U.S. Chemical Safety and Hazard Investigations Board

Business Meeting

April 29, 2020

CSB Headquarters Office - Washington, DC

U.S. CHEMICAL SAFETY BOARD MEMBERS PRESENT:

KATHERINE LEMOS, CHAIRMAN & CEO

KRISTEN KULINOWSKI, MEMBER

TOM GOONAN, GENERAL COUNSEL

STAFF PRESENT:

Tom Goonan, General Counsel

1 OPERATOR: Good morning and welcome to the Chemical Safety 2 Board public business meeting conference call. My name is Zinara[?] and I'll be the operator for today's call. At this 3 time, all participants are in a listen-only mode. Now I'll turn 4 the call over to Ms. Katherine Lemos. Katherine, you may begin. 5 CHAIR LEMOS: Thank you, Zinara. Good morning. We will now 6 7 call to order this business meeting of the U.S. Chemical Safety 8 and Hazard Investigation Board, referred to as the CSB.

9 Before we begin, I'd like to introduce myself, Dr. Katherine
10 Lemos, as the new Chairman and CEO for the agency. I am thrilled
11 to serve both the agency and the American public in this
12 capacity. Joining me today is Board Member Kristen Kulinowski and
13 our General Counsel, Tom Goonan.

Due to the COVID-19 pandemic, this is an audio-only business meeting. Although all interested participants are able to join via the call-in line, you should know that there are only three of us here in the CSB's headquarter offices in Washington, D.C. We are maintaining social distancing per CDC guidelines.

19 Today we meet in open session, as required by the Government 20 in the Sunshine Act, to discuss operations and agency activities. 21 The CSB is an independent, non-regulatory federal agency that 22 investigates major chemical incidents at fixed facilities.

The investigations examine all aspects of chemical incidents, including physical causes related to equipment design, inadequacies in regulations, industry standards, and safety management systems. Ultimately, we issue safety recommendations for the purpose of preventing similar incidents or accidents in the future.

If you are on the phone and wish to make a public comment at the end of the meeting, please follow the operator's cues and she will unmute your line. You may also submit public comments during the meeting or after, by email to <u>meeting@csb.gov</u>. Again, that's <u>meeting@csb.gov</u> and those comments will be included in the official record.

I would now like to turn the first part of today's meeting over to Dr. Kulinowski. I sincerely appreciate and thank her for her leadership as Interim Executive and wish her all the best as she transitions from the Board into a new position outside of government. I have truly appreciated her insight and candor over the last few days. And so, please, Dr. Kulinowski, continue.
MEMBER KULINOWSKI: Thank you Chair Lemos. I am delighted to

42 be here and pleased to participate in my last public business 43 meeting, with, of course, some regret. I'll have more to say on

44 that at the end of the meeting. For now, I will provide an 45 update on the current investigations.

46 The CSB is currently operating with seven incident 47 investigators and two supervisory investigators. And we have 13 48 open investigations. I will provide a brief description of the 49 status of each.

50 There was one new deployment since the last business meeting 51 on January 29, 2020. The CSB has 13 open investigations and the 52 new one is the Wendland 1H well.

53 On January 29th, a blowout and fire occurred at the Daniel H. 54 Wendland 1H natural gas well in Burleson County, Texas. Three 55 workers were fatally injured, and one worker was seriously 56 injured. The investigation team is performing on-scene 57 activities, interviewing personnel, and reviewing relevant 58 documents.

As for our open investigations, I'll begin with the Watson Manufacturing and Grinding. On January 24th, 2020, an explosion and fire event occurred at the Watson Manufacturing and Grinding Company in Houston, Texas. The incident resulted in the fatal injury of two employees, one employee was seriously injured, and there was significant commercial and residential property damage in the surrounding area. The Watson Company's operation included

66 the powder coating of metal equipment primarily for the oil and 67 mining industries. The powder coating process utilized 68 poly...utilized propylene that was stored on-site in a bulk storage 69 tank.

70 The investigation team is performing investigative 71 activities, interviewing personnel, and continuing to review 72 relevant documents.

73 The TPC Group facility in Port Neches, Texas, experienced a 74 release of hydrocarbons on November 27th, 2019, that resulted in 75 a fire event and multiple explosions. The release occurred in 76 the South Unit of the facility, used in the production of 1,3-77 butadiene which is primarily used as a monomer in the production 78 of a wide range of polymers and copolymers. The incident 79 resulted in multiple injuries and property damage to both the 80 facility and the surrounding area.

And the investigation team is continuing to perform
investigative activities, interview personnel, and review
relevant documents.

On October 26, 2019, Aghorn Operating Incorporated in
 Odessa, Texas, experienced a loss of containment at a pump
 station that resulted in the release of hydrogen sulfide. One worker and

87 one member of the public were fatally injured as a result of the 88 release.

89 This investigation is also ongoing.

90 On June 21, 2019, a major process loss of containment 91 resulted in a fire and several explosions at the Philadelphia 92 Energy Solutions, or PES, refining complex in Philadelphia, 93 Pennsylvania. The incident occurred in the PES hydrofluoric acid 94 alkylation unit. The unit was significantly damaged from the 95 fire and multiple explosions.

96 This draft investigation report is in the final stage of 97 review.

98 On May 3rd, 2019, an explosion and fire that occurred during 99 production of a silicon hydride emulsion at the AB Specialty 100 Silicones facility in Waukegan, Illinois. The incident resulted 101 in fatal injuries to four employees and the injury of at least 102 one other employee. The explosion severely damaged the 103 production facility and impacted neighboring facilities.

104 The...the CSB's investigation team is analyzing the factual 105 information collected during the initial phase of the 106 investigation.

107 On April 2nd, 2019, an explosion and fire occurred at the
108 KMCO facility in Crosby, Texas. KMCO is a producer of specialty

109 chemical products. The company reported the release of 110 isobutylene prior to the incident. The incident resulted in the 111 fatal injury of one employee. Two employees were seriously 112 injured and over 25 workers, both employees and contractors, were 113 injured.

114 The investigation team is developing the draft final 115 investigation report.

On March 17th, 2019, a large fire erupted at the 116 117 Intercontinental Terminals Company, LLC, or ITC, bulk liquid 118 storage terminal located in Deer Park, Texas. The fire 119 originated in the vicinity of Tank 80-8, an 80,000-barrel 120 aboveground atmospheric storage tank. The tank contained 121 naphtha, a flammable liquid typically used as a feedstock or 122 blend stock for production of gasoline. ITC was unable to 123 isolate or stop the release of naphtha from the tank and the fire continued to burn, intensify, and progressively involve 124 additional storage tanks at the facility. 125

High levels of volatile organic compounds were present for approximately 13 weeks after the incident, which delayed access to the incident location by our investigators. The incident did not result in any injuries to either ITC personnel or emergency responders. But the local community was affected by the

131 incident, resulting in a shelter-in-place order and the closure 132 of schools and businesses.

The investigation team is performing on-scene investigative
activities, interviewing personnel, and reviewing relevant
documents.

On Saturday, May 19th, 2018, an ethylene release and fire injured 23 workers at the Kuraray America Inc., or Kuraray, ethylene and vinyl alcohol copolymer plant, or EVAL Plant, in Pasadena, Texas. At the time of the incident, 266 employees and contract workers were on site. During the incident, 2,347 pounds of ethylene were released in less than three minutes.

142 The incident occurred during the startup of a chemical reactor system following a turnaround. High-pressure conditions 143 144 developed inside the reactor, activating the reactor's emergency 145 pressure-relief system and discharging ethylene vapor into the 146 atmosphere toward an area where many contractors were working. These workers were performing a variety of tasks that were not 147 essential to the startup of the reactor, including hot work, 148 149 which likely ignited the ethylene vapor, creating the fire.

150 The draft investigation report is in the final stage of 151 review.

152 On April 26, 2018, an explosion and subsequent fire occurred 153 at the Husky Superior Refinery in Superior, Wisconsin. The 154 explosion occurred while workers were shutting down the Fluid 155 Catalytic Cracking Unit for periodic maintenance and inspection. 156 20 Husky employees and contract workers were injured, and a 157 large portion of the town of Superior, Wisconsin, was evacuated.

158 The investigation team is reviewing documents and data 159 collected during the initial phase of the investigation.

160 On May 31st, 2017, several explosions occurred at the Didion 161 Milling facility in Cambria, Wisconsin. Didion performs corn 162 milling at the Cambria facility. The dry corn milling process is 163 a dust-producing operation and corn dust is known to be explosive 164 under the right circumstances. Five employees were fatally 165 injured, 14 workers injured, and there was significant damage to 166 the facility as a result of this incident.

167 This investigation is currently on hold due to the lack of168 available investigative staff.

169 On April 3rd, 2017, a steam condensate, hot water, storage 170 tank catastrophically failed at the Loy-Lange Box Company in St. 171 Louis, Missouri. The force of the steam explosion ejected the 172 storage tank from the facility, where it travelled approximately 173 500 feet and went through the roof of the Faultless Healthcare

174 Linen facility. One Loy-Lange employee and two Faultless 175 Healthcare Linen employees were fatally injured. One Loy-Lange 176 employee was seriously injured and there was significant damage 177 to both facilities.

178 The investigation team is reviewing documents and data, in 179 addition to testing a component involved in the incident.

180 On August 12, 2016, a flash fire occurred during a welding 181 operation or hot work on a pipe manifold at Sunoco Logistics 182 Partners terminal facility in Nederland, Texas. Seven 183 contractors were injured as a result of this event.

184 This investigation is on hold due to the lack of available 185 investigative staff.

186 Chair Lemos.

187 CHAIR LEMOS: Thank you, Dr. Kulinowski. What I'll now turn
188 to is an update of the status of the CSB Recommendations,
189 followed by ongoing audits by the EPA Office of Inspector
190 General, as well as a financial update.

191 In terms of recommendations, I'll provide a summary first of 192 our current open and closed and will follow by highlighting a 193 recently released advocacy document.

194 The CSB currently has a ratio of 83% recommendations closed 195 and 17% in open status. That equates to 697 closed 196 recommendations and 144 open, for a total of 841.

197 A specific breakdown according to investigation can be found 198 in the events portion of the CSB's website, including the status 199 of all recommendations.

Now let's go back in time to April 20, 2010, the blowout and explosion from Macondo oil well. Many of you will recall this as if it were yesterday, and just last week, April 20th, was the tenyear anniversary.

This was a multiple-fatality incident that occurred approximately 50 miles off the coast of Louisiana, in the Gulf of Mexico, during temporary well-abandonment activities on the Deepwater Horizon drilling rig. Control of the well was lost, resulting in a blowout, the uncontrolled release of oil and gas, in specific, hydrocarbons from the well. On the rig, the hydrocarbons found an ignition source.

The resulting explosions and fire led to the deaths of 11 individuals, serious physical injuries to 17 others, the evacuation of 115 individuals from the rig, the sinking of the Deepwater Horizon, and massive marine and coastal damage from approximately four million barrels of released hydrocarbons.

216 From the four-volume investigation report, the CSB issued 16 217 recommendations, nine of which were to the Department of Interior's Bureau of Safety and Environmental Enforcement. 218 I'd 219 like to highlight one of these recommendations in Tt. particular. 220 states, "Drawing upon best available global standards and 221 practices, develop guidance addressing the roles and 222 responsibilities of corporate Boards of Directors and Executives 223 for effective major accident prevention. Among other topics, this 224 standard shall provide specific guidance on how Boards and 225 Executives could best communicate major accident safety risks to 226 their stakeholders, as well as corporate legal strategies to 227 effectively manage those risks." That recommendation number, for 228 the record, is 2010-10-I-OF-R7.

As a result, we released the CSB product entitled, "CSB Best Practice Guidance for Corporate Boards of Directors and Executives in the Offshore Oil and Industry...and Gas Industry for Major Accident Prevention". We released this on the ten-year anniversary date.

For a company to avoid major accidents, Boards of Directors and Executives must be equipped with adequate and timely process safety-related information, and at least some members must have adequate levels of relevant education, training, and professional

238 experience to allow them to assess the information they receive 239 to evaluate the actions, decisions, and strategies of executive 240 management.

Boards influence corporate activity at the highest levels, including policies, communications, strategic goals, objectives, mergers and acquisitions, indicators, compensation, and incentive pay programs.

These decisions help to shape the corporation's overall culture and the degree to which that culture is focused on safety and major accident prevention. This new guidance document is designed to help inform and guide decision making when it comes to safety and major accident prevention.

Moving on to The Office of Inspector General Audits. As of April 29th, 2020, the CSB is currently working with the Office of Inspector General on the Federal Information Security Management Act recommendation, and this will be completed by the deadline on April 30th, which is tomorrow.

Next, we have our Financial Update. Currently, the CSB is operating under appropriated funding totaling \$12 million to support the agency's mission. In February of this year, the agency submitted their budget request to Congress for Fiscal Year 2021 in the amount of \$13.5 million. That represents a \$1.5

260 million increase from FY2020. The CSB has requested these 261 additional funds to satisfy increases in employment, as well as 262 investigative costs.

The CSB would like to express its sincere gratitude towards Congress for continuously funding the agency so we can continue to keep our nation safe from chemical disasters.

At this time, I would like to open the floor for public comments related to the CSB's activities. Please present your comments within a three-minute time period. And we'll go now to the phone to see if we have any public comments.

270 OPERATOR: Thank you. We will now be in a public comments 271 session. At this time, if you have a public comment, please 272 press * then 1 on your touchtone phone. Please limit your 273 comments to three minutes or less. There will be a slight delay 274 before the first comment is announced.

275 Once again, if you have a public comment, please press *276 then 1 on your touchtone phone. And our first comment is from277 Steve Solomon. Please go ahead. Your line is open.

278 STEVE SOLOMON: Good morning and thank you for the 279 opportunity to make a comment and ask a question. First of all, 280 congratulations to Dr. Lemos on your new position. We look 281 forward to working with you. And I also want to take a moment to

282 personally thank Dr. Kulinowski for your service to workers and 283 especially those who have been lost due to tragic events. So 284 thank you for all you've done.

My question is, on April 15th, there was a paper mill explosion in Jay, Maine. And I was wanting to know, is the CSB looking into this and, if you are looking into this, what are your plans going forward? Thank you.

289 CHAIR LEMOS: Thank you, Steve. This is Katherine. First 290 of all, thank you so much for your congratulations and, again, I 291 will also miss working with Dr. Kulinowski. I think she's done a 292 fantastic job. And we looking forward to working together.

In terms of your…your question regarding the 15th April event, I'll put that… We'll note that for the public comments. That is a question, a fair question. And we will address that through the public comment process.

297 OPERATOR: Thank you. Our next question comes from John298 Bresland. Please go ahead. Your line is open.

JOHN BRESLAND: Good morning. This is John Bresland, a former Board Member and Chair of the Chemical Safety Board. I left the Chemical Safety Board in 2012. It just doesn't seem...my life has passed so quickly since then. But I did want to call in and congratulate Dr. Lemos...congratulate Katherine on her

304 appointment as the Chair and Board Member of the Chemical Safety 305 Board and...and certainly wish her all the best. And also thank 306 Dr. Kulinowski for her service over the years as well.

307 It's...it...it's interesting to listen to the...the list of incidents that you're currently investigating or hoping to 308 309 investigate with more staff. It doesn't seem like the types of 310 incidents are changing all that much and that's a little 311 disheartening. It's not a ...it's not a criticism of the Chemical 312 Safety Board. It's just...it's unfortunate that the incidents 313 that we were investigating ten years ago are still happening 314 today.

315 But I certainly enjoyed my time at the Chemical Safety 316 I was there for almost ten years. It was probably the Board. 317 most interesting job I had the whole time ... in my working career. 318 So I just encourage you to keep on doing your investigations, doing them quickly, doing accurately and 319 comprehensively, and getting the information out to the industry 320 so that we can have a ... an ongoing reduction in the number of 321 322 incidents and the number of fatalities.

323 But again, congratulations and welcome aboard to Dr. Lemos. 324 I know you're really going to have a...a very interesting time over 325 the...the next five years. Thank you.

326 CHAIR LEMOS: Thank you, Mr. Bresland. What an honor to 327 have you call in and...and provide such encouraging comments and 328 congratulations. I am certainly looking forward to an 329 interesting time.

330 Your observation regarding the fact that the similar events 331 are occurring is...is noteworthy and something, of course, that we 332 hope to impact...you know, moving forward. So thank you so much 333 for...for calling in and...and your comments of encouragement.

334 MEMBER KULINOWSKI: And I wanted to add my...my thanks also 335 to...to you, John, for your...for your comments directed to me, Dr. 336 Kulinowski.

337 OPERATOR: Thank you. Our next comment comes from Richard338 Rosera. Please go ahead. You line is open.

339 RICHARD ROSERA: I just wanted to congratulate Dr. Lemos and 340 also thank Dr. Kulinowski for her service over...well, almost five 341 years to the...to the Board and to the CSB.

342 And also wanted to check. I noted that some of the 343 investigations are on hold because of lack of staff. How many 344 investigators do you currently have? And what's the status of...of 345 hiring any additional staff as investigators?

346 CHAIR LEMOS: So I know that earlier in the... First of all, 347 thank you, Richard. And your last name is Rosera?

348 RICHARD ROSERA: Correct.

349 CHAIR LEMOS: Correct. And are you with any particular 350 agency or association?

351 RICHARD ROSERA: I'm with a company called EHS Grades, which 352 includes two former investigators, Johnnie Banks and Samuel 353 Oyewole and, you know, I have a continuing interest in the 354 activities of the CSB. So that's...that's my background.

355 CHAIR LEMOS: Excellent. Thank you, Richard. So I'm just 356 referring back to Dr. Kulinowski's comments from earlier in this 357 hour. The CSB is currently operating with seven incident 358 investigators and two supervisory investigators. And there are 359 13 open investigations. I do know that there are a number of 360 open requisitions for investigators. And I also know that we're 361 in the process of...of bringing on several others currently.

362 So I can't...I can't provide any details but we will note in 363 the public record, you know, that...that question and potential 364 concern, because I share that as well, in terms of our ability to 365 close out on these...these issues...on these events.

366 RICHARD ROSERA: Thank you.

367 CHAIR LEMOS: Thank you.

368 OPERATOR: Thank you. Our next comment comes from Mahti369 Chindouri[?]. Please go ahead. Your line is open.

MAHTI CHINDOURI[?]: Hi. My name is Mahti Chindouri
Chininga[?] and I'm with the American Chemistry Council.
Firstly, I'd like to join my peers in congratulating you, Dr.
Lemos, on your new appointment. And, of course, thanking Dr.
Kulinowski for your service.

375 My question is regarding the new accidental release 376 reporting goal, which went into effect last month. I was 377 wondering if you had any preliminary insights on its effect and 378 the type of information it's generating.

379 CHAIR LEMOS: So thank you, Mahti, I looking forward to 380 working with you. I'm aware of the new reporting rule and I'll 381 put this...I will definitely note this interest and the specific 382 questions for public comment.

I still have yet to be briefed on the…in its entirety, which is why I'm unable to answer any of those details right now. But certainly for public comment, I will…I'll make sure that we do address those moving forward.

387 MAHTI CHINDOURI: Thank you.

388 CHAIR LEMOS: So we do have a question that came in from the 389 e-mail address. This question is from Kevin Druley at the 390 National Safety Council. And the question is, "What is CSB's 391 understanding of a possible timeline for bringing new members

392 onboard? With Dr. Kulinowski's final meeting today, how will the 393 agency proceed with only one Board Member going forward?"

394 So I have to say that that's an excellent question. And I 395 will...again, that will...that information will be in the public 396 comment record for response and...and for our addressing it. If I 397 had specific information today, we would provide it. But we are 398 working through those details.

399 OPERATOR: Thank you. At this time, I'm not showing any 400 further comments. I would like to turn the call back over to the 401 host.

402 CHAIR LEMOS: Thank you, Zinara. We do have one other 403 question that came in from... And I'm going to try to read this 404 name appropriately, Michael Serafilia[?], and I'm not sure that 405 there is a association for Michael, if he's on the phone.

406 So the comments are, "Excellent update on the current status 407 of open investigations. How does the CSB determine which incident they will respond to? There was an explosion at a 408 papermill in Jay, Maine on the 15th of April 2020. While no 409 410 fatalities were reported, there was significant damage and 411 significant economic impacts to the plant, local community, as 412 well as loggers and truckers." The question is, "Will a team 413 investigate this incident?"

414 And my assumption here is this is the same event that Steve 415 Solomon was referring to in the first question. Dr. Kulinowski, 416 would you like to answer that?

417 MEMBER KULINOWSKI: Yes, thank you, Chair Lemos. I can 418 comment generically about the CSB's decision making for whether 419 or not it's deployed. And, as we've discussed before, the CSB 420 has multiple criteria that it uses to determine whether or not 421 it's going to deploy to an incident.

422 First, of course, is whether it's in our jurisdiction. And 423 then our criteria are largely consequence-based. Was the loss of 424 life, property damage, or significant injury that would warrant 425 us to deploy? Unfortunately, we also look at the available 426 resources for deployment. And during my time as Interim 427 Executive, I also had concerns about sending investigators into 428 the field during an active pandemic.

So when incidents come in to our screening department, we weigh all of these factors and then make a go or no-go decision. Even if we don't deploy, we often collect information about the incident and...and continue to monitor it for...for our...for our internal purposes.

434 So that's what I can tell you about our deployment decision 435 making.

436 CHAIR LEMOS: Thank you, Dr. Kulinowski. Zinara, there are437 no other questions from online?

438 OPERATOR: I am showing a few comments if you'd like to take 439 them.

440 CHAIR LEMOS: Absolutely.

441 OPERATOR: Our next comment comes from Dave Sierra. Please442 go ahead. You line is open.

443 DAVE SIERRA: Hello, this is Dave Sierra. I had a question 444 regarding the reporting rule. And is the CSB planning or do you 445 all envision doing any sort of guidance on...on that rule? And, if 446 so, do you envision any opportunity for stakeholders to provide 447 comment, either through a virtual stakeholder meeting or some 448 other forum to elicit input for...for that?

449 CHAIR LEMOS: So, thank you, Dave. I am familiar with the 450 fact that we just did pass a reporting rule and there was public 451 comment on the rule itself. And I know we did get this question 452 also from an earlier caller.

In terms of guidance, I am aware...I was informed yesterday that we are going to be providing some guidance for this rule. And I'm not, you know, familiar with the details, which is why I would just say for the rest of this, let's put it in the public comment to be addressed.

458 Typically, there...there is always stakeholder engagement in 459 the products that we produce. So that's a very general comment 460 that I would...I would have to say I don't know how it's going to 461 work with this...with the guidance materials in specific because I 462 haven't been briefed upon that yet.

463 DAVE SIERRA: Okay, thank you.

464 CHAIR LEMOS: Thank you, Dave.

465 OPERATOR: Thank you. Our next comment comes from Jeff466 Johnson. Please go ahead. Your line is open.

467 JEFF JOHNSON: Thank you and thanks for having this. I'm a 468 reporter with Chemical & Engineering News. A number of the 469 questions that I have have been already asked. Although some of 470 the answers didn't [inaudible] forward. Can you tell me…? I 471 think you mentioned one that I think was Didion, one 472 investigation that's on hold because of lack of staff. Can you 473 give me a sense of how many others there might be?

474 The other question, of course, is how many investigators are 475 you actually short now? And do you have any idea when you might 476 be able to fill them? Can you help me with that?

477 CHAIR LEMOS: So, yes, Dr. Kulinowski did mention several,
478 and I don't know the count of exactly how many that are open, but
479 yet on hold due to a staffing shortage of investigators. Again,

480 we do have seven incident investigators with two supervisory 481 investigators. Obviously, that is short if we're not able to 482 continue. But I don't know the exact count at this moment. Dr. 483 Kulinowski, do you have any input for that?

484 MEMBER KULINOWSKI: Yeah, we're looking to hire at least ten 485 more investigators. And we have an open action right now and 486 a...we're...we're vetting some of the candidates now.

487 CHAIR LEMOS: Got it. I do know that it's active. We have, 488 you know, several offers currently pending. We just brought on 489 several more. So this is a high priority, top priority. So 490 hopefully that...that addressed that...that same question.

491 JEFF JOHNSON: Yeah. Thank you, thank you.

492 OPERATOR: Thank you. Our next comment comes from...comes493 from David Miller. Please go ahead. Your line is open.

494 DAVID MILLER: Yes, thank you, operator. This is David
495 Miller with the American Petroleum Institute. Not a question,
496 just a comment. Of course, first and foremost, to congratulate
497 you, Dr. Lemos, on your appointment. We look forward to working
498 with you.

And then, of course, a comment to thank Dr. Kulinowski for 500 her service for these five years and to wish her all the best in 501 her future endeavors.

502 So really just two things there. And again, as others have 503 said, thank you very much for having this business meeting. I 504 appreciate the opportunity to call in. And while we can't see 505 you on screen, we're glad to know that you're social distancing. 506 [laughter] the appropriate thing to do at this point, right? So, 507 again, thank you very much.

508 CHAIR LEMOS: Thank you, David. Again, we really do appreciate the congratulations and it is no small investment for 509 510 Dr. Kulinowski for five years and the staff. I have to say there 511 are so many dedicated staff at this agency that I'm meeting and 512 have interacted with just recently, that I'm so fortunate to ... to 513 be working with. And I know we're going to accomplish, you know, significant improvements ... continued improvements, I should say, as 514 515 we move forward. Because I know there have already been quite a 516 few.

517 So, in closing, I thank everyone here today and the staff, 518 as well as my fellow Board Member, Dr. Kulinowski, for attending 519 today's meeting.

520 I urge you, all of you, to continue monitoring our website, 521 and if you haven't already done so, to sign up for CSB news 522 alerts.

523 All of us share a strong interest in preventing chemical 524 incidents in the future, and we need to work together as a 525 community to do so.

526 So, Dr. Kulinowski, I believe you have some personal527 comments before we close.

528 MEMBER KULINOWSKI: Thank you, Chair Lemos. At the end of 529 a...of a tenure like this, one gets retrospective. So if you'll 530 permit me to go back in time a little bit.

When I was first approached about being considered for a 531 position on the Board, I was very excited about being able to 532 533 contribute to its important mission. Much of my prior work in 534 occupational and environmental health and safety was compelling, but largely anticipatory. That work was aimed at thinking about 535 536 how to prevent human and environmental damage from engineered 537 nanomaterials, a relatively novel class of materials used in many 538 different industrial sectors.

539 So we were laying the foundation for an assessment of the 540 risk, based on early research that showed potential areas of...of 541 concern. But these risks had not yet emerged.

542 The risks of major industrial accidents, such as the ones 543 investigated by the CSB, are not theoretical. Every day in the 544 U.S. and around the world, people go to work in high-hazard

545 industries. These industries remain vitally important to 546 contributing to the coronavirus response.

And nearly every day, as our incident screening data 547 548 demonstrates, something does not go as planned. Usually the 549 unplanned releases of hazardous substances reported to us are 550 small and relatively harmless. But that's not always the case. 551 Sometimes the magnitude and consequences are extreme. And 552 when that happens, lives are lost, property destroyed, and 553 communities left in tatters. Preventing these catastrophic 554 events is the work of the CSB. It is important. It is 555 compelling. And it has been my privilege to have contributed to 556 it.

557 I have also appreciated the commitment of our staff, who 558 dedicate their talents to this work and to my former Board 559 Members for their service. I have learned much from all of you, 560 for which I am grateful.

Finally, I would like to thank our many stakeholders for their unwavering support of the agency and its mission during some rather bleak times when our future seemed uncertain. And so I'm pleased but also farewell...but also sad to say farewell at this, my last public business meeting and last week at the agency.

567 But I am confident that the chair will thrive under your 568 leadership, Chair Lemos, as you are an experienced safety 569 professional, committed to its success. I will be cheering for 570 you and the staff from the sidelines. And, like at least 100,000 571 subscribers, eagerly awaiting for that next safety video to be 572 posted to the YouTube channel. [laughter]

573 Thank you all and let us continue to envision a nation safe574 from chemical catastrophe.

575 CHAIR LEMOS: Thank you, Dr. Kulinowski. What a wonderful 576 way to close out this meeting. Thank you, everyone, for your 577 attendance. And with that, this meeting is adjourned.

578 OPERATOR: Thank you. And thank you, ladies and gentlemen.
579 This concludes today's conference. Thank you for participating.
580 You may now disconnect.