U.S. 125, 142 (1976) (quoting *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944))).

Based on Complainant’s interpretation of the standard, he concludes that the facts establish that the work on H-401 was construction. This conclusion is premised on two factors: (1) the nature of the work; and (2) the context in which the work occurs. Citing to *Gulf States*, Complainant argues that the work performed on H-401 was to maintain proper functioning of the heater. *See Gulf States*, 12 BNA OSHC at 1546. Complainant also contends that the turnaround itself was nothing more than a large-scale event to maintain the refinery itself in proper working order, and, as such, any events taking place during the turnaround would be considered maintenance. *See Compl’t Br.* at 16–17 (citing *Cenex Refinery*, 14 BNA OSHC 1727 (No. 89-1350, 1990) (ALJ)). Respondent, on the other hand, claims that Complainant’s interpretation is unreasonable based, in part, on its inconsistency with prior agency interpretations of “construction” versus “maintenance”. The Court agrees with Respondent.

Starting in 1983, Complainant began issuing letters of interpretation (“LOI”), official memoranda, and directives discussing the distinction between construction and maintenance. *See John B. Miles, Jr.*, Letter of Interpretation, Oct. 25, 1983 (“Miles LOI”). That first letter only reiterated the definition of construction found in 1910.12(b); however, in subsequent iterations, Complainant has added additional factors to consider. In 1994, Deputy Assistant Secretary James Stanley issued a more comprehensive Memorandum addressing the definition of construction versus maintenance. (Ex. C-10, James W. Stanley, Policy Memorandum, August 11, 1994 (“Stanley Memo”)). As to construction, Mr. Stanley wrote that “construction work is not limited to new construction. It includes the repair of existing facilities. The replacement of

structures and their components is also considered construction work.” *Id.* As to maintenance, Mr. Stanley noted that there is no specified definition in the regulations and opted for a definition taken from the directive on confined spaces—“making or keeping a structure, fixture or foundation (substrates) in proper condition in a routine, scheduled, or anticipated fashion.” *Id.* That memorandum also stated that “determinations of whether a contractor is engaged in maintenance operations rather than construction activities must be made on a case-by-case basis, taking into account all information available at the site.” *Id.*

In 1999, Complainant issued two LOI that address two additional factors to consider when making the “case-by-case” determination of whether a particular activity is construction or maintenance. (Ex. C-12, Randall A. Tindell, Letter of Interpretation, February 1, 1999 (“Tindell LOI”); Ex. C-13, J. Nigel Ellis, Letter of Interpretation, May 11, 1999 (“Ellis LOI”). The Tindell LOI reiterates the Stanley Memorandum’s definition of “maintenance” and also introduces a new factor—size. In that respect, the LOI states that size is a factor “if, because of its size, the process of removal and replacement involves significantly altering the equipment that the valve is in.” (Ex. C-12). To illustrate, the LOI discusses two similar scenarios that, based on their facts, could be characterized as maintenance or construction. In the first scenario, the LOI concludes that the removal and replacement of a household water shut-off valve is maintenance because it can be done “without making major alterations to the heating system.” *Id.* In the second scenario, the LOI concludes that the removal and replacement of a 36-inch valve, which is one of three major components in a processing system and requires 50 percent of all parts in the system to be cut, moved, altered or replaced, would constitute construction. *Id.* The Ellis LOI, on the other hand, further defines maintenance as being an “anticipated, routine, and periodic event” to maintain structures and equipment in their original condition” and further notes that longer periods of time do not necessarily alter that determination. (Ex. C-13).

The most recent interpretive document issued by Complainant was a letter sent to a Raymond V. Knobbs from the Directorate of Construction. (Ex. C-14, Raymond V. Knobbs, Letter of Interpretation, November 18, 2003 (“Knobbs LOI”). This letter is the most comprehensive statement from Complainant regarding the maintenance-versus-construction distinction. Of particular note are the following passages:

- “Construction work is not limited to new construction, but *can include the repair of existing facilities or the replacement of structures and their components*. For example, the replacement of one utility pole with a new, identical pole would be maintenance; however, if it were replaced with an improved pole or equipment, it would be considered construction.”
- “In addition to the concept of one-for-one replacement versus improvement, the scale and complexity of the project are relevant. This takes into consideration concepts such as *the amount of time and material required to complete the job*.”
- “[I]f a steel beam in a building had deteriorated and was to be replaced by a new, but identical beam, the project would be considered a construction repair rather than maintenance *because of the replacement project’s scale and complexity*.”
- “Replacement of a section of limestone cladding on a building, though not necessarily a large project in terms of scale, would typically be considered construction because *it is a complex task in view of the steps involved and tools and equipment needed to do the work*.”
- “Note that, though the work may itself occur during a scheduled “maintenance outage,” *this alone is not enough to qualify it as maintenance*. For example, it is possible that the work may be construction, but scheduled during a maintenance outage to minimize lost productivity.”

(Ex. C-14) (emphasis added).

As noted by the Commission, the deference due to Complainant’s interpretation depends, in part, on its consistency with other agency interpretations on the same topic and the validity of its reasoning. *See Simpson*, 15 BNA OSHC 1851. The Court finds that Complainant’s interpretation in this case is inconsistent with published guidance documents and that his rationale is flawed.

As to the nature of the work on H-401, Complainant overemphasizes the end result—keeping the heater in proper condition—and discounts the work that was actually performed. Indeed, the end result of the work was a fully-functioning heater, same as before the work began; however, as noted in the Knobbs LOI, construction can include the repair of existing facilities or the replacement of structures and their components, as was the case here. Likewise, though context is important to this determination, Complainant has stated that even though work occurs during a scheduled maintenance outage, “this alone is not enough to qualify it as maintenance.” Nevertheless, Complainant urges the Court to not only characterize the entire turnaround project as maintenance but to also conclude, contrary to its own guidance, that any activities taking place during the turnaround are also maintenance. *Compl’t Br.* at 16–17.

In support of its interpretation, Complainant cites favorably to Commission case law, which holds that: (1) work that would not normally be considered construction will be characterized as construction if it is integral to a construction project; and (2) work that would be considered construction work in isolation will not be considered construction work if it is incidental to a non-construction project. *See Compl’t Br.* at 16 (citing *Active Oil*, 21 BNA OSHC 1184; *B.J. Hughes*, 10 BNA OSHC 1545, 1547, (No. 76-2165, 1982); *Royal Logging*, 7 BNA OSHC 1744, 1750 (No. 15169, 1979)). The refurbishment of H-401 was only one part of a \$60 million dollar capital improvement project scheduled to take place during the turnaround. Whether regarded as an individual activity or as part of a larger project, the work on H-401 would still be construction according to the interpretive documents published by Complainant.

Complainant’s interpretation in this case also seems to disregard, or at the very least minimize, the importance of scale and complexity, two factors which feature prominently in both the Tindell and Knobbs LOI. It is also at odds with the interpretation that he recently proffered before the Commission. *See Brand Energy Sol’ns LLC*, 2015 WL 1957888 at *2. In *Brand*

Energy, Complainant “point[ed] out that whether a structure is altered during a work project is not necessarily determinative.” *Id.* Instead, Complainant, citing the interpretive documents describe above, urged the Commission to also consider the scale and complexity of the project and whether it was a routine activity. *Id.* The work at issue in *Brand Energy* involved installing a 16-level scaffold around the outside of a crude oil distillation column, which was a 220-foot tall, cylindrical structure, and repairing and replacing the insulation damaged by a storm. *Id.* The Commission agreed with Complainant’s assertion that the work was construction and cited the following factors in support: (1) it took eleven workers three weeks to install half of the scaffolding required to complete the project, thus supporting the conclusion that the project was large in scale and complex in implementation; (2) the work was not merely preventive, but involved repairing damage and installing new insulation; (3) the work was scheduled in anticipation of the need for routine upkeep. *Id.* at 3. Complainant’s attempts to deemphasize its prior interpretive documents by saying that they “lack the force and effect of law even for the examples they address” and “provide no basis for rejecting the interpretation embodied in the citation” ring hollow when compared to its previous attempts to assert the importance of those documents. *Compl’t Br.* at 23; *see also Ryder*, 2014 WL 5025979 at n.3 (noting Secretary has previously indicated relevance of scale and complexity and finding that length of time work took, coupled with nature of tasks, supported finding that work was construction).

At trial, CSHO Klostermann did not discuss any of the foregoing interpretive documents and instead focused solely on CPL 2.100, which addresses the construction-versus-maintenance distinction in the context of confined spaces. (Ex. C-11). Specifically, it characterizes the refurbishing of existing equipment as maintenance. (*Id.*). It also provides examples of so-called maintenance activities, including the patching or total removal of tank lining and its replacement. (*Id.*). CSHO Klostermann equated the removal and relining of the tank with the removal and

reinstallation of the heater tubes in H-401. (Tr. 166). The Court finds CSHO Klostermann’s assessment unpersuasive. Although the CPL characterizes refurbishment as maintenance, it also states that “[t]he reconfiguration of space or the installation of substantially new equipment (as for a process change) is usually construction.” (Ex. C-11). In lieu of relying on the most up-to-date and comprehensive interpretations, which entertain a more holistic approach to the analysis, Klostermann focused almost exclusively on the concept of refurbishment. The problem, however, is that a tank liner and a series of conduits for transporting refined petroleum are only analogous insofar as they can be found inside a piece of equipment.⁸ The heater tubes in H-401 are the sole means by which petroleum product is transported through the heater. A liner, on the other hand, is not integral to the function of a tank or pipe; rather, its purpose is to prevent oxidation and other chemical processes that reduce the useful life of the equipment it protects. All of the examples in the CPL are of this sort—relining a tank, relining a furnace with refractory, tuckpointing and individual brick placement in a manhole, and repainting as part of scheduled program to maintain a system—and none of them address the removal and replacement of equipment required to make that system function.

Region 8’s Assistant Regional Administrator, Mike Lynham, also focused on the end result of the work, as opposed to the work itself.⁹ Specifically, he concluded that the work was maintenance because the function of the heater was the same both before and after the turnaround. (Tr. 33, 332). Further, in response to questions regarding the similarity of the repairs on H-401 and the examples of construction found in the Knobbs LOI, Lynham also testified:

Now, if you remove a significant structural component of a piece of equipment then, in fact, yes, I would agree with you even though it’s a one-to-one

8. Further, the Stanley Memo also states that the definition in CPL 2.100 is not dispositive and that the determination must be made on a case-by-case basis. (Ex. C-10).

9. This is best illustrated in the following passage: “And in the end, you look at what was the end game? What was the goal of this particular project? Again, it was the refurbishment of heater 401 to restore it to its regular, normal operating parameters so the entire reformer unit could function as designed.” (Tr. 349). Thus, rather than assessing the “nature of the work”, Lynham and Klostermann were focused on its result. *Sec’y Br.* at 16.

replacement identical beam, that would e [sic] construction activity. Because when you look at the overall alteration of the space, you've taken a major component, a bigger component. It affects the structure and stability of that piece of equipment and replaced it with a new one. That's construction activity. That's going beyond refurbishment of that type of equipment.

(Tr. 341–42). Even if the Court grants some credence to Lynham's assertion regarding function—which is only partly useful in light of the construction examples in the Knobbs letter, the end results of which did not change the function of the equipment or structure being repaired—the foregoing statement is wholly inconsistent with his conclusion that the removal and replacement of the heater tubes is maintenance. The heater tubes in H-401 were a significant structural, or at the least functional, component of the heater. To suggest that the removal and replacement of those tubes is more akin to respraying a liner in a tank or pipe than to the replacement of a 36-inch valve, limestone cladding, or a structural steel beam strikes the Court as unreasonable at best, and disingenuous at worst. (Ex. C-14, Knobbs LOI).

Further, the Court disagrees with Complainant's analogy to the situation in *Public Service*, wherein Judge Augustine determined that a two-month project to reline a portion of a penstock, which is essentially a large pipe, was maintenance. *Public Svc., supra*. The relining involved removing old, deteriorated coal tar lining and replacing it with epoxy. *Id.* Not all of the original lining was removed and the new lining was compatible with the old. *Id.* Indeed, the scope of the project was larger both in terms of the size of the object to be worked on and the length of time required to complete it.¹⁰ However, the project did not involve removal and replacement of significant structural or functional components; rather, it targeted the lining that protected those components. As such, the Court finds that the facts of *Public Service* are analogous to the maintenance examples found in CPL 2.100, all of which address the concept of replacing a lining, as opposed to the construction examples found in the Knobbs LOI.

10. It must also be remembered that size and complexity are only factors if, because of the size of an object or component involves significant alteration of the equipment the component is in. (Ex. C-12, C-14).

Whether analyzing the construction-versus-maintenance distinction from the standpoint of plain language, agency interpretation, or the Commission case law referenced above, the Court finds that the conclusion is the same—the work on H-401, as well as the entire scope of the turnaround, was construction. Accordingly, Citation 1, Item 1 and Citation 2, Item 1 are hereby VACATED. Likewise, the original allegation of Citation 1, Item 2, insofar as it alleges a violation of the general industry standard, is also VACATED. Thus, the Court shall proceed to an analysis of whether Complainant has proved a violation of 29 C.F.R. § 1926.451(g)(1).

B. Citation 1, Item 2 (Alternative Violation)

Complainant alleged a serious violation of the Act as follows:

29 CFR 1926.451(g)(1): Each employee on a scaffold more than 10 feet above a lower level was not protected from falling by the use of a personal fall arrest systems [sic], or by the use of a guardrail system:

- a) Suncor Energy, Inc. at 5801 Brighton Boulevard, Commerce City, CO 80022: On or before October 29, 2012, the employer did not ensure that weld inspector subcontractor employees were protected from falling when working on tubular welded system scaffold. Three outrigger scaffolds were missing guardrails, and personal fall arrest systems were not in use. Condition exposed employees to fall hazards of up to 25 feet.

The cited standard provides:

Each employee on a scaffold more than 10 feet (3.1 m) above a lower level shall be protected from falling to that lower level. Paragraphs (g)(1)(i) through (vii) of this section establish the types of fall protection to be provided to the employees on each type of scaffold. Paragraph (g)(2) of this section addresses fall protection for scaffold erectors and dismantlers.

29 C.F.R. § 1926.451(g)(1).

1. The Standard Applies and its Terms were Violated

The Court has already determined that the construction standards found in Part 1926 apply to the work on H-401. *See* Section VI.A, *supra*. Further, this specific standard applies because [redacted] was working on a scaffold outrigger platform, which was more than 25 feet above the heater floor. It is undisputed that the outrigger platform did not have guardrails and

that neither [redacted] nor Mota were wearing adequate fall protection for the hazards presented. Accordingly, the standard applies and was violated.¹¹

2. Respondent Knew or, With the Exercise of Reasonable Diligence, Could Have Known of the Violative Condition

Complainant contends that Respondent knew or should have known of the condition in H-401 because, as the controlling employer over the worksite, it had an obligation to take reasonable measures to detect and prevent the violation. *See* OSHA Instruction CPL 2-00.124, Multi-Employer Citation Policy ¶ X.B.D (1999). Respondent contends that it did not have actual knowledge that the scaffold had been modified or what the specific conditions inside H-401 were on the day of the accident. Respondent also contends that, though it may qualify as a “controlling employer”, it took all reasonable measures necessary to discover hazardous conditions and, thus, cannot be charged with constructive knowledge of the hazards. Based on the facts of this case, the Court finds that Respondent should have known of the violative condition.

“In assessing reasonable diligence, the Commission has considered ‘several factors, including the employer’s obligation to have adequate work rules and training programs, to adequately supervise employees, to anticipate hazards to which employees may be exposed, and to take measures to prevent the occurrence of violations.’” *Greenleaf Motor Express, Inc.*, 21 BNA OSHC 1872 (No. 03-1305, 2007) (quoting *Precision Concrete Constr.*, 19 BNA OSHC 1404, 1406 (No. 99-0707, 2001)). One of those measures includes “a general obligation to inspect its workplace for hazards.” *Hamilton Fixture*, 16 BNA OSHC 1073 (No. 88-1720, 1993). This obligation “requires a careful and critical examination, and is not satisfied by a mere opportunity to view equipment.” *Austin Commercial v. OSHRC*, 610 F.2d 200, 202 (5th Cir.

11. Respondent does not appear to dispute these elements, focusing instead on the elements of knowledge and exposure. *See Resp’t Br.* at 82–97.

1979). When reviewing the foregoing factors, the Court must also consider how long the condition has existed and whether the condition was “readily apparent”. *Shaw Areva Mox Svcs., LLC*, 23 BNA OSHC 1821 (No. 09-1284, 2012) (citations omitted).

According to the Commission, “an employer who either creates or controls the cited hazard has a duty under section 5(a)(2) of the Act to protect not only its own employees, but those of other employers ‘engaged in the common undertaking.’” *McDevitt Street Bovis, Inc.*, 19 BNA OSHC 1108, 1009 (No. 97-1918, 2000) (quoting *Anning-Johnson Co.*, 4 BNA OSHC 1193, 1199 (No. 3694, 1976)). Thus, an employer “may be held responsible for the violations of other employers ‘where it could reasonably be expected to prevent or detect and abate the violations due to its supervisory authority and control over the worksite.’” *Id.* (quoting *Centex-Rooney Constr. Co.*, 16 BNA OSHC 2127, 2130 (No. 92-0851, 1994)).

In support of its argument that it was reasonably diligent, Respondent points to the following: (1) its safety audit program; (2) the turnaround fall protection program and the associated training; (3) the safe work permit process; and (4) the scaffold tag process. The Court will address each of these issues in turn.

With respect to the safety audit program, Respondent points out that it had dedicated safety staff examining numerous issues every day and conducting safety discussions with contractors after each shift. (Tr. 1092). For example, Calkins testified that fall protection was audited 542 times during the turnaround; scaffold tags were audited 354 times; and scaffold use was audited 408 times.¹² These audits include review of important documents, such as permits and scaffold tags, as well as field audits of actual work practices, such as scaffold use. (Tr. 1100; Ex. R-25 at 13609). The sheer number of audits is impressive given the time frame of the turnaround; however, even though Respondent’s safety team audited scaffold use 408 times,

12. These totals reflect audits performed during the turnaround as a whole, not just H-401.

there is no indication that those audits included the scaffolding *inside* H-401. (Tr. 1109, 1137; Ex. R-25). Calkins explained:

Well, there were hundreds of different jobs going on. Thousands of jobs during the course of the turnaround. So as we're working our way through the different work areas, we're addressing issues based on priority, based on risk, based on what we can see. I couldn't see inside the heater. I had no reason to believe they wouldn't be wearing fall protection.

(Tr. 1109). This statement concerns the Court. Based on the nature of the work inside H-401—confined spaces, radiation-based testing, hot work (welding), scaffolding, and working at elevation—it would seem that the risk would be significant. However, because Calkins could not see inside the heater, an assumption was apparently made that safe work practices would be followed, even if they were not verified. Further, scaffold tags were audited 354 times, and yet Calkins testified that no one in his group had seen the scaffold tag on H-401 prior to the day of the accident.¹³ (Tr. 1108).

Calkins was not the only person whose job duties appear to have been impacted by the scope and scale of the turnaround. According to Stockton, who is the confined space supervisor, he was focused on preparing the equipment, such as blinding the conduits and isolating the confined space and that “tools”, such as the scaffold, do not fall under that purview. (Tr. 419–420). This characterization is at odds with the description provided by Respondent’s Safe Work Practice 404, Confined Space Entry, which requires the confined space supervisor to: “[k]now the hazards that may be faced during entry, including information on the mode, signs, or symptoms and consequences of the exposure” and “[b]e responsible for preparing the permit, ensure[] permits have been completed correctly, and that *all additional safety concerns are addressed* prior to authorizing entry.” (Ex. C-2) (emphasis added). Based on the language of SWP 404, there is no limitation on the types of hazards that the confined space supervisor must

13. According to Calkins, October 29, 2012, was the first time that he saw the tag or entered H-401. (Tr. 1109).

be aware of, and yet it appears that Stockton believed his role, at least in this respect, was limited to ensuring the preparation of the confined space “equipment”. (Tr. 419–20). This likely explains why Stockton testified that the turnaround group only did a comprehensive walkthrough of the space prior to the initial entry and when an equipment change (breaking lock-out/tag-out) occurred within the space. (Tr. 401–402). Although the Court understands that Stockton’s knowledge of the hazards in the confined space is premised, at least in part, on the information given to him by other parties, SWP 404 still requires that he “know the hazards” and address “all additional safety concerns”. (Ex. C-2).

Dave Mollendor, who coordinated mechanical work during the turnaround, was responsible for processing change orders, which included modifications to scaffolding in H-401. (Tr. 995). According to Mollendor, he signed off on at least 10 change orders every day during the turnaround and was responsible for coordinating 15–100 different jobs. (Tr. 997). However, he also stated that he did not necessarily know the scope of the work contained in the change order because he did not have time. (Tr. 1007). Again, although the Court recognizes that Mollendor himself was likely limited in his ability to track the specifics of each change, the change orders represented an opportunity for Respondent to review and evaluate changes in the workplace. The same could be said with respect to Stockton and Calkins, each of whom had the opportunity to discover hazards or changes within H-401 but nonetheless limited themselves based on what they could see or what they perceived the scope of their job to be.

The safe work permit process, as implemented in this case, also presents concerns. Stockton testified that he was responsible for reviewing and issuing permits. (Tr. 389). According to SWP 404, part of that responsibility also includes ensuring the permit is filled out correctly and addressing all additional safety concerns. (Ex. C-2). Both Stockton and Applegate testified that they did not engage in any sort of dialogue regarding the hazards in H-401 prior to

Mistras' entry on October 29, 2012. (Tr. 429, 512–15). More concerning, however, are the discrepancies between the various permits that were issued with respect to entries into H-401 in the days leading up to the accident. (Exs. C-16, C-17, C-18). One of the last lines on the permit is a series of check boxes under the heading "Rescue/Fall Protection". (Ex. C-16). Those check boxes indicate "body harness", "lifeline", "yo-yo", "rescue device", "other", and "N/A". (*Id.*). Stockton testified that the permit system prefills certain items based on the default settings of the computer, which are set by Respondent. (Tr. 393–404). According to Stockton, the "N/A" box was prefilled because, to his knowledge, the scaffold had been green-tagged and did not require personal fall protection.¹⁴ (Tr. 429). This is reflected in the Mistras permits found in Exhibit C-17, all of which indicated N/A under Rescue/Fall Protection. (Ex. C-17). The permits in C-16, which were issued during the same period of time, all indicate that a body harness was required. (Ex. C-16). The permits in C-18 also indicate that a body harness is required, but also include an indication under "other", which states, "if required by scaffold." (Ex. C-18) At the very least, this discrepancy should have prompted further inspection of the space or inquiry into the contractor's assessment of the hazards in H-401.

Respondent also attempts to place the onus on Mistras to uncover and report hazards that are found in H-401. (Ex. C-7 at 2). The Court does not dispute the role that Mistras played in the events that unfolded in H-401; however, Mistras' failures do not necessarily mean that Respondent was blameless. The report of Tina Rutledge is instructive. Regardless of how Ms. Rutledge characterizes her findings—whether "root cause" or "other findings"—it is clear that Respondent had reasonable opportunities to become aware of and prevent the accident.¹⁵ In particular, Rutledge points out that "[i]nterviews identified inconsistencies in the understanding

14. According to Tye Hansen, Safway does not green tag scaffolds in confined spaces. (Tr. 959).

15. In that respect, the Court is not bound by Ms. Rutledge's characterization of an event as a "root cause" or merely an "other finding".

of the actual working conditions of the scaffold in the heater.” (Ex. C-7 at 2). Although Respondent contests that any real confusion existed, the testimony of various witnesses suggests otherwise. Respondent’s own confined space supervisor testified that, in the context of the safe work permit, “body harness” means for rescue, whereas fall protection would require checking both “body harness” and an additional checkbox, such as “yo-yo”. (Tr. 408–409). This comports with the Mistras employees’ understanding of “harness required” on the scaffold tag.¹⁶ It also makes sense considering that almost all confined space entries require a harness for rescue purposes. (Tr. 418).

Nonetheless, Respondent points out that most of the people who testified indicated that “harness required” listed on the scaffold tag means “fall protection required”. (Tr. 931, 1000, 1051). If that was the case, however, Mistras’ confusion regarding what was actually required was likely compounded by the information contained on the scaffold tag, which indicated that a harness was required but did not indicate specific fall hazard locations (other than a missing access gate) or any tie-off points within the structure of H-401, as required by the turnaround fall protection plan.¹⁷ (Exs. C-4, C-6). When coupled with a deficient permit (at least as compared to other permits issued at or around the same time), it is clear that confusion over the process was not merely ancillary to the end result in this case.

Ms. Rutledge also found that Respondent did not keep detailed records of the scaffold modifications, which would have alerted Respondent to potential hazards within H-401. As the Court previously noted, these change orders represented an opportunity for Respondent to review and evaluate changes in H-401 to ensure that its fall protection plan, scaffold plan, and permitting process were being followed. According to Hansen, Safway would not modify the

16. Although Mistras’ JSA indicates a fall hazard, the Court is convinced by Applegate’s testimony that the JSA refers to the hazard of working from elevation generally, regardless of the specific fall protection used, i.e., guardrails or personal fall arrest systems. (Tr. 528–29).

17. Even Calkins testified that the scaffold tag was not clear regarding the nature of the hazards within H-401. (Tr. 1114).

scaffold without Suncor's approval. (Tr. 943). Thus, Respondent was aware that modifications occurred within H-401, even if it chose not to review the details of them.

The foregoing illustrates that Respondent had multiple opportunities to become aware of changes within H-401, but did not take advantage of them. According to Tye Hansen, the scaffold in H-401 was modified on October 26, 2012, in order to remove planks from the outrigger platforms for Repcon, the welding contractor, to allow for the insertion of new heater tubes. (Tr. 948–50). To accomplish this, Hansen testified that guardrails would also have to be removed. (Tr. 951). Hansen also testified that, once the tubes were inserted, a new change order would have to be submitted to return the scaffold back to the way it was, though he did not know when or if that was done. (Tr. 952–53). The change orders and entry permits are also unclear as to what modifications were made and when. (Ex. C-16, C-31). Nevertheless, Complainant contends that the condition existed for at least three days prior to the accident.

The Court finds equivocal the evidence regarding the length of time that the condition existed. Safway's permits indicate multiple entries to modify the scaffold inside H-401 between October 26 and October 29, but do not show what modifications occurred. (Ex. C-16). However, though the evidence may be unclear as to how long condition lasted, we do know that Safway removed guardrails from the scaffold on October 26, 2012. When that modification occurred, the tag was not contemporaneously modified to reflect that change, nor was a white tag appended to the scaffold tag to indicate appropriate tie-off points, consistent with the mandates of the Turnaround Fall Protection Plan. (Ex. C-6). The Court also notes that none of the documents associated with the work inside H-401 during the three days prior to the accident—safe work permits, change orders, scaffold tag, or JHAs/JSAs—either reflect the actual conditions or modifications inside H-401, nor are they consistent with one another in terms of

their hazard description or the personal protective equipment required to abate the hazard. (Exs. C-16, C-17, C-18, C-24).

The problem with the foregoing is a breakdown in the process of communicating and documenting hazards. Perhaps any one of the “other findings” indicated in Rutledge’s report or the missed opportunities documented above, occurring individually, would not be an adequate basis to assess liability to Respondent. When viewed collectively, however, the evidence illustrates a process that was well-thought out but inadequately implemented and resulted in a catastrophic failure. To be sure, [redacted] should have been wary of the missing rails as he accessed the outrigger platform, but he entered immediately after another contractor whose work he was examining. According to Mota, those workers were not wearing lanyards or other fall restraining devices, which likely further strengthened their assumption that the “harness required” admonition on the scaffold tag was quite literal.¹⁸ In either case, the condition should never have been allowed to occur.

Respondent admits that it is a controlling employer. As such, these breakdowns in process are the types of events that an employer with a birds’ eye view is privileged to see and obligated to correct. As noted above, there were multiple opportunities for Respondent to both be aware of the changes in H-401 and take action to ensure that proper precautions were taken. Mollendor may not have seen the problem because he had enough to do in coordinating multiple, complicated projects simultaneously. Stockton, though certainly justified in relying on his experienced contractors to an extent, relied too strongly on their assessments without independently verifying those determinations—as confined space supervisor, it was his duty to know *all* of the hazards associated with the space. (Ex. C-2). This required doing at least some field supervision of the process beyond the initial shutdown of equipment, which likely would

18. Even though the Safe Work Permit indicated “N/A”.

have cleared up the confusion over whether the scaffold was yellow- or green-tagged. Calkins, charged with ensuring safety in a complex and volatile environment, put together an admirable audit program, but even he placed reliance on the presumption that the rules were being followed without actually looking inside H-401.

Respondent is correct that “a controlling employer is not required to make continuous inspections of the work site to fulfill its supervisory responsibilities.” *E.P. Guidi Inc.*, 21 BNA OSHC 1367, 1372 (Nos. 04-1055 & 04-1056, 2005) (ALJ). Complainant’s Multi-Employer Citation Policy reflects this understanding: “The extent of the measures that a controlling employer must implement to satisfy this duty of reasonable care is less than what is required of an employer with respect to protecting its own employees.” *See Resp’t Br.*, Ex. A. Thus, the policy lays out factors to consider when assessing the controlling employer’s duty of care, such as: (1) the scale of the project; (2) the nature of the work; (3) safety history and experience of the contractors; (4) more frequent inspections required if contractor has a history of noncompliance or the relationship is relatively new; and (5) less frequent inspections if contractor has history of compliance and illustrates sound safety practices. *Id.*

Even under the more lax requirements of the Multi-Employer Citation Policy, the Court still finds that Respondent did not exercise reasonable care. The Policy indicates that “less frequent inspections may be appropriate” when a contractor has a solid safety history. *Id.* According to Respondent, Mistras and Safway fit that bill. In this case, however, there is no evidence to suggest that Respondent performed any field inspections of the confined space inside H-401. Calkins testified that he based his inspections on risk and what he could see, which did not include the inside of H-401 until *after* the accident. Respondent’s confined space supervisor was not aware of what color the tag was on the scaffold, even though it was hanging, unobscured, outside of H-401. (Ex. C-6). Even a cursory review of the safe work permits issued

to enter H-401 would have revealed discrepancies in the hazard assessments performed by the contractors. (Ex. C-16, C-17, C-18). In the multi-employer context, the controlling employer should be able to rely on the assessment of experienced and safety-conscious contractors; however, such reliance cannot be total. As a controlling employer, Respondent is still obliged to ensure the integrity of the process and take action to correct deficiencies.

At bottom, the Court is not convinced that Suncor took all reasonable efforts to ensure compliance with rules, instead placing undue reliance on its contractors without much oversight as to the actual work inside H-401. Clearly, the work required to modify H-401 was complex and technical, and the expertise required to carry out the work was not necessarily in the wheelhouse of Suncor personnel. That, however, does not excuse the failure to conduct even basic field inspections of contractors to ensure compliance with turnaround policies under actual conditions. Accordingly, the Court finds that Respondent should have known of the violative condition.

3. Respondent's Employees Were Exposed to the Hazard

In order to prove that Respondent's employees¹⁹ were exposed to a hazard, Complainant must show that:

During the course of their assigned working duties, their personal comfort activities on the job, or their normal ingress-egress to and from their assigned workplaces, employees have been in a zone of danger or that it is reasonably predictable that they will be in a zone of danger.

RGM Constr. Co., 17 BNA OSHC 1229, 1234 (No. 91-2107, 1995). The evidence clearly shows that [redacted] was exposed to the condition, which Respondent does not dispute. *Resp't Br.* at

94. However, Respondent takes issue with Complainant's determination that the RECON

19. Though [redacted] was not an employee of Respondent, Respondent was nonetheless responsible for his safety as the controlling employer of the worksite.

employees who occupied the space prior to [redacted] and Mota were exposed to the same condition.

[redacted] and Mota were charged with examining the welds performed by RECON. RECON had just vacated H-401 prior to [redacted] and Mota entering the space. Thus, it is at least reasonable to assume that RECON employees occupied the same location on the scaffolding as [redacted]. The question then becomes whether they were actually exposed to the fall hazard.

According to Mota, he observed RECON employees exiting H-401 without lanyards and some employees without a harness at all. (Tr. 472). Further, there is no indication that the scaffold was modified in the time period between when RECON exited H-401 and when Mistras entered, which means that the scaffold was in the same condition during both entries. Although no one directly observed RECON employees on the outrigger platform with no guardrails, the Court finds that the evidence permits the reasonable inference that at least one RECON employee was similarly exposed to the hazard. *See Ultimate Distribution Sys., Inc.*, 10 BNA OSHC 1568 (No. 79-1269, 1982) (concluding Secretary established violation based on reasonable inferences drawn by judge from circumstantial evidence). This is not mere speculation or conjecture, as argued by Respondent. Mistras was charged with examining welds performed by RECON. RECON just completed welding activities before Mistras entered H-401, and the exiting employees were not wearing the full complement of fall protection gear. One of the welds examined by [redacted] was adjacent to an unguarded outrigger platform. Thus, the Court finds that the RECON employees responsible for welding the tube adjacent to the outrigger scaffold were exposed in the same manner as [redacted]. Accordingly, the Court finds that this element has been satisfied.

4. The Violation Was Serious

A violation is “serious” if there was a substantial probability that death or serious physical harm could have resulted from the violative condition. 29 U.S.C. § 666(k). Complainant need not show that there was a substantial probability that an accident would occur; he need only show that if an accident occurred, serious physical harm could result. *Phelps Dodge Corp. v. OSHRC*, 725 F.2d 1237, 1240 (9th Cir. 1984). If the possible injury addressed by a regulation is death or serious physical harm, a violation of the regulation is serious. *Mosser Construction*, 23 BNA OSHC 1044 (No. 08-0631, 2010); *Dec-Tam Corp.*, 15 BNA OSHC 2072 (No. 88-0523, 1993).

The violation was serious. [redacted]’s fall illustrated that the failure to provide fall protection, whether through the use of guardrails or a personal fall arrest system, exposed employees and contractors to a fall of nearly 25 feet. A fall from that height can, and did, result in serious physical harm.

VII. Penalty

In calculating appropriate penalties for affirmed violations, Section 17(j) of the Act requires the Commission give due consideration to four criteria: (1) the size of the employer’s business, (2) the gravity of the violation, (3) the good faith of the employer, and (4) the employer’s prior history of violations. Gravity is the primary consideration and is determined by the number of employees exposed, the duration of the exposure, the precautions taken against injury, and the likelihood of an actual injury. *J.A. Jones Construction Co.*, 15 BNA OSHC 2201 (No. 87-2059, 1993). It is well established that the Commission and its judges conduct *de novo* penalty determinations and have full discretion to assess penalties based on the facts of each case and the applicable statutory criteria. *Valdak Corp.*, 17 BNA OSHC 1135 (No. 93-0239, 1995); *Allied Structural Steel*, 2 BNA OSHC 1457 (No. 1681, 1975).

In determining the penalty, the Court has considered the size of Respondent, the scale of the turnaround, the complexity of the tasks required to carry it out, and the difficulty of managing and coordinating multiple contractors engaged in hundreds of work tasks. Respondent is a large employer, with over 500 employees at the Commerce City refinery. As regards good faith, the Court finds that Respondent's safe work policies were comprehensive, even if not effectively implemented in every aspect. Notwithstanding Respondent's policies, however, the Court finds that the gravity of the violation was high. The Court determined that at least two employees were exposed to the condition, which lasted, at the very least, since Safway's last entry into H-401 on October 28, 2012, prior to the investigation. (Ex. C-16 at 5). Further, the Court finds that the likelihood of injury was also high, considering that [redacted] had to stretch out over a gap of nearly three feet in order to reach the tubes he was charged with examining. This was no less the case with the RECON employee who welded those tubes prior to [redacted]'s entry.

Based on the foregoing considerations, the Court finds that a penalty of \$7000 is appropriate.

ORDER

Based upon the foregoing Findings of Fact and Conclusions of Law, it is ORDERED that:

1. The alternative allegation in Citation 1, Item 2, alleging a violation of 29 C.F.R. § 1926.451(g)(1) is AFFIRMED, and a penalty of \$7,000.00 is ASSESSED

SO ORDERED.

/s/ John H. Schumacher
John H. Schumacher
Judge, OSHRC

Date: July 31, 2015
Denver, Colorado