United States of America
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION
1924 Building - Room 2R90, 100 Alabama Street, S.W.
Atlanta, Georgia 30303-3104

Secretary of Labor, Complainant, v. LyondellBasell and its Successors, Respondent.	OSHRC Docket No. **22-0153**

Appearances:

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For Complainant

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For Respondent

BEFORE: Administrative Law Judge Sharon D. Calhoun

CORRECTED DECISION AND ORDER[1]

LyondellBasell produces acetic acid at its LaPorte, Texas, manufacturing facility, about 25 miles east of Houston. The chemical is used to meet food grade requirements for shipping within the food industry. On July 27, 2021, contract employees tasked with removing an actuator from a valve accidentally removed the valve's pressure-retaining cover, and the resulting chemical release caused fatal injuries. The Occupational Safety and Health Administration (OSHA) began its inspection and investigation the following day and issued a Citation and Notification of Penalty (Citation) to LyondellBasell on January 1, 2022, alleging serious violations of the Occupational Safety and Health Act of 1970, 29 U.S.C. §§ 651-678 (Act). Specifically, the Secretary alleges

[1] Decision corrected to properly identify Respondent in the Jurisdiction and Coverage section of this decision. *See* 29 C.F.R. § 2200.90(b)(4)(i) ("Until the Judge's report has been directed for review or, in the absence of a direction for review, until the decision has become a final order as described in paragraph (f) of this section, the Judge may correct clerical errors arising through oversight or inadvertence in decisions . . . .").

LyondellBasell exposed workers at the LaPorte facility "to process materials, toxic release, and flammable hazards" in violation of the Process Safety Management (PSM) and Lockout/Tagout (LOTO) standards. (Citation at 6-10.)

JURISDICTION AND COVERAGE

LyondellBasell timely contested the Citation on January 31, 2022. The Secretary filed her Complaint on April 21, 2022, and LyondellBasell filed its Answer on May 10, 2022. The Court held a hearing July 17-20, 2023, in Houston, Texas. LyondellBasell and the Secretary filed post-hearing briefs on December 12, 2023, and the Secretary filed an amended brief on February 12, 2024.[2] LyondellBasell admitted Commission jurisdiction over this matter pursuant to section 10(c)

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[2] At trial, the Secretary requested the Court reconsider its rejection of the Chemical Safety Board (CSB) report for the LyondellBasell LaPorte complex, which the CSB issued on May 25, 2023. (Tr. 1013-14, 1078; Ex. C-10 (rejected).) The Court still finds this CSB report is inadmissible for the following reasons. First, the Fifth Circuit has indicated CSB reports, without regard to civil penalties or damages sought, "likely constitute inadmissible hearsay under the Federal Rules of Evidence" 801 and 802. *Terry v. BP Amoco Chem. Co.*, 574 F. App'x 410, 415 (5th Cir. 2014) (unpublished); *see also Regina Constr. Co.*, 15 BNA OSHC 1044, at *3 (No. 87-1309, 1991) (Federal Rules of Evidence apply in Commission proceedings under Commission Rule 71 (29 C.F.R. § 2200.71)). Here, the report is a "written assertion" made by the board, while its members were not "testifying at the current trial or hearing." Fed. R. Evid. 801(1)(a), (c). Further, the Secretary did not offer the report to resolve a factual dispute; it offered the report to "to prove the truth of the matter asserted in the" report." (Tr. 1015 (It would be "informative . . . with things like the redesign of the valve and *the recommendations by the Chemical Safety Board on training and supervision and safe work practices*. There was a host of *information that speaks directly to the citation items* that are in question in this case.") (emphasis added).) For these reasons, the Court finds the report was inadmissible hearsay.

Even assuming the CSB report is admissible under the Federal Rules of Evidence, the Court finds additional reasons cut in favor of its rejection. According to the Clean Air Act Amendments, the CSB "shall investigate (or cause to be investigated), determine and report to the public in writing the facts, conditions, and circumstances and the cause or probable cause of any accidental release resulting in a fatality, serious injury or substantial property damages[.]" 42 U.S.C. § 7412(r)(6)(C)(i). However, "[n]o part of the conclusions, findings, or recommendations of the Board relating to any accidental release or the investigation thereof shall be admitted as evidence or used *in any action or suit for damages* arising out of any matter mentioned in such report." *Id.* 7412(r)(6)(G) (emphasis added). At trial, counsel for the Secretary urged the Court to rule the report is admissible because it only prohibits the admission of the report's conclusions, findings, or recommendations in "civil litigation suits for damages and not Government proceedings of this type." (Tr. 1012.)

First, neither the Commission nor any federal appeals court has squarely ruled CSB reports are admissible in Commission proceedings. As the Secretary notes, a Commission judge has *sua*

sponte taken judicial notice of two CSB reports where "neither party adduced an authoritative account of the relevant facts of that event or its historical context . . . [i]n order to present a more detailed background." *Cooper Tire & Rubber Co.*, No. 11-1588, 2015 WL 9854708, at *17 (OSHRC Mar. 17, 2015) (ALJ), *settlement agreement approved & case dismissed*, 25 BNA OSHC 1837 (No. 11-1588, 2016). The judge "conclude[d] that the C[SB] reports are a source whose accuracy cannot be reasonably questioned." *Cooper Tire*, 2015 WL 9854708, at *17 n.26. Crucially, the judge used the reports to clarify factual matters rather than accepting its "conclusions, findings, or recommendations" relating to the release or investigation. Here, the Court finds the CSB report for the LaPorte accident was not necessary to make any factual findings. Further, the judge's reliance on the reports in *Cooper* is neither precedential nor determinative of whether the report is admissible in this context, where the facts are clear. *Mosser Constr. Inc.*, 15 BNA OSHC 1408, 1411 n.3 (No. 89-1027, 1991) ("unreviewed judge's decisions may be considered for their persuasive value" but are not precedent).

Finally, the Court considers whether a Commission proceeding "is an action or suit for damages arising out of any matter mentioned in such report." Unquestionably, this proceeding arises out of a matter mentioned in the report. Further, this proceeding is an action for the enforcement of civil penalties and abatement of violations of the Act and standards thereunder, rather than a traditional tort lawsuit for civil damages. However, Commission proceedings and civil cases have the same evidentiary standard; both the Secretary and plaintiffs bear the burden of proving their cases by a preponderance of the evidence. *See Kerns Bros.*, 18 BNA OSHC 2064, at *3 (No. 96-1719, 2000) ("The standard of proof in Commission adjudications is the preponderance of the evidence."); 32A C.J.S. Evidence § 1556 (2024) ("An issue of fact in a civil case generally cannot be regarded as proved unless the party having the burden of proof thereof produces a preponderance of the evidence.") Therefore, the Court has deep reservations about extending the admissibility of CSB reports to Commission proceedings in this context. The legislative history for the relevant statutory provision succinctly explains why:

> The findings, conclusions and recommendations of the Board are not to be used in civil proceedings for damages which result from an accident investigated by the Board. In conducting its investigations, the Board will need the fullest cooperation from facility owners and operators, equipment suppliers and other parties involved in an accidental release to determine the probable causes of the event. The likelihood that conclusions drawn from information provided to the Board will be used in a suit from damages will discourage full cooperation. Furthermore, and as noted above, the standard of evidence used by the Board in reaching its determinations of probable cause is likely to be less rigorous than evidentiary standards used in a civil proceeding and thus a conclusion, finding or recommendation of the Board should not be given the same weight as other evidence in such a proceeding.

S. Rep. No. 101-228, at 3616-17 (1989).

Additionally, the Court is concerned CSB reports will serve as proxy expert reports for the Secretary; that is, rather than find an expert, who develops her own report and is subject to examination at trial, the Secretary will use the CSB report to establish her case and poke holes in the employer's expert's report and testimony. As noted above, the counsel for the Secretary explained these were the very purposes of placing the report into the record. (Tr. 1014-15.) Due to

of the Act. (Compl. ¶1; Answer ¶4; Joint Pre-Hr'g Statement ¶D.1.) LyondellBasell also admitted it is an employer engaged in business affecting commerce under § 3(5) of the Act. (Compl. ¶2; Answer ¶5; Joint Pre-Hr'g Statement ¶D.2.) Therefore, the Court finds it has jurisdiction under § 10(c) of the Act and finds LyondellBasell is a covered employer under § 3(5) of the Act. Under section 12(j) of the Act and Commission Rule 90(a)(1), after hearing and carefully considering all the evidence and the arguments of counsel, the Court issues this Decision and Order, which constitutes its final disposition of the proceedings. 29 U.S.C. § 661(j); 29 C.F.R. § 2200.90(a)(1). For the reasons indicated *infra*, the Court affirms Citation 1, Item 2, in which the Secretary alleges LyondellBasell violated 29 C.F.R. § 1910.119(h)(2)(ii) by failing to inform its contractor of known potential toxic release hazards and vacates the remaining the items. The Court also assesses the proposed $13,653 penalty.

BACKGROUND

The Acetic Acid ("AA") Unit reactor at the La Porte facility produces acetic acid by taking methanol and carbon monoxide and running it through a rhodium catalyst. (Tr. 57, 157.) The reactor runs continuously and produces about 3-3.2 million pounds per day of acetic acid, which resembles water. (Tr. 58.) The acetic acid then goes to the vinyl acetate monomer (VAM) unit, where it is mixed with oxygen and ethylene across a palladium catalyst to make VAM. (Tr. 157.) From the control room, a LyondellBasell board operator monitors and adjusts the AA Unit's temperature, pressure, and flow rate. (Tr. 62.) Among other things, the operator regulates the flow of product through a bidirectional plug valve (HV-117) along the piping system below the reactor. (Tr. 279-80; Ex. R-20.) Before the accident, the valve could not be manually opened or closed; to accomplish this, three pieces of equipment worked together. First, a pneumatic actuator, which has both electrical and air lines, received an electrical signal from the control board. (Tr. 77-78.) The signal changed the air pressure in the diaphragm of the actuator. (Tr. 77-78.) A part called a coupling fit onto the valve stem, which was part of the valve, and extended through the cover where it was connected to the plug inside the valve. (Tr. 951; Ex. R-23.) The coupling did not contain process chemicals or enter the pressure boundary; it connected the stem to the actuator. (Tr. 78, 175, 342.) Air pressure from the actuator passed through the coupling and to the valve

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the report's evidentiary issues, less rigorous evidentiary standards, and problematic policy considerations, the Court denies the Secretary's request for reconsideration.

stem, which allowed the plug to turn in the valve. (Tr. 952, 1018-19.) The opening of the plug valve allowed product to flow through the piping system, whereas the closing of the plug valve halted the flow of product.[3] (Tr. 77-78, 92, 183, 312-13.) A yellow plastic piece on the actuator told workers whether the valve was opened or closed. (Tr. 78-79.) A hexagonal mounting bracket secured the actuator to the HV-117 via four smaller diameter bolts. (Tr. 171, 177-78; Exs. R-21, R-23.) Although these bolts held the actuator in place, they did not impact pressure-retaining components such as the valve or piping or otherwise enter the process. (Tr. 171.) Larger diameter flange bolts, also called valve cover fasteners, lined the outside of the valve cover and held the pressure boundary. (Tr. 177-78, 945; Ex. R-23.) The HV-117 valve was typically covered with insulation. (Tr. 69; Ex. R-20.) As designed and installed, HV-117 lacked a handle or hand jack device to physically close the valve and lock it out at the stem. (Tr. 95, 602.)

In the days leading up to the accident, LyondellBasell discovered a methanol leak in a spool piece of piping section located below the reactor and HV-117. (Tr. 71 (explaining Ex. R-20 depicts location of spool piece repair at the tag hanging from the pipe in the lower right corner of picture).). LyondellBasell had unsuccessfully tried to repair the leak on the spool piece. (Tr. 394.) Another unit in the facility called the "SYNGAS" supplies "feed" to the AA Unit. (Tr. 391.) On July 27, an unexpected shutdown of the "SYNGAS" Unit meant it could no longer supply feed to the AA Unit, which automatically shut down around 1:00 P.M. that day. (Tr. 392; Ex. C-11 at 4.) LyondellBasell's operations management team decided this shutdown would be an opportunity to isolate the reactor and repair the spool piece. (Tr. 67, 71. 393, 395.) LyondellBasell employees met on several occasions that afternoon to discuss how to isolate the reactor.

First, as part of the notification the spool piece would be repaired, AA Unit Specialist and Manager Jeff Williams told Production Maintenance Coordinator David Bernard Jr. the actuator needed to be removed to isolate HV-117. (Tr. 377.) Williams also asked Bernard for information on failsafe positions for loss of air and for loss of electricity on plug valves. (Tr. 378-79.) Instrument and Electrician Specialist, Carlos Garza provided this information, as well as the valve and actuator specification sheets to verify these positions. (Tr. 379-80.) Bernard visited HV-117 with Williams and AA Unit Process Technician Brad Dodd, where Williams and Bernard

[3] After the air passes through the valve, it flows up and into the reactor. (Tr. 176.) When air flow stops, HV-117 keeps the contents of the reactor from draining down. (Tr. 176.)

disconnected an air tube from the actuator and bled out the remaining air in the system.[4] (Tr. 380-83.) After this disconnection, an indicator at the end of the actuator showed HV-117 was in the last position and the closed position. (Tr. 383.) Williams then tested and verified three times the closed valve could not be moved from the control board. (Tr. 380-81.) Jose Ramos, the I&E technician, later disconnected the electrical signal from the actuator. (Tr. 383-84.) Although Bernard did not verify Ramos disconnected the electrical signal, First Line Supervisor David Dye said both the air and electrical signal had been physically disconnected from the actuator when he arrived that afternoon. (Tr. 79-80.)

Around 3:00 P.M., Williams met with Garza, Health Safety and Environment Specialist Lance Hardcastle, Day Technician Jamie Gilliam, outgoing day shift First Line Supervisor Israel Nunez, AA Unit Process Technician Brad Dodd, and AA Unit Operations Technician Scott Skains. (Tr. 75-76, 158-159.) Williams suggested and the group discussed using HV-117 as the isolation point for the repair scheduled for the next day.[5] (Tr. 72, 158.) This meant LyondellBasell was "going to close that valve to stop flow and to withhold pressure and flow" from the spool piece. (Tr. 67.) Dye arrived at 3:00 P.M. and met Israel Nunez, whose shift was ending. (Tr. 65.) Nunez informed Dye that Williams had proposed using HV-117 as an isolation point for the upcoming spool piece repair. (Tr. 72-73.)

Around 4:00 P.M., Williams, Hardcastle, and Dye went to the actuator to determine how to lock the valve for the repair the following day. (Tr. 83-84, 86, 585.) They discussed two options. Under the first option, LyondellBasell would use the actuator as an isolation point; but the managers were concerned this would trigger a deviation from the company's energy isolation procedures and related approval process. (Tr. 86-87; *see* Ex. C-3.) Under the second option, they "discussed removing the actuator and putting a physical handle on [HV-117] so that we could lock it out according to our procedures and alleviate the need for a deviation." (Tr. 87-88; *see also* Tr. 89-90, 588.) They did not discuss the procedure of removing the actuator or its specific bolts, but they discussed the fact actuators were previously removed so valves could be used for isolation.

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[4] A second piece air tube leading to the actuator had already been disconnected. (Tr. 382.) Bernard testified without air the actuator was inoperable, safe to remove, because without air the actuator cannot turn the plug inside the valve. (Tr. 403-04, 409-10.)

[5] First Line Supervisor David Dye testified, "[t]he unit specialist is responsible for the performance of the unit, designating priority work, priority maintenance work." (Tr. 74.) Whereas the first line supervisor oversees personnel the specialist oversees the unit. (Tr. 74.)

(Tr. 598-99.) Dye, Hardcastle, and Williams agreed the second option was a "credible" plan, and Hardcastle, who was LyondellBasell's subject matter expert in energy isolation, returned to his office to review the company's energy isolation procedures and confirm the plan's compliance with these procedures.[6] (Tr. 96-97, 585-86, 612.) After reviewing them, he determined HV-117 could be safely used as an isolation point. (Tr. 587.) Hardcastle based his determination on several factors. First, LyondellBasell had used plug valves as isolation points after removing actuators. (Tr. 587-88.) Second, although company procedures did not specifically mention removing an actuator to use a plug valve for an isolation point, they did not prohibit the practice. (Tr. 589.) Hardcastle also determined removing the actuator, which was an attachment to a valve, did not fall under company energy isolation procedures because it did not involve process equipment, unlike the methanol spool piece, which contained chemicals and the removal of which required a line break. (Tr. 590-91.) The actuator was bolted onto the valve, and neither the actuator nor the bolts nor the bracket affected the process, pressure, or boundary of the valve. (Tr. 591, 593.)

Following his review, Hardcastle called Williams to discuss and confirm the plan. (Tr. 612.) There was no formal approval process related to the decision to remove the actuator and use HV-117 as the isolation point. (Tr. 613-14.) They discussed "the actuator was going to be removed and operations was going to look at the valve itself and try to identify what's the best method to lock that valve so they could physically put a lock on it, and that way it would fall under our procedure." (Tr. 592, 614.) Williams communicated the decision to Dye. (Tr. 99, 614-15.) The group's final plan involved removing the actuator from HV-117, installing a quarter turn handle, and positively

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[6] LyondellBasell's energy isolation procedure effective at the time of the accident stated:

> 5.9.3 Control valves without a designed EID are not acceptable isolation devices. Switches and buttons are not acceptable isolation devices.
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> > 5.9.3.1 Pneumatic (air, nitrogen) actuated valves with manual hand jacks are approved EIDs only if the air is disconnected and the hand jack is locked in a manner that controls energy.
> >
> > 5.9.3.2 Hydraulic actuated valves with manual hand jacks are approved EIDs only if the hand jack is locked in a manner that controls energy.
> >
> > 5.9.3.3 Motor operated valves with manual hand jacks are approved EIDs only if the breaker has been properly isolated (de-energized) and the hand jack is locked in a manner that controls energy.

Ex. C-3 at 653.

locking out the valve.[7] (Tr. 98-100, 145-46, 387.) Specifically, LyondellBasell, to comply with company procedures, planned to put the handle in T-position and then run a cable or chain from the handle to a pipe or brace where it could not be manipulated without being unlocked. (Tr. 105.) LyondellBasell did not have the lock or cable or chain for the lock and had not identified where they would be placed. (Tr. 106.)

LyondellBasell did not have a written procedure or manufacturer instructions for removing the actuator on HV-117. (Tr. 149-50, 706.) Skains testified he was not trained to remove actuators. (Tr. 362, 476.) Dodd similarly testified he had expertise in unit operations, use, and process but not in repairing and assembling equipment, such as the actuator. (Tr. 874-75.) Michael Stewart, who was LyondellBasell's Occupational Safety Manager for the Americas in the Corporate Health, Safety and Environmental Group at time of accident, confirmed Skains and Dodd were experts in the AA Unit process and equipment but not in removing the actuator. (Tr. 557.)

Williams also communicated the decision to remove the actuator to Bernard, whose shift ended around 4:00 P.M. (Tr. 388.) Before he left the facility, Bernard contacted Troy Choate, the planner for AA Unit, who hires contract crews to perform work in the Unit, and told him they needed a crew to remove the actuator. (Tr. 388-89.) Choate called Turn2 Project Manager Mark Monson and asked if Turn2 had personnel available on the evening shift to remove the actuator. (Tr. 727.) Monson told Choate he had people available and would look at job. (Tr. 728.) Between 4:00 and 5:00 P.M., Dodd, Monson, and Turn2 foreman Dustin Day, who was a pipefitter, met in the blast resistant room and then walked out to the reactor deck to see the actuator and HV-117. (Tr. 728-29, 755, 783.) Day, according to Monson, was an experienced foreman, who had supervised crews, removed actuators, and supervised unbolting and disassembly jobs at the LaPorte facility. (Tr. 728-29.) During this meeting, Day put his hand on the actuator and asked Dodd if it was the actuator to be removed. (Tr. 747.) Dodd replied it was and said lay it on the

[7] To prepare for the spool piece repair, the maintenance department was going to clear process and lock out the valve for the next morning after the removal of the actuator. (Tr. 780.) The maintenance department was going to close valves and then flush water and steam through them to clear process. (Tr. 781.) To accomplish this, the maintenance department was going to drain this process from the bleed at the bottom just left of pipe flange where the leak occurred. (Tr. 781; Ex. R-20.) The de-inventoried process would be transferred to the catalyst holding tank. (Tr. 146.)

deck.[8] (Tr. 747.) Day and Monson agreed removing bolts from the mounting bracket was a four-bolt job, and Day determined a crescent wrench would be used to complete it. (Tr. 731, 748, 784.) Dodd was present during this conversation. (Tr. 749.) Dodd did not inform Monson and Day the system was still inventoried and under pressure, and Monson and Day did not discuss or ask about the inventory and pressure.[9] (Tr. 753-54, 784.) Dodd did not discuss the composition of the crew with Monson and Day; he reminded them to bring unit-specific PPE, such as goggles and a carbon monoxide monitor in case of leaks. (Tr. 785.) Monson and Day communicated to Dodd they could do the job. (Tr. 784.) The actuator removal, according to Monson, did not involve breaking the line and he had no concerns about HV-117 being used as an isolation point. (Tr. 736-37.)

After walking the worksite, Monson prepared a quote and sent it to Choate, who then issued the purchase order. (Tr. 739.) Neither the quote, purchase order, nor reply expressly referenced the actuator removal. (Tr. 740.) Day selected [Redacted] and [Redacted] to his crew. (Tr. 732.) The crew, which had been at the LaPorte facility in the months leading up to the accident, and both Day and [Redacted] had experience removing actuators. (Tr. 733, 736.) The crew had "stop work authority" if they were confused about the scope of the job. (Tr. 737; Ex. R-5.) Day, according to Monson, knew the difference between actuator and valve cover, and neither Dodd nor any other LyondellBasell employee instructed the crew to open the valve cover. (Tr. 732.) Gilliam testified neither LyondellBasell nor the actuator manufacturer had a written procedure for removing the actuator. (Tr. 706.) He also said the spec sheet for the AA Unit did not have any instructions for removing the actuator bracket's mounting fasteners. (Tr. 706.) Gilliam, who did not interact with the crew that day, said Turn2 crews had previously unbolted four mounting bracket bolts for actuators. (Tr. 712.)

Both Dodd and Skains were the AA Unit Process Technicians (also called field operators) that evening. (Tr. 436.) Skains described their work and roles as "interchangeable." (Tr. 459.) They did not make a formal decision that evening for one to work with Turn2 and the other to focus on other work. (Tr. 460.) Around 6:30 P.M., Dodd radioed Skains to say Turn2 arrived for the job and said he would get the general work permit ready and walk the job out. (Tr. 461, 786.) A general

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[8] Dodd, however, testified he placed his hand on the actuator and told Day and Monson this was the actuator that needed to be removed. (Tr. 783.)

[9] Monson testified Turn2 contractors are taught to assume the pipes contain hazardous chemicals and no energy isolation has been done. (Tr. 730.)

permit, according to Dye "is issued for something simple using your hands, no spark-producing equipment, no opening of the process or so forth" and it "permit[s the contractor] to do" the job scope described in the permit. (Tr. 193; Ex. R-1.) A general permit is both a tool for LyondellBasell to communicate with a contractor regarding the job and an authorization which grants the contractor permission to work on certain equipment, on certain date, at a certain time, and under certain conditions.[10] (Tr. 500.) A general permit does not contain instructions for the contractor to do the job, because the operator determines how to accomplish the permitted work. (Tr. 501-02.) As qualified operators, only Dodd and Skains had the authority that evening to issue work permits to contractors. (Tr. 789.) Because Dodd did the initial walk through with Turn2, he completed the permit, while Skains determined how much braided hose was needed to de-inventory the reactor. (Tr. 456, 790.) Day told Dodd the crew planned to use hand tools for the job, and Dodd did not confirm the specific tools. (Tr. 828, 841-42.) Dodd entered the blast resistant building and sat down at the reactor computer to type up the permit, which simply said in the job description: "Removing actuator from HV[-]117." (Tr. 829; Ex. C-4.) However, Skains's name appeared on the permit because Dodd failed to log Skains off and himself on to the computer to complete the permit. (Ex. C-4 at 038; Tr. 435, 456, 797.) Dodd then printed the permit, which was timestamped 6:49 P.M., presented it to Day, and reviewed it with the crew.[11] (Tr. 191, 835.) Specifically, Dodd described removing the actuator from HV-117 and then discussed work controls and precautions, including personal protective equipment. (Tr. 836.) The hazards related to this job, according to Dodd, were, among other things, dropping objects through the grating, heavy lifting, and pinch points. (Tr. 793.) Dodd did not discuss with the crew the potential release of chemicals from HV-117 and did not

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[10] A line break permit triggers different procedures and requirements. (Ex. R-1 at 678.) LyondellBasell's line break procedures contain additional requirements beyond a general work permit. Among other things, a line break requires blocking the area of the break, upgrading PPE, completing a documented risk assessment, warning contractors of process contents, verifying the equipment is clear of process and isolations are holding, tagging the line break location, and having an operations supervisor or other qualified person present during the hazardous line break until the equipment is shown to be clear or during the entire job. (Ex. R-3 at 1175, 1176-77, 1179; Tr. 180, 470-71, 478, 569-70.) LyondellBasell's "Operational Excellence Management System Line Break Standard" contains additional requirements. (Ex. R-4.). According to Gilliam, the line break procedures did not apply because the removal of the actuator did not involve breaking into the process. (Tr. 660-61.)

[11] Dodd testified he and Skains "usually don't sign general permits," such as the one at issue. (Tr. 831.)

tell the crew which bolts to remove. (Tr. 791-92) Dodd also did not verify Turn2 completed a job hazard analysis, which is required by the permit; he only reminded them to fill it out before commencing work.[12] (Tr. 838-39.) Dodd did not have knowledge of Turn2's safety or hazard recognition training and procedures at the time he issued the permit. (Tr. 840; Ex. R-16.) Although section 4.1.6 of LyondellBasell's permitting procedures required Dodd to offer a "unit info sheet . . . to workers being permitted," he did not do so. (Tr. 833-34; Ex. R-1 at 666.) This sheet contains information about the chemical process and contents of the line. (Tr. 834.)

After Dodd completed the permitting process, he walked the crew out to the reactor deck, and they looked at the valve. (Tr. 799.) Dodd placed his hand on top of the actuator and told them this was the equipment they needed to remove. (Tr. 799-800.) Dodd told Day, who had a radio, he could reach him on the AA channel if he had any questions. (Tr. 800.) Dodd said the crew did not have any questions or otherwise indicate they were confused about the scope of the work or not know how to remove the actuator. (Tr. 800.) After he walked the crew out to the actuator, Dodd went underneath the reactor deck to put together hoses with Skains. (Tr. 801.) LyondellBasell planned to connect the hoses to the drain next to the flange the next day to de-inventory the spool piece. (Tr. 801.) The LyondellBasell unit operators did not observe the Turn2 crew while it was working on the actuator. Skains testified there were too many contractor jobs and permits to observe all contractor work. (Tr. 477.) Company procedure required them to observe work involving line breaks or other higher hazard activities that could result in exposure to the process. (Tr. 470-71, 478.) Here, according to Skains, they did not watch Turn2 work because removal of the actuator did not require a line break. (Tr. 470-71.)

After the Turn2 crew began working, Dodd went to the warehouse to get a fitting and Skains went to the blast resistant room to take a break. (Tr. 469-70, 788.) Skains planned to come back to the reactor deck to inspect Turn2's work and begin the de-inventory process for the following day's work. (Tr. 470.) The Turn2 contractors attempted to remove the actuator bracket mounting fasteners, but they were having difficulty removing them. (Tr. 946-47.) Day left the area to get a different tool, and [Redacted] and [Redacted] started removing six larger fasteners securing

[12] Skains testified it was not company practice to review contract maintenance worker JHAs. (Tr. 438.) Monson confirmed Turn2 and Day were responsible for completing the JHA. (Tr. 735.)

the valve cover to the flange.[13] (Tr. 944-45, 947-48; Ex. R-23.) When Day returned, the crew was able to remove the four bracket mounting fasteners and set the actuator on the reactor deck. (Tr. 949-50.) The crew also removed all six valve cover fasteners. (Tr. 950.) Although no nuts held the cover to the flange, the cover still "tightly" fit to the valve's flange. (Tr. 951.) The crew members attempted to remove the coupling but "with minimal effort they were" unable to do so. (Tr. 954.) [Redacted] then took a pry bar to the coupling and, on the third attempt, removed the valve's pressure-retaining cover. (Tr. 954.) This pressure was caused by the gravity weight of the fluid above the valve in the reactor. (Tr. 1020.)

Shortly after 7:00 P.M., Skains heard a pressure release and looked out a window in the blast resistant room and saw what he thought was steam going through the unit. (Tr. 474.) He left the blast resistant room to see if a steam valve had blown out but soon realized it was not a steam cloud as a "vapor cloud overtook" him and two of the contractors. (Tr. 474.) The reactor, although shutdown, was still under pressure at 130 pounds per square inch and the product was at least 200 degrees Fahrenheit. (Tr. 150-51, 449.) Roughly 164,000 pounds of toxic process chemicals and chemical vapor were released from the reactor, of which 16.4% by weight was Methyl Iodide. (Tr. 963-64; Ex. C-11 at 4.)

[Redacted] survived the accident, but Day and [Redacted] did not. (Tr. 755.) In his state court proceeding deposition, [Redacted] made a number of statements contradicting testimony from the LyondellBasell employees, particularly Skains and Dodd. [Redacted] said the Turn2 crew did not complete a JHA for removing the actuator and said no one from LyondellBasell reminded them to do so. (Ex. R-14 at 005.) [Redacted] also said no one from LyondellBasell discussed the permit and PPE with the crew. (Ex. R-14 at 005-06.) Further, [Redacted] said he did not see anyone from LyondellBasell hand a permit to Day and no one from the LyondellBasell walked the crew out to the rector deck. (Ex. R-14 at 006.) Out on the reactor deck, no one from LyondellBasell put their hand on the on the actuator to show it to the crew, according to [Redacted], who did not see any other LyondellBasell employees working with hoses or otherwise. (Ex. R-14 at 006.) Regarding the removal of the actuator, [Redacted] said the LyondellBasell operator told the crew, "once y'all remove the actuator, set everything to the side, [Day]'s already been up there, he knows what I'm talking about." (Ex. C-14 at 003; Tr. 755-56.) [Redacted] also said he was told they were

[13] The record is unclear whether the Turn2 crew was using an adjustable wrench or wrenches to size. (Tr. 945-46.)

removing a valve, although he did not identify the person communicating this requirement. (Ex. C-14 at 004.)

Compliance Safety and Health Officer (CSHO) Richard Nickerson from the Houston South Area Office was informed by his supervisor of the accident and began his investigation the following day. (Tr. 237-38.) Nickerson conducted an opening conference, requested and received documents, and interviewed employees. (Tr. 239-41.) As a result of the information he received and learned, Nickerson determined the process contained more than 10,000 pounds of methanol, the threshold quantity triggering coverage under the PSM standard. (Tr. 241.)

The Citation

Following the investigation, OSHA cited LyondellBasell for serious violations of the Act and the standards thereunder found at § 1910.119 and § 1910.147. In Citation 1, Item 1(a), the Secretary alleges LyondellBasell violated § 1910.119(f)(4) by failing to "implement safe work practices to control hazards during the modification of HV-117 for LOTO and repair of the Methanol supply line to the Acetic Acid Reactor." (Citation at 6.) In Citation 1, Item 1(b), the Secretary alleges LyondellBasell violated § 1910.147(c)(4)(ii)(B) by failing to develop and implement energy control procedures in the AA "Unit to block and isolate HV-117 from hazardous energy sources while it was being worked on." (Citation at 7.) In Citation 1, Item 2, the Secretary alleges LyondellBasell violated § 1910.119(h)(2)(ii) by failing to inform Turn2 the reactor would not be de-inventoried and/or isolated while work was occurring and did not warn Turn2 the operating state of the equipment created an increased potential for an energy release that could result in fire, explosion, and/or toxic release if the valve boundary were compromised. (Citation at 8.) In Citation 1, Item 3, the Secretary alleges LyondellBasell violated § 1910.119(j)(2) by failing to "establish and implement written procedures to direct workers in modifying HV-117, which was installed in process but not isolated, so it could be used as an isolation point in the LOTO of methanol supply piping in the" AA reactor. (Citation at 9.) Finally, the Secretary alleges in Citation 1, Item 4, LyondellBasell violated § 1910.119(l)(1) by failing to "implement procedures to manage change when it made modification to HV-117 in the" AA unit. (Citation at 10.) The Secretary proposed a penalty of $13,653 for each item. (Citation at 6-10.)

ANALYSIS

To prove a violation of a standard under section 5(a)(2) of the Act, the Secretary must establish "by a preponderance of the evidence that (1) the cited standard applies, (2) there was a

failure to comply with the cited standard, (3) employees had access to the violative condition, and (4) the cited employer either knew or could have known of the condition with the exercise of reasonable diligence." *Astra Pharm. Prods.*, 9 BNA OSHC 2126, 2129 (No. 78-6247, 1981), *aff'd in pertinent part*, 681 F.2d 69 (lst Cir. 1982).

The purpose of the PSM standard is to "prevent[] or minimiz[e] the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals . . . . which may result in toxic, fire, or explosion hazards." 29 C.F.R. § 1910.119 ("Purpose"). To achieve this, the standard applies to "[a] process which involves a chemical at or above the specified threshold quantities." 29 C.F.R. § 1910.119(a)(1)(i). "Process," according to the standard is "any activity involving a highly hazardous chemical including any use, storage, manufacturing, handling, or the on-site movement of such chemicals, or combination of these activities." 29 C.F.R. § 1910.119(b). The Secretary contends the PSM standard generally applies to LyondellBasell's LaPorte facility due to the nature of the process and quantities of process chemicals stored at the facility. (Sec'y Am. Br. at 10-11; Tr. 241, 596.) The AA Unit reactor contained over 160,000 pounds of acetic acid at the time of the accident, of which 16.7% by weight, or 27,388 lbs., was Methyl Iodide. (Tr. 963-64; Ex. C-11 at 4.) This quantity exceeds the 7,500 lbs. threshold for coverage. *See* § 1910.119(a)(1)(ii), App. A to § 1910.119. Therefore, the PSM standard applies to the LaPorte facility.

The Commission and the U.S. Court of Appeals for the Fifth Circuit treat the PSM standard differently. According to the Fifth Circuit, "[s]ome sections of the PSM standard are performance standards . . . but [others are] not." *Sanderson Farms, Inc. v. OSHRC*, 964 F.3d 418, 427 (5th Cir. 2020). The Commission, however, has stated the PSM standard is a performance standard. *BP Prods. N. Am., Inc.*, No. 10-0637, 2018 WL 5314836, at *2 (OSHRC Sept. 27, 2018) (citing Process Safety Management of Highly Hazardous Chemicals, 57 Fed. Reg. 6,356, 6,356, 6,360 (Feb. 24, 1992)). Because the Fifth Circuit is available to both LyondellBasell and the Secretary on appeal, the Court assesses each cited PSM provision with the law of that circuit.[14]

[14] Under the Act, the employer or the Secretary may appeal a Commission order to the federal court of appeals for the circuit in which the violation allegedly occurred or where the employer has its principal office, and the employer also may appeal to the District of Columbia Circuit. *See* 29 U.S.C. §§ 660(a) and (b). The Commission has held "[w]here it is highly probable that a case will be appealed to a particular circuit, the Commission generally has applied the precedent of that

The Fifth Circuit is "reluctan[t] to treat most OSH Act regulations as performance standards." *Echo Powerline, LLC v. OSHRC*, 968 F.3d 471, 479 (5th Cir. 2020). A performance standard "set[s] a goal for an employer to meet with flexible methods," whereas a specification standard "prescribes" specific measures an employer must take to comply. *Sanderson Farms*, 964 F.3d at 428. Two hallmarks of a performance standard, according to the Fifth Circuit, are it "establishes an end result that the employer chooses how to work toward, and" it "is so general as to require definition by reference to industry standards for the regulation to be reasonable." *Id.* (citing *Siemens Energy & Automation Inc.*, 20 BNA OSHC 2196 (No. 00-1052, 2005)). They also tend to apply to "undefined" hazards, which are hazards not necessarily presumed by the standard. *Sanderson Farms*, 964 F.3d at 424, 428. These standards usually include "general[] or open-ended[]" language such as "adequate," "appropriate," "wherever it is necessary," and "safe operating condition." *Id.* at 427-28.

The Fifth Circuit has expressly found § 1910.119(j)(2), which is part of the mechanical integrity provision, identifies specific obligations and is therefore not so vague the court interpret it with reference to industry custom. *Id.* at 432. Section 1910.119(j)(2) states "[t]he employer shall establish and implement written procedures to maintain the ongoing integrity of process equipment." This language, according to the Fifth Circuit, "is quite specific about the need for 'written procedures' for the maintenance of 'process equipment.' " *Id.* Further, the provision is "of the ordinary sort for which a hazard is presumed," which means it does not apply "only when there is a hazardous condition." *Id.* at 424. Therefore, the Court treats the mechanical integrity provision as a general standard.

Because the safe work practices provision, § 1910.119(f)(4), and the management of change provision, § 1910.119(l)(1), use similar language, the Court finds they are also general standards. Section 1910.119(f)(4), states "[t]he employer shall establish and implement safe work practices to provide for the control of hazards" during certain operations, when, among other things, process equipment or piping is opened. Section 1910.119(l)(1) states "[t]he employer shall establish and implement written procedures to manages changes" to, among other things, process

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circuit in deciding the case—even though it may differ from the Commission's precedent." *Kerns Bros. Tree Serv.*, 18 BNA OSHC 2064, 2067 (No. 96-1719, 2000). Here, both the worksite and LyondellBasell's principal office are in LaPorte, Texas, which is in the Fifth Circuit. (*See* Cit. at 1.) Therefore, it is highly probable this case will be appealed to the Fifth Circuit, and the Court applies that circuit's precedent, in addition to Commission precedent, in deciding this case.

equipment and procedures. Although the employer has discretion regarding the content of the procedures and practices, the provisions still require the employer to take specific actions. As the Fifth Circuit noted in its discussion of § 1910.119(j)(4)(1), where a command "is explicit and unambiguous," it "satisfies the reasonableness requirement of due process and fair notice on its own." *Sanderson Farms*, 964 F.3d at 428. Further, the employer's recognition or perception of a hazard does not trigger the requirements of § 1910.119(f)(4) and § 1910.119(l)(1); the hazard is presumed, and the employer must develop these practices and procedures and implement them based upon the equipment involved. Therefore, the Court treats § 1910.119(f)(4) and § 1910.119(l)(1) as general standards rather than performance standards.

According to § 1910.119(h)(2)(ii) "[t]he employer shall inform contract employers of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process." As noted above, performance standards " 'require an employer to identify the hazards peculiar to its own workplace and determine the steps necessary to abate them.' " *Sanderson Farms*, 964 F.3d at 428 (quoting *Thomas Indus. Coatings, Inc.*, 21 BNA OSHC 2283, 2287 (No. 97-1073, 2007)). Although the provision meets the first requirement of the *Sanderson* performance standard test by allowing the employer to identify "known potential . . . hazards," it does not set a goal for the employer to meet with flexible methods or allow the host employer to determine the steps required to abate the known potential hazards. The provision's command "is explicit and unambiguous," and "satisfies the reasonableness requirement of due process and fair notice on its own." *Sanderson Farms*, 964 F.3d at 428. As indicated by the inclusion of "shall inform" in the provision, if an employer or its industry identifies potential hazards, the employer must inform a contractor of them. Therefore, under Fifth Circuit precedent, § 1910.119(h)(2)(ii) is not a performance standard.

Alleged Safe Work Practices Violation

The Secretary alleges in Citation 1, Item 1(a), LyondellBasell, as the host employer, exposed workers to process materials, toxic release, and flammable hazards from the AA Unit when it failed to implement safe work practices to control hazards during modification of HV-117 for LOTO and repair of the Methanol supply line to the reactor. (Citation at 6.) The standard provides:

> The employer shall develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping; and control over entrance into a facility by

> maintenance, contractor, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees.

29 C.F.R. § 1910.119(f)(4).

The Secretary does not allege in this citation item LyondellBasell failed to develop safe work practices to provide for the control of hazards. *C.f., Albemarle Corp.*, 18 BNA OSHC 1730, at *1 (Nos. 93-0848 & 93-1715, 1999) (consolidated) (alleging employer violated § 1910.119(f)(4) because written procedures for opening lines and installing slip blinds were unavailable), *aff'd*, 221 F.3d 782 (5th Cir. 2000). Instead, the Secretary alleges LyondellBasell failed to implement them, emphasizing LyondellBasell's safe work practices were applicable to "opening process equipment or piping" and "control over entrance into a facility by maintenance, contractor . . . personnel." (Sec'y Am. Br. at 10.) According to the Secretary, LyondellBasell failed to meet its "responsibility" to inform Turn2 workers of, among other things, the process and chemical hazards around them and how they could be accessed, the state of the process, the chemicals in the area that could be released, how to prevent their release, and where to find information on the equipment and process, contrary to LyondellBasell's safe work practices. (Sec'y Am. Br. at 12.).

Whether the Standard Applies

In addition to meeting the threshold for process materials, the Secretary argues the safe work practices regulation applies to LyondellBasell because it was the host employer for the Turn2 contractors at the time of the accident. (Sec'y Am. Br. at 11.) The Secretary argues "[b]ecause the specific work assigned to Turn2 involved modifying or opening process equipment, that type of work triggered Lyondell's duties as a host employer under" § 1910.119(f)(4), including its safe work practices to provide for the control of hazards. (Sec'y Am. Br. at 11.) To support this assertion, the Secretary claims LyondellBasell's expert witness Dennis Scardino "admitted," and Dye "agreed," LyondellBasell's work permit procedure is a safe work practice applicable to Turn2's removal of the actuator. (Sec'y Am. Br. at 11 (citing Tr. 136, 990).)

LyondellBasell does not explicitly challenge the applicability of the standard to its facility. Instead, the company contends it complied with the standard because it has developed and implemented safe work practices. (Resp't Br. at 16.) Here, however, LyondellBasell asserts it did not need to follow its safe work practices for PSM "because the job to be performed by Turn2, as permitted by [LyondellBasell], did not involve opening process equipment." (Resp't Br. at 16.) Therefore, it issued a general work permit rather than a line break permit. (Resp't Br. at 16-17.) In

the Court's view, this argument is better-framed as challenging the applicability of the safe work practices provision to the cited conditions.

Although the PSM standard applies generally to the AA Unit at the LaPorte facility, the Court finds the safe work practices regulation does not apply to the cited conditions. *See Jacobs Field Servs. N. Am., Inc.*, 2015 WL 1906701, at *15 (No. 13-1623, 2015) (ALJ) (PSM standard may apply generally to an employer, but the Court must still determine whether the cited standard applies to specific equipment at issue), *aff'd*, 659 F. App'x 181, 186 (5th Cir. 2016) (unpublished) (court must consider whether requirements of a specific provision apply to certain equipment, processes set forth in the provision), *cert. denied*, 582 U.S. 910 (2017). Section 1904.119(f)(4) requires employers to "implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping." Here, the Secretary alleges LyondellBasell directed Turn2 to open process equipment or piping, which triggers safe work practices for the control of hazardous energy. However, the nature of the hazards related to removing the actuator and configuration of the components contradict this allegation, as both the permitted and communicated scope of work was to occur outside the process equipment and therefore beyond the purview of § 1904.119(f)(4).

First, the removal of the actuator does not constitute opening of process equipment or piping within the meaning of the provision. The actuator and bracket fasteners mounting the actuator to HV-117 were external to the valve and process equipment. The assigned work would not and actually did not involve opening process equipment or piping. (Tr. 653-54, 861-62; Exs. R-21, R-22, R-23.) A Commission judge and the Fifth Circuit have addressed a similar applicability issue. In *Jacobs*, a contract employer argued its removal of an actuator did not fall within the PSM standard's mechanical integrity provision.[15] "Because one set of bolts connects the actuator bracket, the valve, and the valve bonnet, and because removing the bracket would 'break the line,' " the appeals court upheld "the ALJ's conclusion that the bracket and bolts used to mount the actuator to the valve bonnet are process equipment within the meaning of § 1910.119(j)(1)." *Jacobs*, 659 F. App'x at 188. Unlike the mounting system in *Jacobs*, the bracket

[15] The mechanical integrity provision applies to process equipment, such as piping systems (including components such as valves). 29 C.F.R. § 1910.119(j)(1)(ii). Although the mechanical integrity provision is a different requirement, the Court finds the Fifth Circuit's analysis instructive because the Secretary argues LyondellBasell directed Turn2 to open process equipment or piping.

and fasteners used to mount the actuator in LyondellBasell's LaPorte facility did not impinge upon the line and therefore were not process equipment. As noted above, a hexagonal mounting bracket secured the actuator to the HV-117 via four smaller diameter bolts. (Tr. 171, 177-78; Exs. R-21, R-23, R-24.) Although these bolts held the actuator in place, they did not impact pressure-retaining components such as the valve or piping or otherwise enter the process. (Tr. 171-72, 653-54.) Large diameter flange bolts, also called valve cover fasteners, lined the outside of the valve cover and held the pressure boundary. (Tr. 177-78, 665, 945; Exs. R-22, R-23.) Therefore, removing the mounting bracket fasteners did not constitute the "opening of process equipment or piping" under the safe work practices provision.

Second, the Court finds the removal of the actuator did not fall within the class of activities set forth by the safe work practices provision. The use of "such as" in the list of activities in § 1904.119(f)(4) shows the list is not exhaustive; it contains examples of activities—lockout/tagout; confined space entry; opening process equipment or piping—requiring the implementation of safe work practices. While the Court does not need to turn to the legislative history of the PSM standard to make this determination, doing so helps illuminate the types of activity covered by the safe work practices provision. In developing the provision, OSHA was chiefly concerned with "requiring the employer to develop and implement safe work practices to provide for the control of hazards during work activities." 57 Fed. Reg. 6,380. The PSM standard's "purpose" sets forth the types of hazards the standard is intended to prevent: "releases [that] may result in toxic, fire, or explosion hazards." 29 C.F.R. § 1910.119 (Purpose). Unlike the activities set forth in the safe work practices provision, the removal of the actuator did not call for a line break and therefore did not require LyondellBasell to implement practices to control potential toxic, fire, or explosion hazards. Indeed, OSHA "agreed" with a comment [related to the safe work practices provision] suggesting one of the purposes of the safe work practices provision was "to provide information to those workers performing non-routine work regarding *the hazards and necessary precautions attendant to that work*." 57 Fed. Reg. 6,380 (emphasis added). Here, the relevant hazards attendant to removing the actuator were not process-related toxic, fire, or explosion hazards; they were the weight of the actuator and danger posed by potentially dropping it, as well as pinch points and trip and fall hazards. (Tr. 116, 793, 925-26.) The type of work activities in the safe work practices provision simply does not encompass the hazards posed by removing the actuator. Therefore, the safe work practices provision does not apply to the cited conditions.

The Court also notes LyondellBasell neither instructed nor permitted Turn2 to perform a line break such that the safe work practices provision's requirements would apply to the host employer. Although [Redacted] testified in his state court proceeding deposition he was told they were removing a valve, the Court credits Dodd's and Monson's testimony. (Ex. C-14 at 004.) Monson and Dodd both credibly testified Dodd communicated the job entailed removing the actuator, nothing more. On the reactor deck, Dodd indicated which actuator was to be removed and crew foreman Day mentioned to Monson it was a four-bolt job requiring a crescent wrench. (Tr. 731, 747-49.) Day put his hand on the actuator. (Tr. 747-48.) Monson testified Dodd had instructed Day to remove the actuator, not to open the valve cover, and Monson was not aware anyone ever told Day to remove the cover. (Tr. 733, 758.) Dodd testified the Turn2 contractors gave no indication they would exceed the scope of the permit, which simply informed Turn2 the job was "[r]emoving the actuator from HV[-]117." (Tr. 801; Ex. C-4 at 038.) No evidence or testimony elicited during this proceeding establishes Dodd changed his directions to the crew before it began to work. Moreover, the Court finds it incomprehensible Dodd, who was involved in many meetings leading up to the commencement of Turn2's work and working near the reactor deck to prepare for the line flush, would change his directions to the Turn2 crew knowing the reactor was not de-inventoried and the line had not yet been flushed of process chemicals.

Finally, the Court addresses the Secretary's contention expert witness Dennis Scardino "admitted" and Dye "agreed" LyondellBasell's work permit procedure is a safe work practice applicable to Turn2's removal of the actuator. (Sec'y Am. Br. at 11 (citing Tr. 136, 990).) The record does not support this argument. First, Dye testified LyondellBasell's work permit procedure requires the work permit to remain with the work crew at the site, and, in this case, his understanding was the permit was destroyed in the accident. (Tr. 135-36; Ex. R-1.) Dye did not state the work permit procedure is a safe work practice within the meaning of § 1910.119(f)(4). Scardino testified he listed some safe work practices for the removal of the actuator in his expert report. (Tr. 989; Ex. R-40 at 8.) These practices, according to Scardino, included HS-06-04-10, Work Permit Procedure; HS-06-01-20, Job Hazard Evaluation; LYB La Porte Complex, Contractor Safety Handbook; LYB La Porte Complex Contractor Orientation, administered by Houston Area Safety Council; and LYB Rules for Contractors. (Ex. R-40 at 8.) While the Court agrees these documents set forth safe work practices associated with the removal of the actuator, these practices are distinct from LyondellBasell's safe work practices for line breaks, which fall under §

1910.119(f)(4). Because the assigned work and configuration of the equipment did not require a line break, LyondellBasell properly issued a general permit and not a line break permit. The line break permit would have triggered LyondellBasell's safe work practices, such as verifying the equipment is clear of process and isolations are holding, tagging the line break location, and having an operations supervisor or other qualified person present. *See* Exs. R-3, R-4. Because Scardino testified to work practices related to a general permit rather than safe work practices under the line break permit procedure, to which § 1910.119(f)(4) would have applied, the Court rejects the Secretary's argument his testimony establishes the applicability of the cited provision.

Whether LyondellBasell Had Knowledge of the Violative Condition

Even if the Court were to find the safe work practices provision applies to the removal of the actuator and LyondellBasell violated the provision by failing to implement its practices, the Court would still find the company lacked knowledge of the violative condition.[16] To establish the knowledge element, "the Secretary must prove that the employer knew or, with the exercise of reasonable diligence, should have known of the conditions constituting the violation." *Cent. Fla. Equip. Rentals, Inc.*, 25 BNA OSHC 2147, at *8 (No. 08-1656, 2016) (citing *Jacobs Field Servs. N. Am.*, 25 BNA OSHC 1216, 1218 (No. 10-2659, 2015)). The Fifth Circuit has held "[t]he knowledge prong is focused on the 'physical conditions constituting the violation,' meaning '[t]he departure from OSHA standards, not the worker's injury, is the violation.' " *Darling Ingredients, Inc. v. OSHRC*, 84 F.4th 253, 262 (5th Cir. 2023) (quoting *S. Hens Inc. v. OSHRC*, 930 F.3d 667, 676, 679 (5th Cir. 2019)). Under both Commission and Fifth Circuit precedent, an employer's supervisor's actual or constructive knowledge can be imputed to the employer. *Jersey Steel Erectors*, 16 BNA OSHC 1162, at *2 (No. 90-1307, 1993), *aff'd*, 19 F.3d 643 (3d Cir. 1994); *Sanderson Farms, Inc. v. Perez*, 811 F.3d 739, 736–37 (5th Cir. 2016).

Here, the violative condition alleged by the Secretary is LyondellBasell's failure to implement safe work practices to control hazards during modification of HV-117 for LOTO and repair of the methanol supply line. (Citation at 6.) The Secretary contends several facts support a finding LyondellBasell had actual or constructive knowledge of the violative condition. Among other things, the Secretary argues LyondellBasell failed to verify Turn2 completed a JHA for the job and failed to provide the Turn2 crew with relevant information to complete the JHA. (Sec'y

[16] LyondellBasell stipulated at trial two or more of its employees were exposed to the alleged hazards. (Tr. 269.)

Am. Br. at 17-18 (citing Tr. 225, 838).) The Secretary also argues LyondellBasell's work permit and permit procedure was inadequate, because the general permit only provided a checklist of items, such as JHA, PPE, and hazards, for LyondellBasell to discuss with the crew or have them complete, instead of confirming they were actually discussed or completed. (Sec'y Am. Br. at 17-18 (citing Tr. 132-33, 141, 225).) The Secretary asserts the work permit was deficient because the short description states "remove actuator" and the detailed job description states "removing actuator from HV-117." (Sec'y Am. Br. at 18 (citing Tr. 687-98).) Finally, the Secretary claims Gilliam testified that, from looking at the permit, "one cannot determine from the face of it exactly what hazards, if any, were communicated to the Turn2 work crew by the Lyondell permit issuer." (Sec'y Am. Br. at 18 (citing Tr. 698-699).)

The record does not support a finding the company knew or could have anticipated Turn2 would open HV-117, such that safe work practices to provide for the control of hazards were required. First, LyondellBasell did not have actual knowledge of the allegedly violative condition. LyondellBasell, as the general permit states, directed Turn2 to remove the actuator. Because doing so involved external work and did not require a line break, LyondellBasell issued a general permit rather than a line break permit, which would have triggered its safe work practices and a host of other practices. Monson confirmed Dodd had communicated the job scope. During the meeting with Dodd and Monson, Day put his hand on the actuator and asked Dodd if that was the actuator to be removed. (Tr. 747.) Dodd replied it was and said lay it on the deck. (Tr. 747.) Day and Monson were not confused by the scope of the assigned work. They agreed removing bolts from the mounting bracket was a four-bolt job and Day determined a crescent wrench would be used to complete it. (Tr. 731, 748, 784.) The actuator removal, according to Monson, did not involve breaking the line. (Tr. 736-37.) The permit and Monson's testimony confirm LyondellBasell did not have actual knowledge of the allegedly violative condition.

Second, LyondellBasell exercised reasonable diligence. Any further inquiries by LyondellBasell into the condition of the actuator and HV-117, as well as the assigned work, would not have revealed LyondellBasell's failure to implement safe work practices. *Greenleaf Motor Express, Inc.*, 21 BNA OSHC 1872, 1874-75 (No. 03-1305, 2007) (an employer must make "reasonable inquiries" to discover hazards), *aff'd*, 262 F. App'x 716 (6th Cir. 2008) (unpublished). Given the actuator's external nature, LyondellBasell did not know its removal would lead to a line break and trigger the abatement measures required by the company's safe work practices. Further,

Monson and Day indicated they understood the scope of the job was limited to removing the actuator, so LyondellBasell did not and could not know the Turn2 crew would perform a line break. Therefore, LyondellBasell did not have constructive knowledge of the allegedly violative condition.

The Court finds the Secretary has not established all elements of her burden of proof for Citation 1, Item 1(a).

Alleged Failure to Inform Contract Employees of PSM Hazards

The Secretary alleges in Citation 1, Item 2, LyondellBasell, exposed workers to process materials, toxic release, and flammable hazards from the AA Unit when it did not inform Turn2 the AA Unit would not be de-inventoried and/or isolated from HV-117 while work was occurring on HV-117. (Citation at 8.) The Secretary also alleges in this item LyondellBasell "did not warn that the equipment arrangement and operating state creates an increased/elevated potential for unexpected energy release at HV-117 that could result in fire, explosion, and/or toxic release if the pressure boundary of HV-117 is compromised during their work." (Citation at 8.) The standard provides: "The employer shall inform contract employers of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process." 29 C.F.R. § 1910.119(h)(2)(ii). Section 1910.119(h) "applies to contractors performing maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a covered process. It does not apply to contractors providing incidental services which do not influence process safety, such as janitorial work, food and drink services, laundry, delivery or other supply services." 29 C.F.R. § 1910.119(h)(1). For the following reasons, the Court affirms this item.

Whether the Standard Applies to the Cited Conditions

The Court finds the standard applies to Turn2's assigned removal of the actuator for the following reasons. First, both LyondellBasell and Turn2 recognized the removal of the actuator was "specialty work." LyondellBasell describes Turn2 as a specialist contractor in arguing it reasonably relied upon Turn2 to perform the contracted work of removing the actuator. (Resp't Br. at 30 n.36.) Further, Monson testified the Turn2 crew had certain expertise and experience which would allow it to complete the job. (Tr. 726-27, 733.) Second, although the removal of the actuator was not work on a covered process, it was taking place adjacent to a covered process; in this case, the valve, piping system, and reactor. *See* Safe Work Practices Applicability discussion, *supra*. Further, the removal of the actuator was certainly more significant than and dissimilar to "janitorial

work, food and drink services, laundry, delivery or other supply services" set forth in the second sentence of the applicability provision. Therefore, the standard applies to the cited conditions.

Whether LyondellBasell Violated the Standard

The Secretary argues LyondellBasell, as the host employer, created and controlled the known toxic release hazards and had information on these hazards, yet it failed to communicate this information to its contractor, Turn2. (Sec'y Am. Br. at 29-30.) Specifically, the Secretary contends LyondellBasell failed to inform the Turn2 work crew of line opening procedures; failed to describe to the workers what was allowable and what work was safe or not safe to perform; failed to identify hazards with respect to the assigned work; and failed to give them any sort of direction, diagrams, or supervision related to the removal of the actuator. (Sec'y Am. Br. at 29-30 (citing Tr. 248).) Although the general work permit communicated the scope of work was to remove the actuator, it did not identify material in the process and its potential for release, according to the Secretary. (Sec'y Am. Br. at 31 (citing Tr. 285).)

LyondellBasell argues it had a narrow duty under the provision. The permitted work was limited to the removal of the actuator and therefore did not include any known potential fire, explosion, or toxic release hazards, according to LyondellBasell. (Resp't Br. at 27.) LyondellBasell contends it provided "necessary information" on the assigned work, which did not require a line break, as well as the hazards relevant to that work. (Resp't Br. at 28.) LyondellBasell asserts the "specific communications proposed by the Secretary were unnecessary and irrelevant to Turn2's work task of removing the actuator from the exterior of valve HV-117," because an employer only has a duty to instruct workers on foreseeable hazards. (Resp't Br. at 29 (citing *Jensen. Constr. Co.*, 14 BNA OSHC 2022, at *7-9 (No. 88–0612, 1990) (ALJ).) In any event, Monson understood the scope of work was limited to removing the actuator and the AA Unit reactor was not de-inventoried. (Resp't Br. at 28.) Turn2 had opportunities to ask questions regarding the scope of the job and the permit but did not do so, according to LyondellBasell. (Resp't Br. at 28.) LyondellBasell also contends, Turn2, as the contractor removing the actuator, was responsible for deciding how to accomplish the task and for completing a JHA regarding the hazards relevant to its methods. (Resp't Br. at 29.)

Neither the Secretary nor LyondellBasell accurately or completely states the company's duties under the contractor communication provision. The Court finds an employer has a duty to inform contractors of two sets of hazards. First, the employer must "inform contract employers of

the known potential fire, explosion, or toxic release hazards related to the contractor's work." And second, the employer must "inform contract employers of the known potential fire, explosion, or toxic release hazards related to . . . the process." The use of "and" and "related" in § 1910.119(h)(2)(ii) establishes the hazards phrase modifies both "the contractor's work" and "the process," not the contractor's work related to the process, and therefore an employer has a duty to communicate the hazards related to each. Second, if OSHA required an employer to communicate a single set of interrelated hazards it could have written the final rule using similar language from the Federal Register notice,[17] such as hazards "pertinent to the contractor's job tasks" or hazards "associated with the work being performed." The Court must use the "known potential hazards" phrase to modify "the contractor's work" and "the process," which are the phrases preceding and proceeding the "and." *See Bunge Corp.*, 12 BNA OSHC 1785, at *6 (Nos. 77-1622, 78-0838 & 78-2213, 1986) (consolidated) ("It is axiomatic that OSHA standards must be interpreted in accordance with the natural and plain meaning of their words . . . ."). Further, § 1910.119(h)(1) states an employer's duty to inform of certain hazards applies not only to contractors working on covered process equipment but also to those working adjacent to a covered process. The applicability provision is therefore broad and applies due to the contractor's proximity to process equipment, so long as the contractor is not performing an incidental service "which do[es] not influence process safety." The applicability provision contemplates a contractor will not be working directly on process equipment, yet it demands the employer apprise the contractor of known potential hazards related to the process.

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[17] The Court notes there is some ambiguity in OSHA's summary and explanation accompanying the final PSM rule as to whether the employer's duty is to inform contractors of a single set of hazards related to both the work performed and the process. The summary and explanation for the final rule states OSHA "believes that *process safety information pertinent to the employees [sic] job tasks* is required to be communicated to employees by the final standard," including "to contract employees in paragraph (h) . . . ." 57 Fed. Reg. 6,374 (emphasis added). Furthermore, "[t]he purpose of these proposed requirements [in (h)(1) and (h)(2)] was to assure that contractors are aware of both *the hazards associated with the work being performed* and the actions to be taken during emergencies." 57 Fed. Reg. 6,385 (emphasis added). Both excerpts support a reading the host employer must communicate process hazards related to the assigned work. However, OSHA goes on to state a more general duty to communicate hazards related to the process: "These provisions [contained in Paragraphs (h)(2) (ii) and (iii)] *require the communication of basic process hazard* and emergency information to contract employers and have been retained in the final rule." 57 Fed. Reg. 6,387 (emphasis added). Based on the plain language of § 1910.119(h)(2)(ii), the Court finds OSHA has adopted this meaning.

As noted above, although § 1910.119(h)(2)(ii) is not purely a performance standard because it specifies measures an employer must take to comply, it still requires an employer to identify known potential fire, explosion, or toxic release hazards. Therefore, the Court assesses whether LyondellBasell knew, or its industry recognized, potential hazards related to the process. *See Sanderson Farms*, 964 F.3d at 428. Here, the Secretary alleges LyondellBasell failed to inform Turn2 the reactor would not be de-inventoried and/or isolated while work was occurring and did not warn the contractor the operating state of the equipment created an increased potential for an energy release, which could result in fire, explosion, and/or toxic release if the valve boundary were compromised. (Citation at 8.) The Court rejects LyondellBasell's argument § 1910.119(h)(2)(ii) only required it to only communicate "foreseeable" hazards, which it claims are those related to the removal of the actuator. As noted above, the provision plainly provides otherwise. It requires an employer to inform contractors of "known potential hazards" related to "the process." Whereas foreseeable hazards "reasonably can or should be anticipated . . . such that a person of ordinary prudence would expect to occur or exist under the circumstances," potential hazards are merely "existing in possibility." *Foreseeable* and *Potential*, Merriam-Webster Dictionary, https://www.merriam-webster.com/dictionary/foreseeable and https://www.merriam-webster.com/dictionary/potential (last visited May 15, 2024). Therefore, the Secretary need only show a possibility of the known hazards, not an expectation they would occur under the circumstances. Moreover, because the provision "anticipates the possibility" of fire, explosion, or toxic release hazards, "the focus is on the likely results of a [release], not on whether it is likely" to occur. *Ormet Corp.*, 14 BNA OSHC 2134, at *5 (No. 85-531, 1991) (explaining crane standard is concerned with possibility of load falling, not likeliness of it falling). The employer's duty to communicate under the provision attaches "before a hazardous situation occurs." *Ormet Corp.*, 14 BNA OSHC 2134, at *5 (emphasis in the original).

LyondellBasell did not communicate to Turn2 any "known potential fire, explosion, or toxic release hazards" related to the actuator removal. This omission does not run afoul of the provision's first command, because, as discussed in detail above, there simply were no "known potential fire, explosion, or toxic release hazards" related to this assigned task. Instead, LyondellBasell communicated the weight of the actuator and danger posed by potentially dropping it, as well as pinch points and trip and fall hazards. (Tr. 116, 793, 925-26.) These hazards do not fall within the purview of the cited provision. However, multiple LyondellBasell employees

testified the AA Unit reactor was not de-inventoried and to potential hazards posed by the process, which establishes the company was aware of them. Bernard and Gilliam testified the AA Unit was not de-inventoried as it was during a 2019 actuator removal, when there was no product in any of the lines, vessels, and towers in the AA Unit. (Tr. 414, 646.) In addition to these LyondellBasell employees, Dodd, Skains, and Hardcastle, all testified they knew the reactor had not been de-inventoried. (Tr. 438-39, 447 (Skains), 606-07, 633 (Hardcastle), 801 (Dodd).) The de-inventoried AA Unit reactor posed multiple known potential hazards. Dye testified the process temperature was about 230 degrees Fahrenheit and was still under pressure. (Tr. 150-51, 183.) Similarly, Skains testified the process product in the system reactor and piping was still under pressure and exceeded 200 degrees, despite the system shutdown earlier that afternoon. (Tr. 447-49.) Furthermore, as LyondellBasell's expert Scardino testified, the gravity weight of the process fluid in the de-inventoried reactor was creating pressure on the valve's interior. (Tr. 1020.) When the Turn2 contractors removed the HV-117 cover, 160,000 lbs. of pressurized process fluid was released. (Tr. 963.) Both Dye and Dodd testified to the known potential hazards posed by the process. Dye agreed the process product left in the reactor posed a hazard that could seriously injure or kill those exposed to it through inhalation or skin contact. (Tr. 149.) On cross-examination, Dodd indicated the unit specification sheet—a single sheet of paper describing the unit—contains information about the chemical process and contents of the line, such as pressure in the line and the type of acetic acid in the reactor, as well its hazardous characteristics and effects. (Tr. 834, 983.) Therefore, the Court finds LyondellBasell knew of potential toxic release hazards related to the process.

Neither party disputes LyondellBasell did not communicate to Turn2 any "known potential fire, explosion, or toxic release hazards" related to the process. In fact, Stewart testified LyondellBasell's practice is to "walk out [contractor] to an area of the plant and issue a work permit . . . what we try to do is focus on the relevant work, the hazards of that work and not talk about or not add a bunch of detail that may not be directly relevant to the work they're doing . . . ." (Tr. 522.) In this case, Dodd walked out the crew, handed the permit to Day, communicated the scope of work, and performed a safety review with the crew. (Tr. 791.) Dodd testified this review did not include a discussion of the potential release of chemicals from HV-117. (Tr. 791.) Dodd said he did not tell the Turn2 crew HV-117 and the piping above and below it had chemicals, including acetic acid or methanol because "it was not part of their scope." (Tr. 795.) Dodd also testified he did not tell the crew the reactor was empty and the equipment was safe to open. (Tr. 795-96.)

Further, Monson testified Dodd did not mention during the earlier meeting with Day there were still toxic chemicals in the system or it was under pressure. (Tr. 753-54.) Although section 4.1.6 of LyondellBasell's permitting procedures required Dodd to offer a "unit info sheet . . . to workers being permitted," he did not do so. (Tr. 833-34; Ex. R-1 at 666.) Because LyondellBasell and specifically Dodd knew of "potential fire, explosion, or toxic release hazards" related to the process but did not communicate them to Turn2, the company failed to comply with § 1910.119(h)(2)(ii).[18]

The Court also rejects LyondellBasell's argument it did not violate § 1910.119(h)(2)(ii) because Monson understood the AA unit still contained hazardous chemicals. Monson may have understood this fact, but there is no evidence in the record Day, [Redacted], or [Redacted] actually knew this, and there is no evidence in the record Dodd or anyone else from LyondellBasell informed them of "known potential fire, explosion, or toxic release hazards related to . . . the process." LyondellBasell's duty under the provision is an affirmative one; the use of "shall" in the provision means it simply had to inform the contract employees of these known potential hazards.

Whether Employees Had Access to the Violative Condition

To establish exposure to the violative condition the Secretary must show either an employee was actually exposed to the cited condition or access to the cited condition was reasonably predictable. *Phoenix Roofing Inc.*, 17 BNA OSHC 1076, at *3 (No. 90-2148, 1995), *aff'd*, 79 F.3d 1146 (5th Cir. 1996) (unpublished). Here, the record establishes Turn2 contractors suffered serious and fatal injuries resulting from their exposure to process chemicals. Therefore, the Secretary has established actual exposure. *See Phoenix Roofing*, 17 BNA OSHC 1076, at *3 (employee's fatal fall through a skylight established actual exposure to a fall hazard). Furthermore, LyondellBasell stipulated at trial two or more of its employees were exposed to the alleged hazards. (Tr. 269.)

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[18] The Court does not find § 1910.119(h)(2)(ii) required LyondellBasell to inform the "crew of line opening procedures, [describe] to the workers what was allowable, what work was safe or not safe to perform, . . . identify hazards with respect to the work they were performing, and . . . give them any sort of direction, diagrams or supervision relating to their work activity." (Sec'y Am. Br. at 29-30 (citing Tr. 248).) The Secretary also contends Dodd had a "responsibilit[y] . . . to show the crew which valve it was, *what was going to be done* to the valve, and issue a work permit. (Sec'y Am. Br. at 31 (emphasis in original) (citing Tr. 118-119).) These actions set forth by the Secretary go well beyond the requirements of the provision. It merely requires the host employer to "inform contract employers of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process." 29 C.F.R. § 1910.119(h)(2)(ii).

Whether LyondellBasell Had Knowledge of the Violative Condition

To establish the knowledge element, "the Secretary must prove that the employer knew or, with the exercise of reasonable diligence, should have known of the conditions constituting the violation." *Cent. Fla. Equip.*, 25 BNA OSHC 2147, at *8 (citing *Jacobs Field Servs.*, 25 BNA OSHC at 1218). The Fifth Circuit has held "[t]he knowledge prong is focused on the 'physical conditions constituting the violation,' meaning '[t]he departure from OSHA standards, not the worker's injury, is the violation.' " *Darling Ingredients*, 84 F.4th at 262 (quoting *S. Hens, Inc.*, 930 F.3d at 676, 679). Significantly, "a 'physical condition' can be an intangible thing or even the absence of something," such as a lack of training. *Id.* (citing *S. Hens*, 930 F.3d at 676). Under both Commission and Fifth Circuit precedent, an employer's supervisor's actual or constructive knowledge can be imputed to the employer. *Jersey Steel*, 16 BNA OSHC 1162, at *2; *Sanderson Farms*, 811 F.3d at 736–37. Here, the non-complying condition is LyondellBasell's failure to inform Turn2 contractors of the known potential hazards related to the process.

The Secretary argues Turn2 knew the AA reactor contained process materials and by not de-inventorying the system, these materials were still under pressure and about 230 degrees Fahrenheit. (Sec'y Am. Br. at 32 (citing Tr. 150-51, 256).) The Secretary contends testimony from LyondellBasell employees establishes the company knew of potential process-related hazards yet failed to inform Turn2. (Sec'y Am. Br. at 32-33.) Dye testified LyondellBasell's practice was to not warn contractors of hazards unrelated to their assigned and permitted work. (Tr. 154-55.) Furthermore, Gilliam testified Dodd did not tell him he informed the Turn2 crew of these hazards during the permitting process. (Tr. 701.)

LyondellBasell does not directly address the knowledge element of the Secretary's prima facie case but makes a few related arguments. Among other things, the company claims the chemical and toxic release hazards alleged were not foreseeable, because Turn2, an experienced and qualified contractor, impermissibly and unforeseeably exceeded the scope of its permit when it removed pressure-restraining equipment. (Resp't Br. at 29-30.) LyondellBasell also asserts it "reasonably relied upon Turn2 to properly and safely perform the actuator removal." (Resp't Br. at 30 (citing *Sasser Elec. & Mfg. Co.*, 11 BNA OSHC 2133 (No. 82-178, 1984), *aff'd*, No. 84-1961, 1985 WL 1270163 (4th Cir. Aug. 8, 1985) (unpublished)).)

The Court finds LyondellBasell had actual knowledge of its failure to inform Turn2 of known potential hazards related to the process. Dodd knew the process contained potential toxic

release hazards, yet, as a matter of company policy, knowingly did not communicate them to the Turn2 contractors because he "did not think it was relevant to their scope of work." (Tr. 791.) At the very least, Dodd failed to exercise reasonable diligence when he did not communicate known potential hazards, as required by the provision, to Turn2. Similarly, Dye knew the reactor was not de-inventoried and process chemicals in the system remained under pressure at a temperature of over 200 degrees Fahrenheit but did not communicate these facts to Turn2. (Tr. 218, 221.) Although Dye did not interact directly with Turn2, he still knew of potential hazards related to the process and failed to confirm the contractors had been informed, despite his position overseeing the AA Unit. *See Calpine Corp.*, No. 11-1734, 2018 WL 1778958, at *6 (OSHRC Apr. 6, 2018) ("Calpine's five supervisors knew of the opening on December 21, and their absence in the early morning hours of December 22, when the cited opening still existed, does not magically erase that knowledge."), *aff'd*, 774 F. App'x 879 (5th Cir. 2019) (unpublished).

In the Fifth Circuit, "a supervisor's knowledge of his own malfeasance is not imputable to the employer where the employer's safety policy, training, and discipline are sufficient to make the supervisor's conduct in violation of the policy unforeseeable." *W.G. Yates & Sons Constr. v. OSHRC*, 459 F.3d 604, 608-09 (5th Cir. 2006). Here, because LyondellBasell's policy was to inform contractors only of hazards related to their assigned work, its failure to inform Turn2 of known potential fire, explosion, or toxic release hazards related to the process was foreseeable. Stewart testified "what we try to do is focus on the relevant work, the hazards of that work and not talk about or not add a bunch of detail that may not be directly relevant to the work they're doing . . . ." (Tr. 522.) Similarly, Gilliam testified LyondellBasell communicated hazards based upon "what [the contractor's] job is," and here the job entailed "working on and everything being exterior and no access to the process." (Tr. 701.) Based upon LyondellBasell's policy, the failures of Dye, Dodd, and other LyondellBasell supervisors to inform Turn2 of potential hazards related to the process were foreseeable.

The Court also rejects LyondellBasell's *Sasser* defense for the following reasons. First, it is only available to an employer seeking to rebut a constructive knowledge finding. *See Manua's, Inc.*, No. 18-1059, 2018 WL 6171790, at *4 (OSHRC Sept. 28, 2018), *aff'd*, 948 F.3d 401 (D.C. Cir. 2020) ("Reasonable reliance on a specialty contractor . . . is an affirmative defense to constructive knowledge, and therefore Respondent had the burden of proof."). The Court has already found LyondellBasell supervisors Dye and Dodd knew the AA Unit reactor was not de-

inventoried of process chemicals, which at high pressure and temperatures presented known potential chemical release hazards to Turn2 contractors. Yet, they knowingly did not inform Turn2 contractors as required by the cited standard. Therefore, they had actual knowledge of the violative condition, which is imputable to LyondellBasell, and cannot be overcome by proving the affirmative defense of reasonable reliance. *See Calpine Corp.*, 2018 WL 1778958, at *6 ("Defending against a finding of actual knowledge by making arguments relevant to constructive knowledge is inconsistent with Commission precedent.").

Second, assuming LyondellBasell's reasonable reliance defense is not barred because LyondellBasell only had constructive knowledge, it still fails on the merits. In *Sasser*, the Commission identified several factors supporting an employer's reasonable reliance upon a contractor. Among other things, the employer's employees never performed the contractor's work; the employer hired a contractor whenever that work was performed; the hazard fell within the expertise of the contractor; the contractor had direct control over the cited hazard; and the contractor had previously performed work for the employer without incident. *Sasser*, 11 BNA OSHC 2133, at *3-4. This case is distinguishable. Here, the relevant known potential process hazards fell within the expertise of the LyondellBasell. LyondellBasell employees and their expert testified the AA Unit reactor was not de-inventoried and contained pressurized process chemicals at a high temperature, which, if released could cause serious injuries. Although the Turn2 contractors had access to HV-117 and indeed removed the valve cover, which released the reactor contents, they did not have direct control over the cited hazard, such that they could de-inventory the reactor, or depressurize or otherwise lower the temperature of process chemicals at the time of their work. Furthermore, the record is unclear whether Turn2 contractors previously performed a similar actuator removal job with an inventoried unit reactor. Indeed, Bernard and Gilliam testified the AA Unit was de-inventoried during a 2019 actuator removal, when there was no product in any of the lines, vessels, and towers in the AA Unit. (Tr. 414, 646.) Therefore, the hazards and conditions, although different during this job, were not communicated as such.

The Court also finds the "shall inform" language in § 1910.119(h)(2)(ii) places an affirmative duty on a host employer to inform a contractor of known potential hazards related to the process; it does not make exceptions for experienced contractors, as LyondellBasell would have the Court find. For all these reasons, the Court rejects LyondellBasell's *Sasser* defense and finds the company had knowledge of the violative conditions.

The Court finds the Secretary has established all elements of her burden of proof for Citation 1, Item 2.

Alleged Mechanical Integrity Provision Violation

The Secretary alleges in Citation 1, Item 3, LyondellBasell exposed workers to process materials, toxic release, and flammable hazards from the AA Unit because it failed to "establish and implement written procedures to direct workers in modifying HV-117, which was installed in process but not isolated, so that it could be used as an isolation point in the LOTO of the methanol supply piping to the" AA reactor. (Citation at 9.) The mechanical integrity provision states: "The employer shall establish and implement written procedures to maintain the on-going integrity of process equipment." 29 C.F.R. § 1910.119(j)(2).

Whether the Standard Applies to the Cited Condition

Among other things, the mechanical integrity provision applies to piping systems (including piping components such as valves). 29 C.F.R. § 1910.119(j)(1)(ii). Here, the Secretary argues the "the component parts of the actuator assembly and plug valve HV-117" fall within the "expressly open-ended" definition of piping systems. (Sec'y Am. Br. at 34.) Specifically, the Secretary contends "all pieces of equipment that Turn2 worked on—the actuator, mounting bracket, coupler, fastener bolts, the bonnet valve, and the stem valve—constitute process equipment because they are part of the piping systems and controls." (Sec'y Am. Br. at 34.) To support this contention, the Secretary primarily relies upon Nickerson's testimony the valve is part of the process equipment and therefore LyondellBasell owed a duty to maintain the integrity of the valve and piping system. (Sec'y Am. Br. at 34-35 (citing Tr. 289).) As part of this duty, LyondellBasell should have told Turn2 which fasteners to remove and provided the contractor with specific work procedures and valve manufacturer instructions or maintenance department instructions regarding the assembly, according to the Secretary. (Sec'y Am. Br. at 35 (citing Tr. 290, 291, 293-94).) The Secretary also contends Scardino's testimony the "actuated valve assembly" comprises the plug valve, coupling, bracket, and actuator supports its position these components are part of the valve and therefore piping system within the meaning of the mechanical integrity provision. (Sec'y Am. Br. at 35 (citing Tr. 965).) Further, Scardino testified the work permit stated the assigned job was to remove the actuator from HV-117 and makes no mention of the mounting bracket. (Sec'y Am. Br. at 36 (citing Tr. 967-68, 975).)

LyondellBasell argues the mechanical integrity "standard does not apply to the activity of

removing an external actuator for energy isolation purposes because actuator removal has nothing to do with maintaining the on-going integrity of process equipment." (Resp't Br. at 31.) According to LyondellBasell, Nickerson admitted removing the actuator from the exterior of HV-117 did not impact the mechanical integrity of process equipment, and Scardino confirmed the design of the mounting bracket prevented the removal from impacting the mechanical integrity of the process. (Resp't Br. at 31 (citing Tr. 345-46, 888-89).)

For the following reasons, the Court finds the cited mechanical integrity provision does not apply to the cited conditions. As discussed in detail above, LyondellBasell directed Turn2 to remove the actuator, which did not involve disturbing the integrity of process equipment. The actuator and bracket fasteners mounting the actuator to HV-117 were external to the valve and process equipment. The assigned work, Turn2's removal of the mounting fasteners and actuator, would not and actually did not involve opening process equipment or piping. (Tr. 653-54, 861-62; Exs. R-21, R-22, R-23.) The Court again finds the judge's and Fifth Circuit's decisions in *Jacobs* instructive. *Jacobs Field Servs. N.A., Inc.*, No. 13-1623, 2015 WL 1906701 (OSHRC Feb. 5, 2015) (ALJ), *aff'd*, 659 F. App'x 181 (5th Cir. 2016) (unpublished). The judge described two methods used by Jacobs to mount actuators to valves. In the "old style," "the same bolts that h[eld] the bonnet and valve body together also connect[ed] the actuator to the valve," whereas "[t]he 'new style' d[id] not require the use of the same bolts connected to the bonnet and valve body to mount the actuator and the bolts d[id] not go through the bonnet." *Jacobs*, 2015 WL 1906701, at *3. Because the bolts did not go through the bonnet, the "new style" of mounting the actuator to the valve allowed employees to remove these bolts without causing the tank's contents to lose containment. *Id.* An employee, who was having trouble removing a rusted bracket from the "old style" mounting, removed the four bolts connecting the actuator to the valve bonnet, releasing a chemical mixture from the valve. *Id.* at *3-4. Among other things, the judge determined the pressure boundary on the "old style" mounting included the bolting because the bracket is bolted to the valve bonnet. *Id.* at *18. Therefore, the mechanical integrity provision applied to the "old style" mounting. *Id.* The Commission denied Jacobs's petition for review, and the Fifth Circuit affirmed in an unpublished opinion. According to the appeals court, "[b]ecause one set of bolts connects the actuator bracket, the valve, and the valve bonnet, and because removing the bracket would 'break the line,' the ALJ's conclusion that the bracket and bolts used to mount the actuator to the valve bonnet are process equipment within the meaning of § 1910.119(j)(1)" was supported

by substantial evidence. *Jacobs*, 659 F. App'x at 188.

The Court finds the configuration of the actuator and valve at issue are similar to the "new style" mounting system in *Jacobs* rather than the "old style." Unlike the "old style" mounting system in *Jacobs*, the bracket and fasteners used to mount the actuator in LyondellBasell's Laporte facility did not break the line. A hexagonal mounting bracket secured the actuator to the HV-117 via four smaller diameter bolts. (Tr. 171, 177-78; Exs. R-21, 23, 24.) Although these bolts held the actuator in place, they did not impact pressure-retaining components such as the valve or piping or otherwise enter the process. (Tr. 171-72, 653-54.) Instead, large diameter flange bolts, also called valve cover fasteners, lined the outside of the valve cover and held the pressure boundary. (Tr. 177-78, 665, 945; Exs. R-22, R-23.) Because removing the mounting bracket and its fasteners did not break the line, "the component parts of the actuator assembly" were not process equipment within the meaning of § 1910.119(j)(1)(ii) and the provision did not apply to the cited conditions.[19]

Alleged Management of Change Provision Violation

The Secretary alleges in Citation 1, Item 4, LyondellBasell exposed workers to process materials, toxic release, and flammable hazards by failing to implement procedures to manage change when it modified HV-117 in the AA Unit. (Citation at 10.) The cited provision states: "The employer shall establish and implement written procedures to manage changes (except for 'replacements in kind') to process chemicals, technology, equipment, and procedures; and, changes to facilities that affect a covered process." 29 C.F.R. § 1910.119(l)(1). Here, the Secretary alleges three changes: first, "to usual operating practice of requiring positive isolation or double block and bleed when employer elected to use HV-117 as single isolation for the methanol line without documented approval of Engineering, Operations, Safety, and Management;" second, "to normal practice when implemented modification of HV-117 without input/approval of

[19] Even if the Court were to find the mechanical integrity provision applies to the cited conditions and LyondellBasell failed to comply with the provision, it would still find LyondellBasell did not have knowledge of the violative condition. Here, the alleged violative condition is LyondellBasell's failure to implement written procedures to maintain the on-going integrity of process equipment. However, for the reasons discussed in the safe work practices knowledge section, *supra*, LyondellBasell could not anticipate Turn2 employees would initiate a line break, which would trigger these procedures. *See AJM Packaging Corp.*, No. 18-1865, 2022 WL 1102423, at *10 (OSHRC April 1, 2022) (Secretary failed to show employer did not adequately anticipate hazards where supervisors testified there was no reason to engage in the prohibited practice while working on machines).

Engineering, Operations, Safety, and Management; and," third, "to normal operating practice when employer did not de-energize process equipment prior to allowing it to be serviced." (Citation at 10.)

Whether the Standard Applies to the Cited Condition

The Secretary argues the management of change (MOC) provision applies to the cited conditions because, according to OSHA, the term "change" " 'includes all modifications to equipment, procedures, raw materials, and processing conditions.' " (Sec'y Am. Br. at 37 (quoting OSHA Publ'n No. 3133, PSM Guidelines for Compliance, at 16 (1994).) The Secretary also contends "temporary changes are subject to the [MOC] provisions." (Sec'y Am. Br. at 38 (quoting OSHA Publ'n No. 3133, at 16 (1994).) Here, according to the Secretary, section 1.4 of LyondellBasell's MOC procedure, states " 'this management of change system covers *any modifications* including permanent, *temporary* or emergency *changes to process equipment* and related facilities, changes to utility systems and *other changes that alter the basic design or function of plant equipment or process*.' " (Sec'y Am. Br. at 39 (quoting Ex. R-7 at 1152) (emphasis added by the Secretary).) By disconnecting the air and electrical signals on the actuator, LyondellBasell disabled its "pneumatic actuating function." (Sec'y Am. Br. at 40 (citing Tr. 79-80, 710).) This changed HV-117 from a pneumatic actuating valve to a mechanically operated valve, which could only be opened or closed by manually turning it, according to the Secretary. (Sec'y Am. Br. at 40 (citing Tr. 228, 711, 1031).) This change, which allowed for installation of a ¼ turn handle to positively lock the valve, triggered MOC procedures and the requirements of the MOC provision, according to the Secretary.

LyondellBasell argues the MOC provision does not apply to the cited conditions because "a change to a work practice does not trigger the duty to implement an MOC." (Resp't Br. at 32.) The MOC provision, according to LyondellBasell "applies only to changes to 'process chemicals, technology, equipment, and procedures.' " (Resp't Br. at 32 (quoting § 1910.119(l)(1)).) LyondellBasell also asserts the MOC provision does not apply because the company's MOC procedure is superseded by its energy isolation procedure.[20] (Resp't Br. at 32-33.) Therefore, as

[20] Section 1.5 LyondellBasell's MOC procedure states: "This procedure may be superseded in certain areas of application is that area is regulated by another procedure." (Ex. R-7 at 1152.) It also states, "Changes in jobs or tasks that are covered by an established written procedure" are among the changes which do not "require[e] a Stature MOC." (Ex. R-7 at 16.)

Scardino explained, preparing HV-117 for use as an isolation point falls outside the MOC procedure, LyondellBasell contends. (Resp't Br. at 33 (citing Exs. R-7, R-40, C-3; Tr. 934-35).)

LyondellBasell also argues the three instances alleged by the Secretary should be vacated. First, regarding instance (a), LyondellBasell claims it does not have "a usual operating practice" of requiring positive isolation or double block and bleed for performing energy isolation. (Resp't Br. at 33.) In any event, OSHA regulation allows the company's normal practice of using a single block valve for isolation, according to LyondellBasell. (Resp't Br. at 33.) Therefore, LyondellBasell contends, the use of a single block valve was not a change and the MOC provision does not apply. Next, LyondellBasell argues even if the MOC provision "applied to the use of a single isolation valve, the Secretary cannot prove a recognized or foreseeable hazard existed on the day of the incident because [LyondellBasell] was still in the prepping phase to possibly use the single isolation valve for the next day's isolation project." (Resp't Br. at 33.) Here, LyondellBasell was merely considering whether to use a single isolation valve, according to the company, and therefore there was no violative condition. (Resp't Br. at 33.)

The Court agrees with LyondellBasell the MOC provision does not apply to instance (a). LyondellBasell's Line Break Procedure, Attachment 1, sets forth a hierarchy of isolation methods. (Ex. R-3.) The first or highest method is "positive isolation," which involves a "[c]omplete separation of the system/line to be worked on from other parts of the system" through either a physical disconnection method or blinding/spading method. (Ex. R-3 at Attach. 1.) According to Attachment 1, "[t]his positive isolation can be installed with a double block and bleed isolation after having extended the system." (Ex. R-3 at Attach. 1.) The second method is "proven isolation," which involves isolating a valve through one of several methods and allows LyondellBasell to confirm the effectiveness of the isolation before a line break. (Ex. R-3 at Attach. 1.) According to Attachment 1, proven isolation methods include "[d]ouble block with or without bleed to blowdown" and "[s]ingle block with bleed to atmosphere." (Ex. R-3 at Attach. 1.) The third and final method is unproven isolation, which involves isolating a valve, but it does not allow LyondellBasell to confirm the effectiveness of the isolation prior to the line break. (Ex. R-3 at Attach. 1.) Here, the Secretary alleges LyondellBasell changed its usual operating practice or procedure of requiring positive isolation with double block and bleed (first in the hierarchy) by preparing to implement a single block and bleed (second in the hierarchy). (Citation at 10; Tr. 311.)

LyondellBasell's expert Scardino described double block and bleed as closing two valves

and bleeding or draining the trapped fluid or gas between those valves. (Tr. 929.) This creates a "buffer" zone with no process, allowing line break work to occur even farther downstream and outside this buffer zone. (Tr. 929.) LyondellBasell was considering using a single block and bleed, where two valves are closed and the process or gas between each valve is bled or drained out, allowing work or a line break to be performed between the closed valves, but without a blind in front of those valves or a buffer zone. (Tr. 930-31, 934.) In a single block and bleed, after the valves are closed and a section of piping has been washed and steamed out, the operator can confirm whether the valve seals are holding by checking if they are internally leaking. (Tr. 931-32.) The Secretary has failed to show positive isolation and double block and bleed was LyondellBasell's usual operating procedure and therefore that LyondellBasell's future use of single block and bleed constitutes a departure or change. Neither LyondellBasell's energy isolation procedure nor any other policy requires the company to implement positive isolation, including double block and bleed. Similarly, testimony does not establish positive isolation was usual company procedure or practice. In fact, Dye testified both positive isolation and proven isolation and both double block and bleed and single block and bleed were approved isolation methods. (Tr. 202-204.) Scardino also testified LyondellBasell's line break procedures allowed the company to implement either method and did not mandate the use of positive isolation. (Tr. 933-34; Ex. R-3, Attach 1.)

Turning to instance (b), which alleges a change to normal practice when modifying HV-117 without input or approval from Engineering, Operations, Safety, and Management, LyondellBasell argues the removal of "a disconnected, de-energized, inoperable actuator from the exterior of process equipment (valve HV-117) is not a change or modification of the underlying process equipment. (Resp't Br. at 34.) Moreover, according to LyondellBasell, removing the actuator does not change the design or function of HV-117 because they are separate pieces of equipment. (Resp't Br. at 34.)

The Court agrees with LyondellBasell. The MOC provision requires employers to "establish and implement written procedures to manage changes" to, among other things, "process . . . equipment . . . ." 29 C.F.R. § 1910.119(l)(1). Here, the Secretary alleges LyondellBasell made a "change to normal practice when" it "implemented modification of HV-117 without input/approval of Engineering, Safety, and Management." (Citation at 10.) As discussed above, LyondellBasell did not implement a modification of HV-117 on its own or assign Turn2 any tasks

related to the modification of HV-117, such that it could have implemented MOC procedures prior to the removal of the valve cover. LyondellBasell assigned Turn2 the task of removing the actuator, which the Court has determined was a separate piece of equipment from HV-117 and did not change the valve.

Even if the Court were to extend the MOC provision to HV-117 or the actuator, the removal of the actuator did not change how the valve operated; the lack of air supply and electrical signal prevented the valve from operating at all. The record also establishes LyondellBasell did not consider manually operating HV-117 or restarting and operating the AA Unit reactor with the valve in this condition. According to the Commission, "a 'change' covered by the standard is something new, different, and unfamiliar, as opposed to a regular and recurring event." *Delek Refining, Ltd.*, 25 BNA OSHC 1365, at *10 (No. 08-1386, 2015), *aff'd in part and vacated in part on other grounds*, 845 F.3d 170 (5th Cir. 2016). In *Delek*, the Commission found the employer's use of a steam lance to cool part of a refractory shell while a reactor/regenerator was operating was not a "change" covered by the standard because it was a regular and recurring event. *Delek*, 25 BNA OSHC 1365, at *9-11. "The steam lance," according to the Commission, "is used continuously on the hot spot, and maintained by the FCC unit operators, until the refractory can be repaired during the next 'turnaround,' the period when Delek shuts down the reactor/regenerator for maintenance." *Delek*, 25 BNA OSHC 1365, at *10. Although the facts are different, the Court finds the Commission's discussion of what constitutes a "change" instructive. The Commission noted subsection (l)(2) directs employers to consider, among other things and prior to any change, " '[m]odifications to *operating* procedures,' and the '[n]ecessary *time period for the change*.' " *Delek*, 25 BNA OSHC 1365, at *10 (quoting § 1910.119(l)(2)) (emphasis added). Further, the Commission noted subsection (l)(3) requires employees and contractors " 'affected by a change in the process shall be informed of, and trained in, the change *prior to start-up of the process* or affected part of the process.' " *Delek*, 25 BNA OSHC 1365, at *10 (quoting § 1910.119(l)(3)) (emphasis added). Together, these subsections show the Commission, when interpreting the provision, contemplates changes or potential changes to an operating process, not an inoperable one. Here, unlike in *Delek*, the AA Unit was not operating, as LyondellBasell had shut it down. (Tr. 145.) Despite the removal of the actuator, LyondellBasell never intended to restart the process without the actuator and by manually operating HV-117. (Tr. 935.) And the process was not set to continue with a new configuration in place, such that this configuration would have triggered MOC

procedures. (Tr. 936.) Therefore, the MOC provision does not apply to the alleged modification of HV-117.

The Secretary also alleges the company changed its normal operating practice by not de-energizing process equipment prior to allowing it to be serviced. (Citation at 10.) LyondellBasell contends instance (c) is duplicative of the alleged LOTO violation in Citation 1, Item 1(b). (Resp't Br. at 34.) The company also contends it did not have a "normal operating practice" of de-energizing or isolating process equipment, such as HV-117, when working externally to process equipment. (Resp't Br. at 35.) The Secretary argues instance (c) is not duplicative of the alleged LOTO violation because instance (c) alleges LyondellBasell violated the MOC provision by departing from its energy control procedure when it allowed Turn2 to work on equipment before it was de-energized. The LOTO violation, however, alleges LyondellBasell failed to implement its existing LOTO procedure, according to the Secretary. (Sec'y Am. Br. at 42-43.) The Secretary also asserts in its LOTO violation argument LyondellBasell failed to develop written procedures for the removal of the actuator from HV-117. (Sec'y Am. Br. at 25.)

To determine whether two alleged violations of separate provisions are duplicative, the Commission considers the alleged violative conduct and means abatement. "Violations are duplicative where the abatement of one violation necessarily results in the abatement of the other." *N.E. Precast, LLC*, 26 BNA OSHC 2275, at *5 (Nos. 13-1169 & 13-1170, 2018), *aff'd*, 773 F. App'x 70 (2d Cir. 2019) (unpublished summary order). Furthermore, "[t]he Commission has also found that violations are duplicative where they require the same abatement conduct . . .; where they involve substantially the same violative conduct . . .; or where they involve the same abatement . . . ." *N.E. Precast*, 26 OSHC 2275, at *5 (citations omitted). In its duplication argument, LyondellBasell chiefly relies on testimony from CSHO Nickerson, who stated "1.1b says that they didn't implement the [energy isolation] procedure. The other one, 4(c) says . . . they departed from using their own procedure." (Tr. 337-38.) Nickerson went on to explain "departing" means "[t]hey've got it but they chose not to use it" or "to follow it." (Tr. 338.)

Here, in instance (c), the Secretary alleges LyondellBasell "did not de-energize process equipment prior to allowing it to be serviced" and this amounts to a "[c]hange to normal operating service." (Citation at 10.) This change, according to the Secretary, triggered LyondellBasell's MOC procedures, and the company did not implement them. The abatement for instance (c) is therefore LyondellBasell following its MOC procedures before implementing this change. In the LOTO

violation, the Secretary alleges LyondellBasell exposed workers to process materials, toxic release, and flammable hazards by failing to develop and implement energy control procedures in the AA Unit to block and isolate HV-117 from hazardous energy sources while they were working on it. (Citation at 7.) The abatement for the alleged LOTO violation is LyondellBasell implementing its existing energy control procedures. As such, these alleged violations did not involve the same abatement conduct, substantially the same violative conduct, or the same abatement. *See N.E. Precast*, 26 BNA OSHC 2275, at *5.

However, the Court must also consider whether the abatement of one alleged violation would necessarily result in the abatement of the other. *See N.E. Precast*, 26 BNA OSHC 2275, at *5. Under the Secretary's allegations in the Citation, if LyondellBasell had implemented its energy isolation procedure, as its normal operating practice allegedly required, there would be no cited violative condition under instance (c). That is, the violative condition alleged under instance (c)—failure to implement MOC procedures—would have been abated by virtue of LyondellBasell implementing its LOTO procedures. The Commission also has found "[v]iolations are not duplicative where they involve standards directed at fundamentally different conduct . . . or where the conditions giving rise to the violation are separate and distinct." *N.E. Precast*, 26 BNA OSHC 2275, at *5 (citations omitted). Here, the PSM's standard's MOC provision and the LOTO standard are "directed at fundamentally different conduct"—to consider changes to process equipment and procedures and to control hazardous energy, respectively. But, as noted above, compliance with the LOTO standard would negate the MOC violation or obviate the need to implement changes. Moreover, the conditions giving rise to the alleged violations are not "separate and distinct." They both arise out of LyondellBasell's alleged failure to control hazardous energy. Therefore, the alleged violations are duplicative.

Even assuming the alleged violations are not duplicative, the Court agrees with LyondellBasell instance (c) should be vacated because it did not have a normal operating practice of de-energizing or isolating process equipment for work on external parts, such as removing the actuator. The Secretary alleges in the Citation a "[c]hange to normal operating practice when employer did not de-energize *process equipment* prior to allowing *it* to be serviced." (Citation at 10 (emphasis added).) However, as discussed in detail above, LyondellBasell did not direct Turn2 to service process equipment; it directed the contractor to remove the actuator, a piece of external equipment. Therefore, the MOC provision does not apply to the cited conditions alleged in instance

(c).

Alleged LOTO Violation

The Secretary alleges in Citation 1, Item 1(b), LyondellBasell exposed workers to process materials, toxic release, and flammable hazards by failing to develop and implement energy control procedures in the AA Unit to block and isolate HV-117 from hazardous energy sources while they were working on it. (Citation at 7.) The cited provision states: "The procedures shall clearly and specifically outline the scope, purpose, authorization, rules, and techniques to be utilized for the control of hazardous energy, and the means to enforce compliance including," among other things, "[s]pecific procedural steps for shutting down, isolating, blocking and securing machines or equipment to control hazardous energy." 29 C.F.R. § 1910.147(c)(4)(ii)(B).

Whether the Standard Applies to the Cited Conditions

The LOTO standard "covers the servicing and maintenance of machines and equipment in which the *unexpected* energization or start up of the machines or equipment, or release of stored energy could cause injury to employees. This standard establishes minimum performance requirements for the control of such hazardous energy." 29 C.F.R. § 1910.147(a)(1)(i) (emphasis in original). The Secretary asserts § 1910.147(c)(4)(ii)(B) "applie[s] to the cited conditions because Turn2's removal of the actuator from HV-117 was a maintenance and servicing[21] activity that exposed contract workers and Lyondell employees to the release of stored chemical energy." (Sec'y Am. Br. at 19.) The Secretary contends although the electrical signal had been disconnected, the contents of the actuator were at a high temperature and the product remained in the valve and piping system leading to the valve, and therefore the process equipment was not de-energized. (Sec'y Am. Br. at 20 (citing Tr. 261-62).)

LyondellBasell argues the LOTO standard does not "appl[y] to the activity of removing the purely external actuator on valve HV-117 because the actuator removal did not foreseeably involve

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[21] Under the LOTO standard, servicing and/or maintenance is defined as:

> Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning or unjamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the *unexpected* energization or startup of the equipment or release of hazardous energy.

29 C.F.R. § 1910.147(b) (emphasis in original).

unexpected energization, start-up, or release of stored energy." (Resp't Br. at 23.) LyondellBasell again contends the actuator was not mounted into HV-117 or other pressure-retaining components. (Resp't Br. at 24.) Because no chemical release hazards are present, Scardino testified industry practice is to remove API 599-compliant actuators without de-energizing the process, according to LyondellBasell. (Resp't Br. at 24 (citing Tr. 894).) Therefore, LyondellBasell contends, the Secretary cannot prove removing the actuator could result in the unexpected energization, start-up, or release of stored energy. (Resp't Br. at 24.) Alternatively, LyondellBasell argues the standard does not apply because neither LyondellBasell nor Turn2 was performing "servicing and/or maintenance of machines and equipment." (Resp't Br. at 25.) According to LyondellBasell, it assigned Turn2 to remove the actuator to put a lock on HV-117, which was not servicing and/or maintenance of the actuator or valve. (Resp't Br. at 25.)

The Court agrees with the Secretary's position the cited standard applies to the cited conditions. Section 1910.147(c)(4)(i) requires an employer to develop, document, and utilize LOTO procedures "for the control of potentially hazardous energy when employees are engaged in the activities covered by this section," and these procedures, according to § 1910.147(c)(4)(ii)(B), include, among other things, "[s]pecific procedural steps for shutting down, isolating, blocking and securing machines or equipment to control hazardous energy." Here, the Turn2 crew members were engaged in a servicing activity covered by § 1910.147. Although, as noted above, LyondellBasell did not assign or expect the Turn2 crew to work on process equipment or a perform a line break when they were removing the actuator, the crew impermissibly modified process equipment, causing the line break and unexpected release of process chemicals. Doing so brought their actions within the LOTO standard's definition of servicing and/or maintenance and within the coverage of LyondellBasell's energy isolation procedures discussed below. *See Jacobs Field Servs.*, 25 BNA OSHC 1216, at *2 (LOTO standard applied because there was an unexpected release of stored energy during attempted valve replacement, which was a maintenance activity). Therefore, the cited provision applies to the cited conditions.

Whether LyondellBasell Violated the Standard

The Secretary contends LyondellBasell violated the cited provision because, although it had closed HV-117 and disconnected the electrical signal to the actuator, so material upstream and downstream of the valve may have been blocked, it did not de-energize the equipment prior to the crew beginning its work. (Sec'y Am. Br. at 23 (citing Tr. 272-73).) The Secretary also appears to

argue LyondellBasell violated its energy isolation procedures by selecting HV-117 as the isolation point and having Turn2 remove the actuator without preparing a handle and cable to lock out HV-117. (Sec'y Am. Br. at 24.)

LyondellBasell has developed and documented energy isolation procedures, including "specific procedural steps for shutting down, isolating, blocking and securing machines or equipment to control hazardous energy." 29 C.F.R. § 1910.147(c)(4)(ii)(B). The "procedure covers the isolation, servicing, and maintenance of equipment where the unexpected energization or start up of machines, equipment or systems or release of hazardous energy could cause injury to personnel." (Ex. C-3 at 1.) Section 5.9.3 of the procedure, which the Secretary cites, provides "[c]ontrol valves without a designed EID [(energy isolation device)] are not acceptable isolation devices." (Ex. C-3 at 13.) Pneumatic actuated valves, such as HV-117, "with manual hand hacks are approved EIDs only if the air is disconnected and the hand jack is locked in a manner that controls energy," according to 5.9.3.1 (Ex. C-3 at 13.) Furthermore, "quarter turn valves must have the ability to positively lock the handle into position," according to 5.9.6. (Ex. C-3 at 13.) These energy isolation procedures, according to Scardino, apply to line breaks and work on pressure containing boundaries, but not to the removal of the actuator. (Tr. 910-12, 930.) LyondellBasell, by directing Turn2 to remove the actuator and preparing a handle and cable to lock out HV-117, was in the process of implementing these procedures when the unexpected release of hazardous energy occurred. (Tr. 89-90, 105, 970.) However, LyondellBasell failed to control hazardous energy when Turn2 caused the line break. Gilliam testified the operations department did not perform energy isolation and LOTO when, as here, work was performed on exterior, non-process equipment, to prepare for LOTO. (Tr. 670-71.) Furthermore, LyondellBasell does not dispute it had not fully implemented its energy isolation procedures when Turn2 removed the valve cover. (Resp't Br. at 24-25.) Therefore, LyondellBasell failed to timely implement its energy isolation procedures and failed to comply with the provision.

The Court turns next to the Secretary's argument, based upon Dye's testimony, LyondellBasell did not have written procedures detailing how to remove the actuator from HV-117 or a similar plug valve. (Sec'y Am. Br. at 25 (citing Tr. 149).) Because the Secretary makes this argument in support of the alleged energy isolation violation, the Court believes the Secretary is arguing LyondellBasell failed to develop an actuator-specific removal procedure, which was necessary to comply with the cited LOTO provision. However, the Secretary does not attempt to

support this allegation with any facts, other than stating "[a] line break occurred when the Turn2 crew touched the first nut on valve cover fasteners." (Sec'y Am. Br. at 25 citing (Tr. 180-181).) This fact does not establish LyondellBasell failed to develop or implement procedures for removing the actuator in violation of the cited provision. Hardcastle testified LyondellBasell's energy isolation procedure did not apply to removing the actuator because it "is a separate piece of equipment," whereas "the methanol spool piece . . . is actually process equipment" which "has to be locked out." (Tr. 590.) Here, the removal of the actuator was a step LyondellBasell took to implement and comply with its energy isolation procedures, which required a lock on HV-117. (Tr. 634-36.) Further, as the Secretary notes, Turn2 moved beyond the scope of its permit and performed the line break *afte*r it had successfully removed the four bolts from the mounting bracket and the actuator itself. (Tr. 944, 973.) Because Turn2 had already successfully removed the actuator prior to performing the line break, the Court cannot conclude LyondellBasell lacked or required actuator removal directions as part of its energy control procedures.

Whether Employees Had Access to the Violative Condition

To establish exposure to the violative condition the Secretary must show either an employee was actually exposed to the cited condition or access to the cited condition was reasonably predictable. *Phoenix Roofing Inc.*, 17 BNA OSHC 1076, at *3. Here, the record establishes Turn2 contractors suffered serious and fatal injuries resulting from their exposure to process chemicals. Therefore, the Secretary has established actual exposure. *See Phoenix Roofing*, 17 BNA OSHC 1076, at *3 (employee's fatal fall through a skylight established actual exposure to a fall hazard). Furthermore, LyondellBasell stipulated at trial two or more of its employees were exposed to the alleged hazards. (Tr. 269.)

Whether LyondellBasell Had Knowledge of the Violative Condition

To establish the knowledge element, "the Secretary must prove that the employer knew or, with the exercise of reasonable diligence, should have known of the conditions constituting the violation." *Cent. Fla. Equip.*, 25 BNA OSHC 2147, at *8 (citing *Jacobs Field Servs.*, 25 BNA OSHC at 1218). According to the Fifth Circuit, "[t]he knowledge prong is focused on the 'physical conditions constituting the violation,' meaning '[t]he departure from OSHA standards, not the worker's injury, is the violation.' " *Darling Ingredients*, 84 F.4th at 262 (quoting *S. Hens Inc.*, 930 F.3d at 676, 679). Here, the Secretary alleges LyondellBasell failed to develop and implement energy control procedures to block and isolate HV-117 from hazardous energy sources. (Citation

at 7.) Therefore, the Secretary must establish LyondellBasell had either actual or constructive knowledge it failed to develop or implement energy control procedures when Turn2 and its employees had access to the hazard of the release of stored chemical energy.

The Secretary argues LyondellBasell had knowledge of the violative condition because its supervisory employees knew the reactor was not de-inventoried yet failed to communicate its line break procedures to with the Turn2 crew. (Sec'y Am. Br. at 25 (citing Tr. 146, 216-17).) They "assume[d]" Turn2 had expertise to complete the assigned job and was familiar with these procedures, according to the Secretary. (Sec'y Am. Br. at 26 (citing Tr. 217-18).) Further, these supervisory personnel, including Williams, Garza, Dye, and Bernard, "knew what was in the equipment, what could potentially be released from the process equipment, and knew what the process equipment contained by way of hazards in that process." (Sec'y Am. Br. at 27 (citing Tr. 270, 274-74).) LyondellBasell contends it neither permitted nor expected Turn2 to perform a line break when removing the actuator. (Resp't Br. at 26 (citing Tr. 406, 827).) Moreover, it was obvious to both LyondellBasell and Turn2 employees HV-117 had not been isolated or prepared for a line break, according to LyondellBasell. (Resp't Br. at 26 (citing Tr. 351, 432, 921-22).) Taken together, LyondellBasell did not and could not expect "Turn2 would perform an unauthorized line break or other activity which could trigger the application of the energy isolation procedure." (Resp't Br. at 26.)

Although, LyondellBasell's supervisory personnel knew the contents of the reactor and knew it was de-inventoried, this was not the violative condition. As noted above, the violative condition was LyondellBasell's alleged failure to develop or implement energy control procedures to block and isolate the valve from hazardous energy sources while Turn2 was working on HV-117. Here, the record does not establish LyondellBasell had actual knowledge of this violative condition. No LyondellBasell employee or manager testified he anticipated or knew Turn2's assigned removal of the actuator would require the contractor to modify HV-117 or effect a line break, which would trigger the implementation of the company's energy isolation procedures.

To determine whether LyondellBasell had constructive knowledge of the violative condition, the Secretary must prove the company "could have discovered the violative condition through the exercise of reasonable diligence." *Otis Elevator Co.*, 21 BNA OSHC 2204, at *5 (No. 03-1344, 2007) (citing *Pride Oil Well Serv.*, 15 BNA OSHC 1809, 1814, (No. 87-692, 1992)). A reasonable diligence inquiry "involves 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." *Stahl Roofing Inc.*, 19 BNA OSHC 2179, at *2 (No. 00-1268, 2003) (consolidated) (citing *Precision Concrete Constr.*, 19 BNA OSHC 1404, 1407 (No. 99-707, 2001)). For the following reasons, the Court finds LyondellBasell could not have discovered the violative condition through the exercise of reasonable diligence.

Multiple LyondellBasell employees testified the assigned task of removing the actuator did not require Turn2 to HV-117 or otherwise cause a line break, which would trigger LyondellBasell's energy isolation procedures. (Tr. 172-73, 432-33, 593, 660-61, 668.) The record also establishes LyondellBasell communicated the task to the Turn2 contractors, who did not have questions or use their radio to ask for guidance. (Tr. 783-84, 792-93, 800.) Monson testified both he and Day understood the removal of the actuator did not require a line break; it merely required the removal of four mounting bolts external to process equipment. (Tr. 731-32, 736-37, 748-49.) Monson also testified LyondellBasell did not instruct the crew to open the valve cover. (Tr. 733.) Although the permit was austere, it reflected the requirements of the job, which was simply to remove the actuator. (Ex. C-4.) Based upon these facts, LyondellBasell could not anticipate Turn2 employees would initiate a line break and cause a chemical release.[22] *See AJM Packaging*, 2022 WL 1102423, at *10 (Secretary failed to show employer did not adequately anticipate hazards where supervisors testified there was no reason to engage in the prohibited practice while working on machines). Therefore, LyondellBasell was unaware it needed to implement its energy isolation procedures or communicate its line break procedures to Turn2.[23]

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[22] Although the Secretary does not directly raise this argument, the Court also finds LyondellBasell was not required to more closely supervise the Turn2 contractors. First, the record establishes LyondellBasell had no reason to believe Turn2 would perform an unauthorized line break based upon previous conduct. The record reflects Turn2 had no previous accidents or safety incidents related to unbolting jobs. (Tr. 646-50, 757; Ex. R-26.) The Court also finds LyondellBasell did not have a duty to directly supervise the Turn2 crew's work. This was consistent with LyondellBasell's own procedures, which only required direct supervision for contractor jobs involving line breaks. (Ex. R-3 at 1179.) *See Stahl Roofing*, 19 BNA OSHC 2179, at *3-4 (Based upon "good" employee safety records and the crew's work history, the Secretary failed to establish employer "should have perceived the need for additional monitoring" and should have known to increase its "supervisory efforts.").

[23] Briefly, the Court distinguishes its knowledge rulings regarding the alleged violations of §

CLASSIFICATION AND PENALTY DETERMINATION

The Secretary alleges the violation of § 1910.119(h)(2)(ii) was serious and proposes a $13,563 penalty. (Citation at 8.) The parties stipulated to the classifications and the proposed penalties for each citation item. (Tr. 10-11 (penalties), 258 (classifications).) The Court accepts the stipulations and assesses the proposed penalty. *See KS Energy Servs.*, 22 BNA OSHC 1261, at *7 n.11 (No. 06-1416, 2008) (affirming serious classification and assessing proposed penalty where the parties disputed neither). For the following reasons, the Court finds the record also supports the parties' stipulations.

A serious violation is established when there is "a substantial probability that death or serious physical harm could result [from a violative condition] . . . unless the employer did not, and could not with the exercise of reasonable diligence, know of the presence of the violation." 29 U.S.C. § 666(k). "This does not mean that the occurrence of an accident must be a substantially probable result of the violative condition but, rather, that a serious injury is the likely result if an accident does occur." *Conagra Flour Milling Co.*, 15 BNA OSHC 1817, at *7 (No. 88–2572, 1992): *see also Phoenix Roofing, Inc. v. Dole*, 874 F.2d 1027, 1032 n.12 (5th Cir. 1989). As the accident, injuries, and fatalities demonstrate, death or serious physical harm could and did result from the violative condition, which under this item, was failing to inform the Turn2 contractors of known potential hazards related to the process. (Tr. 755, 963-64.) Therefore, the violation is properly characterized as serious.

The Commission considers "the appropriateness of the penalty with respect to the size of the business of the employer being charged, the gravity of the violation, the good faith of the employer, and the history of previous violations." 29 U.S.C. § 666(j). Gravity, according to the Commission, "is a principal factor in the penalty determination and is based on the number of

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1910.147(c)(4)(ii)(B) (LOTO provision requiring energy isolation) and § 1910.119(h)(2)(ii) (PSM provision requiring employer to inform contractors of known potential hazards). Under § 1910.119(h)(2)(ii), an employer has an affirmative duty to communicate known potential hazards to contractors working on or near process equipment. LyondellBasell was aware of known potential hazards, but, as a matter of company policy, did not communicate them to the Turn2 contractors. Therefore, it had knowledge of the violative condition. Regarding LOTO, LyondellBasell violated the provision because it had not fully implemented its energy isolation procedures when Turn2 removed the valve cover. However, LyondellBasell did not know, and indeed could not know with the exercise of reasonable diligence, Turn2 would remove the valve cover such that LyondellBasell was required to have already implemented its LOTO procedures.

employees exposed, duration of exposure, likelihood of injury, and precautions taken against injury." *Siemens Energy*, 20 BNA OSHC 2196, at *3 (citation omitted); *see also Natkin & Co. Mech. Contractors*, 1 BNA OSHC 1204, at *9, n.3 (No. 401, 1973) ("Gravity, unlike good faith, compliance history and size, is relevant only to the violation being considered in a case and therefore is usually of greater significance. The other factors are concerned with the employer generally and are considered as modifying factors."). Here, the gravity was high. Both Turn2 and LyondellBasell employees were exposed to the hazardous chemical release. Although the exposure was relatively brief, it resulted in serious injuries and fatalities. (Tr. 755, 963-64.)

FINDINGS OF FACT AND CONCLUSIONS OF LAW

The foregoing decision constitutes the findings of fact and conclusions of law in accordance with Rule 52(a) of the Federal Rules of Civil Procedure.

ORDER

Based upon the foregoing decision, it is **ORDERED** that:

1. Citation 1, Item 1(a), alleging a violation of 29 C.F.R. § 1910.119(f)(4), is **VACATED** and no penalty is assessed;
2. Citation 1, Item 1(b), alleging a violation of 29 C.F.R. § 1910.147(c)(4)(ii)(B), is **VACATED** and no penalty is assessed;
3. Citation 1, Item 2, alleging a violation of 29 C.F.R. § 1910.119(h)(2)(ii), is **AFFIRMED** and a penalty in the amount of $13,653 is assessed;
4. Citation 1, Item 3, alleging a violation of 29 C.F.R. § 1910.119(j)(2), is **VACATED** and no penalty is assessed; and
5. Citation 1, Item 4, alleging a violation of 29 C.F.R. § 1910.119(l)(1), is **VACATED** and no penalty is assessed.

SO ORDERED.

/s/_____
Sharon D. Calhoun
Administrative Law Judge, OSHRC

Dated: **June 27, 2024**
Atlanta, GA