WEBVTT 1 00:00:30.990 --> 00:00:32.100 Janetta Coats: Can we have the screen. 2 00:00:44.220 --> 00:00:45.150 Janetta Coats: Good evening. 3 00:00:46.770 --> 00:00:58.680 Janetta Coats: and welcome to the ethylene oxide at zoom Community meeting but Union Carbide in havili Louisiana. 4 00:00:59.910 --> 00:01:07.860 Janetta Coats: My name is genetic coats with EPA, and I am the moderator for this evenings meeting. 5 00:01:09.540 --> 00:01:10.920 Janetta Coats: Next slide please. 6 00:01:13.620 --> 00:01:22.470 Janetta Coats: For those in attendance, requiring language interpretation services instructions are posted on the screen. 7 00:01:23.880 --> 00:01:34.320 Janetta Coats: This will assist our participants to enable the appropriate language preferences for English or Spanish services. 8 00:01:35.520 --> 00:01:45.150Janetta Coats: I would like to welcome and introduce the Spanish interpreters see o'mara kress bro and Nestor Lima. 9 00:01:46.680 --> 00:01:56.880 Janetta Coats: For those requiring American sign language services, the interpreters window is available to pin the interpreter on the screen. 10  $00:01:57.930 \rightarrow 00:02:08.700$ Janetta Coats: I would like to welcome and introduce the American sign language interpreters Karen Evans and corey langridge. 11 00:02:10.110 --> 00:02:11.670 Janetta Coats: Next slide please.

00:02:14.910 --> 00:02:28.710 Janetta Coats: This is a zoom meeting and due to the size of the audience all participants are in listening mode only except for the speakers microphones. 13 00:02:30.450 --> 00:02:38.430 Janetta Coats: At the end of the presentations EPA will address questions during the question and answer session. 14 00:02:40.140 --> 00:02:54.960 Janetta Coats: Participants may write their question in the chat box during the presentation, however, the questions will not be answered until the question and answer session. 15 00:02:56.670 --> 00:03:09.330 Janetta Coats: During that time, please include your name and affiliation in the chat box, so we can be aware of your participation in this meeting. 16 00:03:10.680 --> 00:03:12.060 Janetta Coats: Next slide please. 17 00:03:13.770 --> 00:03:27.720 Janetta Coats: Your comments have very important to us this meeting is focused on hearing from the citizens in the Community area near the Union Carbide facility. 18 00:03:29.310 --> 00:03:46.410 Janetta Coats: Please note any questions related to industry permits any enforcement or legal actions or about other areas of facilities will not be addressed during this Community meeting. 19 00:03:47.400 --> 00:04:03.270Janetta Coats: You may sin those types of questions or other questions and comments related to ethylene oxide, to the EPA region six email box for a response. 20 00:04:04.500 --> 00:04:11.070 Janetta Coats: That address is on the screen before you, which is our six. 21 00:04:12.300 --> 00:04:15.210 Janetta Coats: E T H l y.

00:04:16.260 --> 00:04:25.500 Janetta Coats: E in a oxide oh X I d@epa.gov. 23 00:04:26.610 --> 00:04:28.950 Janetta Coats: Please submit additional questions there. 24 00:04:31.080 -> 00:04:43.320Janetta Coats: Please be mindful that this event is being recorded and will be posted to the EPA region six websites for ethylene oxide. 25 00:04:45.180 --> 00:04:53.700 Janetta Coats: These web page links will be posted in the tech box as an announcement on the right side of your monitor screen. 26 00:04:55.380 --> 00:04:56.670 Janetta Coats: Next slide please. 27 00:05:00.330 --> 00:05:14.790 Janetta Coats: For zoom meetings, best practices during the question and answer session, in addition to writing the questions in the chat box, you may raise your hand to ask a question. 28 00:05:15.960 --> 00:05:32.730 Janetta Coats: Those participants dialing in by phone will also have an opportunity to ask a question during the question and answer session, when you are not speaking, please be mindful to meet your microphone. 29 00:05:36.660 --> 00:05:42.750 Janetta Coats: The slide shows an example of where to find the mute button. 30 00:05:44.700 --> 00:05:45.990Janetta Coats: And this button. 31 00:05:47.370 --> 00:05:50.640 Janetta Coats: And the buttons at the top of your screen for the chat box. 32 00:05:51.660 --> 00:05:53.610 Janetta Coats: And to raise your hand. 33 00:05:55.200 --> 00:05:56.820 Janetta Coats: Next slide please.

34 00:06:00.690 --> 00:06:20.520 Janetta Coats: EPA would like to welcome our Louisiana Congressional delegation state and local officials offices and the environmental justice stakeholders, along with members of the community attending and participating in this meeting. 35 00:06:21.870 --> 00:06:37.950 Janetta Coats: EPA is working with partnerships with the Louisiana department of environmental quality 1d eq regarding public interest, as it relates to eat to ethylene oxide and Union Carbide. 36 00:06:39.060 --> 00:06:45.990 Janetta Coats: At this time, I would like to make you aware that we will have three EPA speakers. 37 00:06:46.770 --> 00:06:55.110 Janetta Coats: The first speaker will be well, not necessarily the first speaker but i'll just give you their names i'm not quite sure as to what order they will be speaking. 38 00:06:55.620 --> 00:07:17.460 Janetta Coats: But I will make you aware of the names of the representatives from EPA that will be speaking one representative is matt to hottie he is the EPA headquarters, the rector of office of environmental justice and a second speaker will be. 39 00:07:18.660 --> 00:07:23.880 Janetta Coats: gianna polk EPA region six deputy director. 40 00:07:24.930 --> 00:07:26.580 Janetta Coats: of environmental justice. 41 00:07:28.140 --> 00:07:42.450 Janetta Coats: office of communities tribes and environmental assessments, she will be making general comments, in addition to a third representative from EPA region six and that representative is. 42 00:07:43.050 --> 00:07:59.490Janetta Coats: Jeff Robinson region six air and permitting branch chief with that, I would like to turn the MIC over to john polk Donna, please unmute your phone and take the MIC Thank you. 43 00:08:00.660 --> 00:08:05.100

JPOLK03: Thank you Jeanette good evening as Jeanette said i'm. 44 00:08:09.060 --> 00:08:18.180 JPOLK03: jonna poke and I serve communities tribes and environmental assessment, I want to thank you for your time and participation, this evening. 45 00:08:18.660 --> 00:08:33.450 JPOLK03: As EPA shares important information concerning ethylene oxide emissions ethylene oxide risks to human health and provides an opportunity for you to ask questions about those concerns. 46 00:08:34.230 --> 00:08:46.320 JPOLK03: We had helped to share this important information with Community members in person, but continue to be protective of everyone during this pandemic, so we are holding meetings virtually. 47 00:08:46.770 --> 00:08:53.730 JPOLK03: I hope that you and your families are safe and we look forward to the time when we can safely gather again. 48 00:08:54.390 --> 00:09:07.110JPOLK03: My special thank you this evening to a group of Community stakeholders from Texas and Louisiana who expressed their ethylene oxide concerns to EPA administrator. 49 00:09:07.590 --> 00:09:18.150 JPOLK03: This past spring EPA invited this group of stakeholders to work with EPA to improve outreach to communities concerning ethylene oxide. 50 00:09:18.600 --> 00:09:39.840 JPOLK03: Including recommendations on how to remove language barriers provide meeting notices and improve communication materials with the Community stakeholders, we have a common goal of providing you the best information concerning ethylene oxide wrist in the best manner. 51 00:09:41.370 --> 00:09:57.780 JPOLK03: First, I would like to introduce our Gloria von our associate director for environmental justice, who i'm sure many of you already know, through her tireless efforts in getting information to communities, thank you Gloria. 52 00:10:00.570 -> 00:10:12.180

Gloria Vaughn: Thank you john and thank you to napa as john said i'm going to have on the associate director of revival justice in the opposite Community tribes and environmental assessment. 53 00:10:13.980 --> 00:10:22.770 Gloria Vaughn: Six I have been fortunate to meet and or talk to somebody who are attending this meeting, but those who I have not met. 54 00:10:23.310 --> 00:10:32.640 Gloria Vaughn: My name, maybe know you to you because i'm a person who seems to grant opportunities training opportunities, meaning everything invitations. 55 00:10:33.090 --> 00:10:47.370 Gloria Vaughn: opportunities to connect connect on nepa related projects and i'm the person who sent you and i'm the kind of your contact the issues that you'd want to bring to attention. 56 00:10:48.480 --> 00:10:52.470 Gloria Vaughn: appreciate your time and the sacrifices they cheered me to attend this meeting. 57 00:10:53.580 --> 00:11:02.040 Gloria Vaughn: Please reach out to me if you have any suggestions for me, Miss meetings better I will place my contact information in the chat box. 58 00:11:03.180 --> 00:11:11.850 Gloria Vaughn: But those of you who are calling in by phone also wishing to 1466575. 59 00:11:13.290 --> 00:11:15.000 Gloria Vaughn: Your feedback is important. 60 00:11:16.020 --> 00:11:20.580 Gloria Vaughn: Thank you for attending tonight's meeting and I want him to meeting back to john. 61 00:11:24.930 --> 00:11:25.950 JPOLK03: Thank you Gloria. 62 00:11:27.180 --> 00:11:41.820 JPOLK03: In region six were most concerned about getting information to you Community Members about the risks and concerns associated with ethylene oxide we're really pleased that.

63 00:11:42.690 --> 00:11:58.740 JPOLK03: matt too hot to our director for office of environmental justice and our headquarters office is with us this evening matt will be inviting Community Members to make statements about their concerns following mats. 64 00:11:59.760 --> 00:12:01.290 JPOLK03: communicate mats. 65 00:12:05.670 --> 00:12:17.040 JPOLK03: sharing with us and offering that Jeff Robinson, who will make some opening remarks on behalf of our ear and radiation division and then fran for halen will. 66 00:12:17.640 --> 00:12:34.860 JPOLK03: make a presentation concerning ethylene oxide and then we will welcome your Community questions and concerns and do our best to answer them, and so this evening i'll turn it over to matt and and welcome him to our meeting, thank you. 67 00:12:37.980 --> 00:12:57.630 Matthew Tejada: hey thanks john so much Hello everyone Thank you again for having me in your meeting tonight, again, my name is Matthew to haha i'm the director of the office of environmental justice for EPA i've been here a little over eight years, which has been an exciting time a challenging time. 68 00:12:58.890 --> 00:13:09.000 Matthew Tejada: I want to thank all of you for for taking time out of your lives away from your families may be away from your jobs to join this session tonight. 69 00:13:09.540 --> 00:13:19.290 Matthew Tejada: I know that even even when we're able to do this in the evenings that it is a lot to ask Community Members to show up and share with us. 70 00:13:19.920 --> 00:13:30.870 Matthew Tejada: But it is a critical part of what we have to do at EPA, to make sure that our decisions, and that our policies. 71 00:13:31.410 --> 00:13:38.460 Matthew Tejada: And at the implementation of our programs are meeting the needs of communities that need our help the most.

72 00:13:39.150 --> 00:13:47.550 Matthew Tejada: So, again, I just want to thank you all so much for for taking that time with us tonight to let us know what is the job that we need to get done for you. 73 00:13:48.180 --> 00:14:03.180 Matthew Tejada: I also want to thank our interpreters are both our American sign language and our Spanish interpreters for those of us to make sure that we are accessible and inclusive to everyone in the Community who wants to share with us and hear the information we have. 74 00:14:04.980 --> 00:14:12.120 Matthew Tejada: One of the reasons it's so important for us to hear from you all about ethylene oxide is because we appreciate it. 75 00:14:13.230 --> 00:14:23.550 Matthew Tejada: Not just in region six but across EPA that this is a, this is a scary development for folks, this is a chemical that. 76 00:14:24.390 --> 00:14:36.180 Matthew Tejada: It took us a long time to figure out it took us a long time to really get the science to a place where we kind of had our arms around it and, and I know that the information that we've shared. 77 00:14:37.500 --> 00:14:40.890 Matthew Tejada: The way that we've communicated about the discovery of this. 78 00:14:41.940 --> 00:14:43.890 Matthew Tejada: has not always. 79 00:14:45.000 --> 00:14:59.250Matthew Tejada: helped to alleviate your concern and help to communicate in a way, where you feel like your needs are being heard and addressed and that you can live your lives in safety. 80 00:15:00.360 --> 00:15:06.750 Matthew Tejada: for yourselves, for your families, for your families that are yet to come in your communities. 81 00:15:08.070 --> 00:15:09.330 Matthew Tejada: And so we're trying to.

82

00:15:11.610 --> 00:15:23.010 Matthew Tejada: make better on that and really hear from y'all tonight provide you some information, so we are we, we really want to focus on that tonight. 83 00:15:23.640 --> 00:15:32.790 Matthew Tejada: To hear from to hear from Community members, first, I know there's a lot of other folks on the phone there's a lot of other government folks on the phone. 84 00:15:33.240 --> 00:15:44.670 Matthew Tejada: there's a lot of environmental advocacy groups on the phone, I would ask, I would ask for folks once we've had a couple more statements from our region six air folks. 85 00:15:45.300 --> 00:15:54.690 Matthew Tejada: To introduce themselves and then do an informational presentation, which I hope is helpful for folks i'm not a scientist i'm a liberal arts good. 86 00:15:55.440 --> 00:16:04.680 Matthew Tejada: So I know about as much as they're going to tell you all tonight about the actual science of ethylene oxide, but as soon as we conclude with the EPA portion. 87 00:16:05.310 --> 00:16:14.400 Matthew Tejada: we're going to go right to taking questions and concerns from Community members first, because that is the purpose here. 88 00:16:15.030 --> 00:16:26.190 Matthew Tejada: And, and that is that is not just the purpose but it's what's right, because that is why we're doing this is to give information and then to hear from y'all. 89 00:16:26.670 --> 00:16:37.470 Matthew Tejada: And this will not be the last time EPA engages out in the public with communities being impacted by ethylene oxide, we will be transparent with y'all. 90 00:16:38.100 --> 00:16:50.940 Matthew Tejada: We will share information about how this develops and we're working hard and we're working hard out of my programming in the office of environmental justice to make sure that EPA. 91

00:16:51.450 --> 00:17:00.270

Matthew Tejada: is accountable to what y'all tell us tonight that our decisions are responsive to your realities and your needs. 92 00:17:02.040 --> 00:17:20.490 Matthew Tejada: The administrator Michael regan speaks constantly about centering the mission of EPA on environmental justice because he knows their communities out there that need our help the most but have received at the least. 93 00:17:21.630 --> 00:17:28.920 Matthew Tejada: And our Agency has done a lot of good over the decades, but there's a lot of folks out there that haven't benefited in that. 94 00:17:30.030 --> 00:17:37.860 Matthew Tejada: And we want to hear from them tonight and make sure that we are accountable to being transparent and responsive. 95 00:17:38.220 --> 00:17:50.760 Matthew Tejada: To what y'all tell us, so thank you again so much for joining us i'm going to turn it back over to our colleagues from region six for one more introduction and then some information and then we're going to go right to hearing from the Community. 96 00:17:54.000 --> 00:18:07.440 JPOLK03: Thank you matt really appreciate those words and putting that in perspective for us, and so I will turn it over to Jeff Robinson, and our for for with our air and radiation division. 97 00:18:07.440 --> 00:18:07.740 Jeff. 98 00:18:10.560 --> 00:18:15.660 Kim Ngo: Oh hi jonna we figured out the communication problems so i'm able to speak. 99 00:18:15.960 --> 00:18:17.340 JPOLK03: All right, thank you. 100 00:18:17.460 --> 00:18:19.020 JPOLK03: Your challenges of zoom. 101 00:18:19.920 --> 00:18:20.880 Kim Ngo: Yes, yes.

102 00:18:21.780 --> 00:18:24.870 Kim Ngo: hi everybody i'm not sure it can you hear me and. 103 00:18:24.900 --> 00:18:25.410 see me. 104 00:18:26.940 --> 00:18:27.690 JPOLK03: We can hear you. 105 00:18:28.800 --> 00:18:29.280 Kim Ngo: Okay. 106 00:18:30.330 --> 00:18:35.310 Kim Ngo: I Tom i'm trying to get the camera on so I let's see. 107 00:18:36.060 --> 00:18:36.870 Matthew Tejada: The cameras on. 108 00:18:37.590 --> 00:18:52.710 Kim Ngo: Okay okay Well, first, I wanted to thank you all the Community Members for being here, thank matt to hate it for coming thank industry for coming to the table really appreciate each and every one of you for spending time with us all of us today. 109 00:18:54.270 --> 00:19:03.720 Kim Ngo: My name is Kim yo I am the deputy division director of reaching six EPA air radiation division my director couldn't be here tonight, so i'm filling in for him. 110 00:19:04.650 --> 00:19:22.260 Kim Ngo: EPA is presenting this Community meeting on potential risks associated with the emissions of ethylene oxide from the Union Carbide Dow corporation that's the St Charles facility and taff Louisiana tonight we will provide information on the current estimated risks from emissions. 111 00:19:23.670 --> 00:19:31.350 Kim Ngo: effing oxide from this facility and what actions Union Carbide has done, and has completed from 2014 through. 112  $00:19:32.820 \rightarrow 00:19:36.420$ Kim Ngo: And what EPA is planning to do to regulate this air toxic.

113 00:19:37.830 --> 00:19:46.500 Kim Ngo: ethylene oxide is a significant building block for many useful everyday consumer products and it's used as a steriliser for medical equipment. 114 00:19:47.130 --> 00:20:01.350 Kim Ngo: During our periodic review of risk from air toxic chemicals, the Agency has determined that ethylene oxide presents a greater potential risk for getting cancer through inhalation or breathing route of exposure. 115 00:20:02.190 --> 00:20:15.150 Kim Ngo: However, across the nation, the total emissions of air toxic pollutants are declining and air quality monitoring data show that concentrations of individual air toxic pollutants in the air are trending downward. 116 00:20:15.990 --> 00:20:21.750 Kim Ngo: But despite these trends some local areas are facing challenges from ethylene oxide emissions. 117 00:20:22.800 --> 00:20:41.460 Kim Ngo: In 2014 and based on the latest national air toxics assessment data ethylene oxide significantly contributed to potential elevated cancer risks in less than 1% of the census tracts across the US one of those census tracts is located in taft Louisiana. 118 00:20:42.780 --> 00:20:49.740 Kim Ngo: Community outreach on ethylene oxide is a critical issue for EPA administrator Michael regan hazmat to hate us had stated. 119 00:20:50.400 --> 00:21:00.480 Kim Ngo: We will be addressing your questions, after the presentations by EPA by Union Carbide and by Community advocate We appreciate you taking time to join us. 120 00:21:01.080 --> 00:21:21.030 Kim Ngo: And with that said, let me introduce miss fran for halen she is our section chief of the air and monitoring grants section and she will provide you with a good details on potential risks of ethylene oxide that are intact Louisiana and with that i'll turn it over to fran Thank you. 121 00:21:24.420 --> 00:21:25.140 Fran Verhalen: Thank you, Kim.

122 00:21:27.060 --> 00:21:28.620 Fran Verhalen: My name is fran van halen. 123 00:21:28.920 --> 00:21:30.000 Fran Verhalen: i'm a supervisor. 124 00:21:30.150 --> 00:21:31.470 Fran Verhalen: Of the US and we're in the middle. 125 00:21:31.770 --> 00:21:33.000 Fran Verhalen: fran yes. 126 00:21:33.270 --> 00:21:45.300 Janetta Coats: This is genetic i'm so sorry to cut in on you and my apologies to everyone in attendance, but I believe that we had someone to just join us from congressman's office. 127 00:21:45.900 --> 00:21:57.420 Janetta Coats: James bernhardt, I believe, if that's correct, so my apologies, in advance, I believe he just joined us so if he would like to unmute star six. 128 00:21:58.740 --> 00:22:02.280 Janetta Coats: We would appreciate that are you there Congressman. 129 00:22:06.630 --> 00:22:12.390 Janetta Coats: he's the deputy chief of staff for congressman's chart carter's office district three. 130 00:22:13.770 --> 00:22:18.930 Janetta Coats: Are you there, I will give you a couple of seconds to try to unmute. 131 00:22:21.300 --> 00:22:26.880 Janetta Coats: it's a little bitty button that says there you are, there you go you got your hand up. 1.32 00:22:28.140 --> 00:22:29.040 James Bernhard: hi how are you. 133 00:22:29.460 --> 00:22:31.140 Janetta Coats: we're doing great sorry.

134 00:22:31.860 --> 00:22:33.840 James Bernhard: i'm muting was was very difficult. 135 00:22:34.710 --> 00:22:36.930 Janetta Coats: Little button just hides itself right. 136 00:22:36.990 --> 00:22:44.040 James Bernhard: Well, it wouldn't let me for a second and i'm very sorry for being a tad bit late it's been a busy day. 137 00:22:45.360 --> 00:22:51.210 James Bernhard: I hope, people have seen we've been you know, working with EPA to try to request more resources for the. 138 00:22:51.660 --> 00:23:01.020 James Bernhard: river parishes so that there'll be more resources to do air monitoring and and study health impacts, but we're just very glad the EPA is here. 139 00:23:01.590 --> 00:23:08.490 James Bernhard: and doing all of these events, so that they get feedback from you guys, the Community, the people who really matter. 140 00:23:08.970 --> 00:23:26.850 James Bernhard: And and have industry here to to explain their their side of the equation is also great and so I just wanted to make sure that you knew the Congressman was listening and that these meetings are very important to us, and we want to hear all the feedback that we can and and. 141 00:23:28.230 --> 00:23:32.010 James Bernhard: And and thank the EPA for holding Thank you all very much. 142 00:23:32.790 --> 00:23:33.450 Janetta Coats: Right so. 143 00:23:35.040 --> 00:23:48.960 James Bernhard: So we appreciate it, we have staff listening in as y'all can hear i'm sort of outside, but I wanted to make sure that y'all knew we were here and we were listening so so thank you for all the feedback and will continue going down this path.

144 00:23:49.920 --> 00:23:57.840 Janetta Coats: Thank you and Dr careful and again I apologize for interrupting you fran, so I will turn the MIC back over to fran Thank you. 145 00:23:59.040 --> 00:24:05.730 Fran Verhalen: Thank you Jeanette and appreciate the Congressional representatives office being here. 146 00:24:07.080 --> 00:24:30.390 Fran Verhalen: Again, my name is Franco halen and i'm a supervisor for the US Environmental Protection Agency in the Dallas Texas office i'm going to be discussing the EPA estimated health risks from breathing ethylene oxide near the Union Carbide TAO St Charles complex located in taft Louisiana. 147 00:24:31.620 --> 00:24:33.690 Fran Verhalen: for purposes of this meeting tonight. 148 00:24:34.770 --> 00:24:38.400 Fran Verhalen: i'm going to call the facility by Union Carbide. 149 00:24:46.080 --> 00:24:52.950 Fran Verhalen: I will be talking about a review of ethylene oxide, including it's important and uses. 150 00:24:54.510 --> 00:25:01.800 Fran Verhalen: The EPA estimated health risks from breathing ethylene oxide near the Union Carbide facility in taft. 151 00:25:03.030 --> 00:25:12.120 Fran Verhalen: What Union Carbide has done to control and provide updated more accurate information on ethylene oxide emissions. 152 00:25:13.680 --> 00:25:27.210 Fran Verhalen: What conclusions EPA has made after reviewing updated information on ethylene oxide at this facility that's been provided by ld Q and the company. 153 00:25:28.980 --> 00:25:37.260 Fran Verhalen: tonight's discussion is a specific discussion about ethylene oxide emissions from this facility.

00:25:39.540 --> 00:25:51.630 Fran Verhalen: i'm focused on providing you information on ethylene oxide uses health effects from breathing ethylene oxide both short term and long term risks. 155 00:25:53.400 --> 00:26:00.480 Fran Verhalen: Information on what the facility has done to update its information on emissions of ethylene oxide. 156 00:26:02.130 --> 00:26:11.310 Fran Verhalen: APIs conclusions After reviewing updated technical information and the risk modeled for this facility. 157 00:26:12.780 --> 00:26:17.670 Fran Verhalen: And more accurate information provided by the company and ld eq. 158 00:26:22.950 --> 00:26:26.280 Fran Verhalen: ethylene oxide exists at room temperature. 159 00:26:27.360 --> 00:26:28.830 Fran Verhalen: As a colorless gas. 160 00:26:30.360 --> 00:26:33.630 Fran Verhalen: It is flammable meaning, it can burn. 161 00:26:35.010 --> 00:26:45.270 Fran Verhalen: It is a chemical component in many other chemicals and is a component for common household items such as detergents or carpets. 162 00:26:47.310 --> 00:27:05.820 Fran Verhalen: It is also a sterilizing agent for materials that cannot be heated or gotten wet, for example, ethylene oxide sterilized is the respiratory to being used in hospitals and for masks and gowns worn by the doctors and nurses. 163 00:27:08.310 --> 00:27:21.150 Fran Verhalen: While ethylene oxide has common uses EPA has determined that this chemical is a carcinogen, meaning that exposure to this air toxic can cause cancer. 164  $00:27:26.280 \longrightarrow 00:27:40.410$ 

Fran Verhalen: In recent years, EPA has learned more about the health risks from breathing air that contains ethylene oxide over a lifetime, but there is a lot about ethylene oxide, that we still do not know. 165 00:27:42.180 --> 00:27:53.460 Fran Verhalen: One of the questions we are examining is whether ethylene oxide is in the air broadly across the United States and if it is at what levels. 166 00:27:55.140 --> 00:28:02.730 Fran Verhalen: Another question is, if we are actually measuring ethylene oxide, or if it is something different. 167 00:28:04.830 --> 00:28:18.570 Fran Verhalen: EPA began examining this question after monitoring studies of ethylene oxide in the air near industrial facilities in another State not in region six in 20th in. 168 00:28:20.310 --> 00:28:20.460 Fran Verhalen: and 169 00:28:22.560 --> 00:28:34.500 Fran Verhalen: found ethylene oxide at the monitors downwind of the facility, this was expected, because when carries ethylene oxide from the facility toward the monitor. 170 00:28:35.910 --> 00:28:49.050 Fran Verhalen: But the studies also detected ethylene oxide, although at lower levels at monitors upwind of the facility indicating the possibility that background ethylene oxide exists. 171 00:28:51.420 --> 00:29:06.840 Fran Verhalen: EPA has found concentrations of ethylene oxide in the outdoor air that is not clearly linked to a particular industrial facility, such as a chemical manufacturing plant or a commercial steriliser. 172 00:29:08.400 --> 00:29:12.420 Fran Verhalen: We do not yet know where the ethylene oxide is coming from. 173 00:29:13.650 --> 00:29:29.460 Fran Verhalen: The scientists and engineers at EPA continue to study and research multiple things that can contribute to ethylene oxide

concentrations to better understand where the ethylene oxide is coming from. 174 00:29:32.100 --> 00:29:42.330 Fran Verhalen: EPA has sample the air in both urban and rural cities across the nation to monitor the concentrations of air toxics. 175 00:29:43.650 --> 00:30:03.840 Fran Verhalen: Welcome well these lower levels of ethylene oxide suggest there is a background level of ethylene oxide in the outdoor air EPA is not yet certain about exact background ethylene oxide levels due to uncertainty with current measurement methods. 176 00:30:11.430 --> 00:30:26.160 Fran Verhalen: i'm here tonight to tell you about potential health risks of cancer associated with air emissions of ethylene oxide from the Union Carbide facility in St Gabriel Louisiana i'm sorry in Huntsville Louisiana. 177 00:30:28.080 --> 00:30:41.160 Fran Verhalen: I use the term potential cancer risk because each of us is unique in our reaction to cancer, causing agents and we may not get cancer from the same exposure as our neighbor. 178 00:30:43.140 --> 00:30:54.990 Fran Verhalen: When we the scientists at EPA discuss health risks, we focus on both short term risk and long term or lifetime risk. 179 00:30:56.670 --> 00:31:05.550 Fran Verhalen: Tonight i'm focusing on risks from breathing air toxics you may also hear this called inhalation risk. 180 00:31:08.490 --> 00:31:13.590 Fran Verhalen: short term risks are those potential risks that impact quickly. 181 00:31:15.090 --> 00:31:28.890 Fran Verhalen: For ethylene oxide, we normally associate this risk with workers who come into contact with and, in this specific case breathe in high concentrations of ethylene oxide. 182 00:31:30.360 --> 00:31:39.840 Fran Verhalen: short term inhalation exposure of workers to high levels of ethylene oxide, have resulted in serious physical effects.

183 00:31:41.010 --> 00:31:51.180 Fran Verhalen: For you, living in the Community near the Union Carbide facility this situation or type of risk is not likely or probable. 184 00:31:53.340 --> 00:32:09.930 Fran Verhalen: Long term risks are potential risks that may develop over years of exposure, such as breathing in lower concentrations of ethylene oxide over longer periods of time, you may hear this called chronic risk. 185 00:32:11.070 --> 00:32:19.890 Fran Verhalen: Long term effects from breathing ethylene oxide for multiple years can but do not always include cancer. 186 00:32:20.940 --> 00:32:31.260 Fran Verhalen: irritation of the eyes skin and respiratory passages and effects to the nervous system, such as headaches or memory loss. 187 00:32:32.880 --> 00:32:52.110 Fran Verhalen: We, the scientists at EPA have determined that a long term that is a lifetime, or about 70 years exposure to ethylene oxide increases the estimated risk of possibly developing certain cancers of the white blood cells. 188 00:32:53.190 --> 00:33:00.030 Fran Verhalen: These cancers include lymphoma myeloma and potentially breast cancer. 189 00:33:03.240 --> 00:33:09.450 Fran Verhalen: Let me start with an explanation about what the potential increased cancer risk means. 190 00:33:11.130 --> 00:33:21.930 Fran Verhalen: EPA discusses increased cancer risk as a comparison of the number of people at risk of developing cancer, for every 1 million cases. 191 00:33:23.040 --> 00:33:28.680 Fran Verhalen: You may hear it as a potential risk of 10 in a million or 100 and a million. 192 00:33:30.150 --> 00:33:37.290 Fran Verhalen: This risk will be in addition to the chances of developing cancer for other reasons.

193

00:33:39.990 --> 00:33:46.200 Fran Verhalen: This slide shows the emissions for ethylene oxide for 2014 and. 194 00:33:47.640 --> 00:33:52.380 Fran Verhalen: from Union Carbide and the associated risk estimates. 195 00:33:54.480 --> 00:34:03.390 Fran Verhalen: Using the 2014 emission inventory information in the national air talks air toxics assessment model. 196 00:34:04.860 --> 00:34:09.270 Fran Verhalen: EPA estimated the potential increased cancer risk. 197 00:34:11.010 --> 00:34:19.410 Fran Verhalen: In the Huntsville area from ethylene oxide, to be over 1600 cases in 1 million. 198 00:34:20.790 --> 00:34:27.900 Fran Verhalen: an EPA decided that the ethylene oxide emissions were from the Union Carbide facility. 199 00:34:30.360 --> 00:34:46.260 Fran Verhalen: With the EPA consider excess cancer risks that are estimated to be above 101 million as not sufficiently protective of human health and in need of further evaluation to address this risk. 200 00:34:48.540 --> 00:34:57.780 Fran Verhalen: This is one of the reasons we are here tonight to tell you that there is an increased risk of potential cancer from breathing ethylene oxide. 201 00:34:59.790 --> 00:35:02.430 Fran Verhalen: Using Union Carbide more recent. 202 00:35:03.630 --> 00:35:12.780 Fran Verhalen: Emission inventory information EPA has found that the potential risk and increased cancer, to be 700 in 1 million. 203 00:35:14.880 --> 00:35:25.230 Fran Verhalen: While this risk has decreased, it remains it levels, the EPA has determined to be not sufficient protective of human health.

00:35:28.410 --> 00:35:38.400 Fran Verhalen: EPA uses actual annual emissions for a specific year to develop the estimated lifetime cancer risk. 205 00:35:39.540 --> 00:35:51.180 Fran Verhalen: Because the amount of annual emissions change, based on a facilities use of ethylene oxide, the associated risk continues to change. 206 00:35:52.950 --> 00:36:08.040 Fran Verhalen: For 2020 Union Carbide has continued to work to control the amount of ethylene oxide emitted and has reduced its ethylene oxide by an additional 5% compared to the 2018 emissions. 207 00:36:09.570 --> 00:36:17.640 Fran Verhalen: Please note that EPA uses actual emissions for a specific year to develop the estimated lifetime risk. 208 00:36:18.990 --> 00:36:24.000 Fran Verhalen: Bus risks change as actual emissions change. 209 00:36:27.030 --> 00:36:36.930 Fran Verhalen: In 2016 EPA published the integrated risk information system or iris assessment for ethylene oxide. 210 00:36:38.070 --> 00:36:47.280 Fran Verhalen: This risk assessment underwent two rounds of public comment and two rounds of peer review by EPA Scientific Advisory Board. 211 00:36:48.810 --> 00:36:53.940 Fran Verhalen: EPA stands behind the ethylene oxide risk value for inhalation risk. 212 00:36:54.960 --> 00:37:10.590 Fran Verhalen: However, you may hear different views this evening about the risk, I am not here to debate the different risks values, but rather to explain the risks for breathing ethylene oxide, based on EPA his latest scientific assessment. 213 00:37:11.760 --> 00:37:21.990 Fran Verhalen: suggestions to consider risk values other than the iris will be addressed by EPA at a later time through our formal agency processes.

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00:37:25.350 --> 00:37:28.920 Fran Verhalen: Our risk number for ethylene oxide is protective of human health. 215 00:37:30.180 --> 00:37:43.680 Fran Verhalen: We base the increased estimated risk of possibly contracting cancer on breathing air with ethylene oxide in it for 24 hours a day, every day for 70 years. 216 00:37:45.120 --> 00:37:56.520 Fran Verhalen: EPA does not expect a one time or short term exposure to low amounts of ethylene oxide to cause immediate harm to a person's health. 217 00:37:58.020 --> 00:38:04.380 Fran Verhalen: We have found that a long term that is a lifetime exposure or about 70 years. 218 00:38:05.550 --> 00:38:26.250 Fran Verhalen: Exposure to set to ethylene oxide, to increase the risk of certain cancers, including non Hodgkin lymphoma myeloma and lymphocytic leukemia some studies also conclude that long term exposure to ethylene oxide may increase the risk of breast cancer. 219 00:38:31.350 --> 00:38:40.950 Fran Verhalen: EPA uses the human exposure model for performing risk assessments for sources emitting air toxics to the air. 220 00:38:42.510 --> 00:38:53.580 Fran Verhalen: The model only addresses inhalation exposure and is designed to predict estimated risks associated with chemicals emitted into the air. 221 00:38:55.170 --> 00:39:01.080 Fran Verhalen: That is by the facility that moves beyond the facilities property boundary. 222 00:39:02.310 --> 00:39:05.010 Fran Verhalen: And remain in the facility of the facility. 223 00:39:06.630 --> 00:39:18.270 Fran Verhalen: In this case we use the emissions and facility information from the Union Carbide facility and ran the model to predict the estimated risk from that facility.

224 00:39:20.370 --> 00:39:29.370 Fran Verhalen: The result of the human exposure model, our estimates of cancer risk and non cancer hazards for the chemicals evaluated in the model. 225 00:39:31.020 --> 00:39:36.060 Fran Verhalen: In this case we looked at air toxics including ethylene oxide. 226 00:39:37.500 --> 00:39:45.930 Fran Verhalen: The actual health of an individual and one's likelihood of developing cancer may be affected by other factors. 227 00:39:46.950 --> 00:39:52.740 Fran Verhalen: example of this include how long a person is exposed to an air toxic. 228 00:39:53.820 --> 00:40:01.380 Fran Verhalen: What their regular routines normally are and what air toxics a person is exposed to. 229 00:40:02.790 --> 00:40:26.760 Fran Verhalen: More information can be found at EPA website EPA pardon me w w w.epa.gov forward slash F E are a forward slash risk dash assessment. 230 00:40:27.810 --> 00:40:36.960 Fran Verhalen: dash and dash modeling dash human dash exposure. 2.31 00:40:38.130 --> 00:40:39.510 Fran Verhalen: dash model. 232 00:40:40.590 --> 00:40:43.590 Fran Verhalen: dash H E m. 233 00:40:52.350 --> 00:41:00.870 Fran Verhalen: The Union Carbide facility is located south of the Mississippi river on river road at taft and just west of Huntsville Louisiana. 234 00:41:02.100 --> 00:41:14.250 Fran Verhalen: The facility has multiple manufacturing units and processes which includes ethylene oxide production, as well as the production of other chemicals and products using ethylene oxide.

235 00:41:16.380 --> 00:41:22.440 Fran Verhalen: As fei began updating information from 2014 to 2020. 236 00:41:23.610 --> 00:41:26.520 Fran Verhalen: We initiated discussions with Union Carbide. 237 00:41:28.140 --> 00:41:28.500 Fran Verhalen: In. 238 00:41:30.330 --> 00:41:40.380 Fran Verhalen: 1d Q spoke with Union Carbide asking for updates on controls of ethylene oxide emissions since 2014. 239 00:41:43.410 --> 00:41:54.390 Fran Verhalen: In March of 2021 API and ld Q held a conference call with Union Carbide to discuss facility efforts to report to read. 240 00:41:56.280 --> 00:41:59.430 Fran Verhalen: To reduce reported ethylene oxide emissions. 241 00:42:05.970 --> 00:42:12.270 Fran Verhalen: How did changes and reported ethylene oxide emissions occur at Union Carbide. 242 00:42:14.040 --> 00:42:21.090 Fran Verhalen: Union Carbide is work to improve its controls and methods for reporting it's ethylene oxide emissions annually. 243 00:42:24.690 --> 00:42:36.720 Fran Verhalen: As part of its facility improvements in 2016 Union Carbide employees implemented a vapor balancing project which recycle vapors. 244 00:42:37.590 --> 00:43:02.040 Fran Verhalen: back into the system for the rail car loading operations and stop venting the vapors to the flare this reduced site ethylene oxide emissions prior to that time the vapors from the sites railcard rail car loading operation were sent to the onsite flair for destruction. 245 00:43:05.460 --> 00:43:11.940 Fran Verhalen: Secondly, Union Carbide also revised its methods for

calculating emissions.

246 00:43:13.350 --> 00:43:27.630 Fran Verhalen: First they revised the ethylene oxide emissions calculations, to use measured operational values for two of the pressurized ethylene oxide storage vessels that vent to the flare. 247 00:43:28.950 --> 00:43:44.580 Fran Verhalen: These tanks are operated at or near a constant level and Union Carbide found that the quantity of vapors from these tanks was lower than previously calculated. 248 00:43:45.600 --> 00:43:51.900 Fran Verhalen: This resulted in less ethylene oxide being vented to the flare than previously estimated. 249 00:43:54.780 --> 00:44:04.440 Fran Verhalen: Union Carbide also evaluated and revise the ethylene oxide emission calculations to reflect the actual amounts in the. 250 00:44:05.490 --> 00:44:07.680 Fran Verhalen: Higher glycol jet vent. 251 00:44:09.060 --> 00:44:09.630 Fran Verhalen: During. 252 00:44:11.670 --> 00:44:29.700 Fran Verhalen: Facility staff sampled and analyzed the waste gas flowing to the site logistics flare results showed the actual actual ethylene oxide amounts in the waste gas going to the flare were lower than previously estimated. 253 00:44:33.150 --> 00:44:43.980 Fran Verhalen: As shown on the chart Union Carbide has been able to reduce its emissions from since 2014 by over 60%. 254 00:44:45.630 --> 00:44:55.140 Fran Verhalen: Union Carbide implemented new control measures for their unloading operations and installed, a new scrubber on their waste gas line. 255 00:44:56.760 --> 00:45:07.470 Fran Verhalen: The facility also evaluated its procedures for calculating new missions using measured and more accurate values to calculate emissions.

256 00:45:08.820 --> 00:45:18.600 Fran Verhalen: They also measured, the volume of ethylene oxide in each rail car tank and then calculated the expected emissions, based on the volume. 257 00:45:22.200 --> 00:45:23.070 Fran Verhalen: Last year. 258 00:45:24.510 --> 00:45:33.030 Fran Verhalen: The facility installed, a new Water scrubber for the gas vapors coming from the ethylene storage tanks, before going to the flare. 259 00:45:34.170 --> 00:45:49.560 Fran Verhalen: The water scrubber absorbs ethylene oxide from the waste gas string and the liquid from the way scrubber is returned back to the ethylene oxide manufacturing process where the ethylene oxide is recovered. 260 00:45:51.000 --> 00:46:05.130 Fran Verhalen: This year in 2021 the facility has worked to maximize the efficiency of the scrubber so that additional ethylene oxide is removed before it is released into the environment. 261 00:46:09.600 --> 00:46:24.420 Fran Verhalen: To summarize the estimated maximum individual risk for the area around the human Union Carbide facility is above the 101 million cancer risk guideline. 2.62 00:46:25.260 --> 00:46:40.890 Fran Verhalen: EPA finds that this risk is not sufficiently protective of human health and we will work with Union Carbide an ld eq to evaluate ways to reduce emissions of ethylene oxide. 263 00:46:43.080 --> 00:46:51.120 Fran Verhalen: I remind you that EPA modeling of estimated risks is very conservative to be protective of human health. 264 00:46:52.260 --> 00:47:04.800 Fran Verhalen: Our models assumes a continuous 24 hours per day inhalation exposure to ethylene oxide for a lifetime of 70 years. 265 00:47:06.600 --> 00:47:12.750 Fran Verhalen: Union Carbide has proposed plans or implemented modifications to improve athlete not.

266 00:47:13.950 --> 00:47:19.290 Fran Verhalen: Miss Jones from their facility, we appreciate their active. 267 00:47:20.340 --> 00:47:28.380 Fran Verhalen: activity on these projects, and we encourage them to review other opportunities to read their emissions. 268 00:47:29.400 --> 00:47:46.290 Fran Verhalen: EPA plans to continue to monitor their progress as they work to reduce their ethylene oxide emissions and EPA is continuing to review and revise our regulations that affect ethylene oxide process. 269 00:47:49.620 --> 00:48:12.270 Fran Verhalen: we've provided a link, for your convenience to look up more information about ethylene oxide, the EPA clean oxide web page is found at w w w dot EPA dot G O V forward slash ethylene dash oxide. 270 00:48:13.710 --> 00:48:40.290 Fran Verhalen: Also EPA hosted an introductory webinar on ethylene oxide in May of this year, this information can be found@www.epa.gov forward slash tx forward slash air dash issues dash Texas number four. 271 00:48:45.780 --> 00:49:02.130 Fran Verhalen: EPA has provided some resources for different for additional information about air toxics and regulations for air toxics some of these topics include the list of the air air toxics pollutants and over. 272 00:49:03.300 --> 00:49:11.250 Fran Verhalen: Review of our risk and technology program and the plain English guide to the Clean Air act. 273 00:49:12.870 --> 00:49:19.140 Fran Verhalen: I appreciate your time this evening, thank you for listening Jeanette i'm returning this to. 274 00:49:19.140 --> 00:49:19.500 You. 275 00:49:21.210 --> 00:49:44.160 Janetta Coats: Thank you fran for your presentation and I would like to also thank matt jonna Gloria and Kim we are now at the question and

answer portion of our meeting your comments and questions are very important to us, an extra time has been included to hear from the Community. 276 00:49:45.210 --> 00:49:56.820 Janetta Coats: We know that it all begins there, as mentioned at the beginning of the meeting, you can post a question in the chat box using the button at the bottom of your screen. 277 00:49:57.990 --> 00:50:06.450 Janetta Coats: So please note that we have a limited amount of time this evening and ask that you limit your questions to about two minutes if. 278 00:50:07.260 --> 00:50:24.090 Janetta Coats: You can please in order to address as many questions as possible everyone's voice is important, is important and we want to hear from everyone as a reminder this meeting is focused on hearing from the citizens. 279 00:50:25.230 --> 00:50:28.890 Janetta Coats: In the area near the Union Carbide facility. 280 00:50:30.120 --> 00:50:47.130 Janetta Coats: Any questions related to industry permits any enforcement or legal actions or about other areas or facilities will not be addressed during this Community Community meeting. 281 00:50:48.150 --> 00:51:00.780 Janetta Coats: However, you may send those types of questions to EPA as region six email box and again that address is posted in the chat section. 282 00:51:02.490 --> 00:51:15.960 Janetta Coats: EPA will post a list of questions and answers on the region six website listed on the side in the tick box these live web links were included in the announcements. 283 00:51:17.130 --> 00:51:29.130 Janetta Coats: I will reach out to my colleague Tom roux is to assist to make sure that everyone that has a question or raise their hand or have any comments. 284 00:51:30.330 --> 00:51:32.640 Janetta Coats: will be allowed that opportunity to do so.

285 00:51:33.780 --> 00:51:36.150 Janetta Coats: But those dialing in on the phone. 286 00:51:37.590 --> 00:51:54.150 Janetta Coats: When you're able to speak, please unmute your phone by pressing star six, this will be an opportunity for phone attendees to ask a question during the question and answer session. 287 00:51:55.290 --> 00:52:06.690 Janetta Coats: When you have been recognized to speak again, please unmute your phone by pressing star six identify yourself prior to asking your question. 288 00:52:08.040 --> 00:52:15.690 Janetta Coats: Okay, so everyone is in agreement with that we will get started with our first question. 289 00:52:17.070 --> 00:52:28.410 Janetta Coats: And our first question fran is when these values were measured were normal operations are occurring. 290 00:52:31.110 --> 00:52:32.700 Fran Verhalen: Well, thank you for the question. 291 00:52:33.750 --> 00:52:46.650 Fran Verhalen: That is a specific question for the industry for Union Carbide, we will have to pass that question on to Union Carbide and respond to that one in writing. 292 00:52:47.700 --> 00:52:49.860 Fran Verhalen: I will say that typically. 293 00:52:51.480 --> 00:52:53.730 Fran Verhalen: When the. 294 00:52:55.260 --> 00:53:00.690 Fran Verhalen: Emissions are calculated, it is from normal operation that is a typical. 295 00:53:01.980 --> 00:53:03.720 Fran Verhalen: method in which. 296

00:53:04.740 --> 00:53:09.750 Fran Verhalen: The emissions are calculated or measured during normal operation. 297 00:53:11.370 --> 00:53:38.370 Janetta Coats: Thank you fran The next question is in the chat box from my ma was a ny in why he and her question is is that exposure at the rate at which has been emitted now, or what has been emitted over the last decades since he to admissions began at the facility. 298 00:53:40.920 --> 00:53:42.060 Fran Verhalen: Thank you, is nine. 299 00:53:44.220 --> 00:53:45.390 Fran Verhalen: These are. 300 00:53:46.680 --> 00:54:02.100 Fran Verhalen: More recent emission rates we looked at the emission chin rates, the mission inventory from 2014 when we develop the national air toxic assessment and then in. 301 00:54:03.480 --> 00:54:05.370 Fran Verhalen: We used the. 302 00:54:07.200 --> 00:54:14.700 Fran Verhalen: Emission inventory to develop the risk, the revised risk that we published this year. 303 00:54:16.500 --> 00:54:29.010 Janetta Coats: Thank you fran We will now move to to keyshia Collins right she has her hand raise so to keisha if you would press star six and unmute yourself. 304 00:54:31.380 --> 00:54:33.630 Tokesha Collins-Wright: hi good evening can y'all hear me. 305 00:54:34.140 --> 00:54:34.740 Janetta Coats: Yes. 306 00:54:34.770 --> 00:54:35.580 Tokesha Collins-Wright: We can hear you. 307 00:54:36.150 --> 00:54:44.880

Tokesha Collins-Wright: Thank you, my name is to keyshia Collins right and the Vice President of Environmental Affairs for the Louisiana chemical Association for LCA. 308 00:54:46.230 --> 00:55:06.450 Tokesha Collins-Wright: LCA is a non profit Louisiana corporation can pose a six six members with over 100 chemical manufacturing plants in sites in Louisiana llc Members are committed to excellence in safety, health and environmental performance and and being good environmental stewards. 309 00:55:07.920 --> 00:55:21.840 Tokesha Collins-Wright: Since late 1980s the Louisiana chemical industry has invested significantly and made great progress when talking slow enough and interpreters and reducing emissions from its facilities by 75%. 310 00:55:22.860 --> 00:55:27.090 Tokesha Collins-Wright: This meeting tonight it's focused specifically on ethylene oxide. 311 00:55:28.740 --> 00:55:39.270 Tokesha Collins-Wright: Since APA revised to revalue in 2016 and use that value in the last matta released in 2018. 312 00:55:40.200 --> 00:55:57.540 Tokesha Collins-Wright: Beyond that ours has steadily decreased their admissions based on control technology and or reevaluation of their actual emissions levels, and we have every reason to believe that as new technologies discovered do emissions will be reduced even further. 313 00:55:58.950 --> 00:56:10.110 Tokesha Collins-Wright: As noted by EPA earlier but modeling of risk it's very conservative, this is also evidenced by the fact that the monitoring conducted by EPA. 314 00:56:10.740 --> 00:56:19.680 Tokesha Collins-Wright: of background levels and 2018 and 2019 show numbers that are several magnitudes higher than the 2016 iris risk value. 315 00:56:20.340 --> 00:56:35.070 Tokesha Collins-Wright: So that means that he is present in the air at levels above he pays risk value, even if there's no industrial facility, from which to can be admitted, so this raise a serious questions as how realistic he pays risk value convey.

316 00:56:36.090 --> 00:56:47.730 Tokesha Collins-Wright: And we also note that TC two has set forth its own risk value, which is magnitudes higher than EPA re evaluate and the TC TC to revalue was published in 2020. 317 00:56:48.300 --> 00:56:58.320 Tokesha Collins-Wright: and benefits benefits from additional information analysis and data that bpa just and that has when it finalized its value back in 2016. 318 00:56:58.770 --> 00:57:10.350 Tokesha Collins-Wright: And we know that EPA recently recognized this fact, because on June 17 EPA agree to reconsider a major clean air act will regulation or the mind. 319 00:57:10.890 --> 00:57:21.030 Tokesha Collins-Wright: On two key issues, one being because of the risk value being used, and also to because the Agency did not use the tct risk value as an alternative. 320 00:57:21.720 --> 00:57:34.440 Tokesha Collins-Wright: And so we had LCA welcome Community outreach and having open dialogue we want to make sure that it's based on the best science and so everybody here tonight deserves to be fully informed of the fact that EPA is in. 321 00:57:35.040 --> 00:57:40.140 Tokesha Collins-Wright: The process of reconsidering using that iris value and ongoing rulemaking and we had. 322 00:57:41.130 --> 00:57:45.960 Matthew Tejada: A Turkey show we asked, we asked a couple things we asked for folks to keep it to a couple of minutes. 323 00:57:45.990 --> 00:57:46.320 Janetta Coats: Thank you. 324 00:57:46.350 --> 00:57:46.890 Tokesha Collins-Wright: All right, also. 325 00:57:47.520 --> 00:58:02.460 Matthew Tejada: He also asked that we honor the Community Members who are with us tonight and prioritize them being able to share with us so if you

could please, so that we can get to some of the Community members that were the purpose of holding this meeting tonight. 326 00:58:03.870 --> 00:58:06.630 Janetta Coats: Thank you matt and thank you to keisha. 327 00:58:07.110 --> 00:58:08.670 Tokesha Collins-Wright: That That was my last sentence, thank you all. 328 00:58:09.090 --> 00:58:10.830 Janetta Coats: You appreciate it alright thanks. 329 00:58:12.030 --> 00:58:20.940 Janetta Coats: fran do you want to make any comments to that or we can move forward to the next question in the chat box, if you don't want to make any comments to that. 330 00:58:22.080 --> 00:58:25.860 Fran Verhalen: No, yes I would um you know I. 331 00:58:25.980 --> 00:58:37.650 Fran Verhalen: appreciate that there is a difference of opinion about the risk numbers, however EPA does stand behind our ethylene oxide. 332 00:58:39.360 --> 00:58:51.060 Fran Verhalen: iris risk value, and it is based in science, so i'm you know it is a good number. 333 00:58:53.280 --> 00:58:56.100 Fran Verhalen: I would like to also mention that. 334 00:58:57.360 --> 00:58:58.140 Fran Verhalen: With. 335 00:59:00.240 --> 00:59:09.810 Fran Verhalen: The revisiting of the iris number that is not the intent of what we are doing with the lawn. 336 00:59:10.860 --> 00:59:17.730 Fran Verhalen: Mike kerber I know you're on the line, can you talk about that for just a minute, please.

00:59:18.000 --> 00:59:24.570 Mike Koerber: Thank you i'd be happy to fan hi i'm Mike kerber i'm a deputy director and eth headquarters air office. 338 00:59:24.900 --> 00:59:31.890 Mike Koerber: And there's really two things going on here with respect to this toxicity value or so called iris value for ethylene oxide. 339 00:59:32.250 --> 00:59:41.700 Mike Koerber: One is the value itself and the very robust and rigorous assessment that EPA went through with this science advisory board over a 10 year period. 340 00:59:42.210 --> 00:59:53.190 Mike Koerber: And as Francis already talked about where the agency came out as a result of that process so that's one thing that the science and the value that EPA. 341 00:59:53.820 --> 01:00:05.640 Mike Koerber: has developed that represents our view of the science and how toxic and potent this chemical is a second issue and the last speaker referred to this. 342 01:00:06.480 --> 01:00:18.960 Mike Koerber: EPA as use of that value in its regulatory program has been challenged and under the law when when EPA is challenged, we have a formal process that we need to go through to respond. 343 01:00:19.380 --> 01:00:31.620 Mike Koerber: To those challenges, and that in fact is, is what EPA initiated back in June, where we said we would be look at a rulemaking that we completed last year. 344 01:00:32.070 --> 01:00:37.350 Mike Koerber: Because we are obligated to under the law but there weren't grounds for real looking at that. 345 01:00:38.340 --> 01:00:50.550 Mike Koerber: That doesn't mean necessarily we're going to change the iris value but what's in play is our use of that value in our rulemaking so there's there's a difference there so fan I hopefully that was helpful. 346 01:00:51.450 --> 01:00:52.800 Fran Verhalen: Thank you Mike I appreciate it.

347 01:00:53.550 --> 01:01:08.670 Janetta Coats: Thank you Mike and friend, the next question is from the environmental justice person it doesn't have a name but it says, I do not see how these slides about the scrubber and the decline are relevant to this meeting. 348 01:01:09.180 --> 01:01:21.750 Janetta Coats: about the dangerous cancer risk that the na ta found if the modifications have occurred and the cancer risk is still seven times. 349 01:01:22.230 --> 01:01:45.600 Janetta Coats: The pH unacceptable level, based on the 100 in 1 million number that you mentioned earlier in the presentation, then they clearly have not reduced enough, in addition to monitoring what is EPA doing to ensure reductions to allowable levels. 350 01:01:47.640 --> 01:01:55.710 Fran Verhalen: Thank you so much for the question and you're right i'm a risk value of 700 and a million. 351 01:01:57.270 --> 01:02:12.510 Fran Verhalen: is above the level that EPA considers protective of human health and so we are going to be continuing to work with the facility to to reduce that emission. 352 01:02:13.980 --> 01:02:25.710 Fran Verhalen: installation of controls is a great manner in which to reduce ethylene oxide and. 353 01:02:27.090 --> 01:02:44.490 Fran Verhalen: You know that Union Carbide has done a lot of work to improve their efficiencies on their control measures, there is more work to do, and we will be working with 1d eq and Union Carbide to. 354 01:02:45.630 --> 01:03:03.030 Fran Verhalen: seek additional controls and actions to work on reducing those emissions um there's one clarification, I would like to make and that's allowable levels is a different term then. 355 01:03:04.410 --> 01:03:09.090 Fran Verhalen: The term unacceptable or not protective of human health, thank you.

356

01:03:10.740 --> 01:03:25.290 Janetta Coats: Okay, thank you fran for that response, the next as a comment, it says a lifetime of 70 years to me is not conservative at conservative i'm sorry it is unrealistic. 357 01:03:27.870 --> 01:03:29.610 Fran Verhalen: And thank you, I appreciate that comment. 358 01:03:30.510 --> 01:03:40.110 Fran Verhalen: When we're dealing with risk evaluations, we do look at a long term risk for cancer. 359 01:03:41.250 --> 01:03:42.510 Fran Verhalen: And so. 360 01:03:44.010 --> 01:03:57.480 Fran Verhalen: We have you know the model has has to have a number, and we have determined that that 70 years is the number that is appropriate to use for calculating the risks. 361 01:03:59.100 --> 01:04:25.470 Janetta Coats: Thank you fran The next question is from i'm going to really miss this name of Kevin dalan Kevin dalan and the question is has EPA reviewed and verified the revised emissions calculations and methods that Union Carbide has used to revise is reported actual emissions. 362 01:04:30.990 --> 01:04:41.670 Fran Verhalen: Well that's a great question and there's a couple of things um Let me describe a little bit about the process for this. 363 01:04:42.990 --> 01:04:45.300 Fran Verhalen: The actual. 364 01:04:46.920 --> 01:04:54.030 Fran Verhalen: Verification of the emissions and calculations and methods are typically done. 365 01:04:55.590 --> 01:04:59.760 Fran Verhalen: During compliance inspections. 366 01:05:01.020 --> 01:05:09.660 Fran Verhalen: And i'm getting into a Gray area here, but I do want to explain the process that would be where they would be reviewed and verified both ld eq and EPA.
367 01:05:10.980 --> 01:05:22.050 Fran Verhalen: regulate this facility and so that is the point at which time and those were done I don't have specific information about any. 368 01:05:23.340 --> 01:05:33.150 Fran Verhalen: compliance or inspection or anything like that, so I, we will look at this in more detail, and we will provide a written answer to this, thank you. 369 01:05:33.990 --> 01:05:39.750 Janetta Coats: Thank you friend the next question from Scott eustace since 2001. 370 01:05:41.160 --> 01:05:48.390 Janetta Coats: Union Carbide has had at least 29 incidents reported to the national response Center. 371 01:05:49.440 --> 01:05:52.050 Janetta Coats: Many incidents happen overnight. 372 01:05:53.580 --> 01:06:00.840 Janetta Coats: How does the unplanned releases happening overnight affect the population at risk. 373 01:06:05.910 --> 01:06:07.200 Fran Verhalen: Thank you for the question. 374 01:06:08.700 --> 01:06:11.220 Fran Verhalen: With respect to risk. 375 01:06:12.780 --> 01:06:19.830 Fran Verhalen: we're looking at a long term risk when we're talking about. 376 01:06:21.240 --> 01:06:34.530 Fran Verhalen: ethylene oxide emissions in this instance, so whether it happens overnight or or not it's a longer period that we're looking at. 377 01:06:35.640 --> 01:06:36.630 Fran Verhalen: So it. 378

01:06:37.710 --> 01:06:38.220 Fran Verhalen: That. 379 01:06:40.260 --> 01:06:48.360 Fran Verhalen: That parameter would not be relevant to the overall long term effect that we are looking at with. 380 01:06:49.800 --> 01:06:52.740 Fran Verhalen: Our determination of risk in this manner. 381 01:06:54.810 --> 01:07:03.060 Janetta Coats: Thank you friend and at this time, I would like to just reiterate to everyone that is participating that you can. 382 01:07:04.440 --> 01:07:16.830 Janetta Coats: Use the hand raise if you would like to ask a question, you have the ability to unmute yourself by star six and between myself and other EPA staffers we will. 383 01:07:17.490 --> 01:07:27.360 Janetta Coats: Note that your hands are raised, and call on you, that is just an additional opportunity, in addition to making comments in the text section. 384 01:07:27.990 --> 01:07:40.170 Janetta Coats: So you can feel free to raise your hand and we just got a hand raised from can, if you would star six and unmute and make your question, we would appreciate it. 385 01:07:43.530 --> 01:07:43.980 Ken Oertling: Oh. 386 01:07:46.290 --> 01:07:47.790 Ken Oertling: cannot be an art. 387 01:07:48.900 --> 01:07:50.010 Janetta Coats: Yes, we hear you. 388 01:07:50.070 --> 01:08:01.710 Ken Oertling: We can again Okay, good evening good can orlan here current residents St Charles Parish and actually school superintendents I just want to say first of all, I appreciate he pays EPA efforts.

01:08:02.130 --> 01:08:09.030 Ken Oertling: to inform you know our Community relative to this presentation is certainly very much appreciated is very informative. 390 01:08:09.810 --> 01:08:16.800 Ken Oertling: You know, and also like to say that Union Carbide just from my personal experience or the past 20 years has been very. 391 01:08:17.220 --> 01:08:25.080 Ken Oertling: open and forth common in providing opportunities for student feedback and stakeholder feedback relative to to their operations on a regular basis, so. 392 01:08:25.410 --> 01:08:38.340 Ken Oertling: I appreciate the efforts both of the EPA and Union Carbide relative to informing and really working with the Community for better outcomes, so now they're committed to improve care quality as well and, and we appreciate that. 393 01:08:39.750 --> 01:08:44.850 Janetta Coats: Thank you can The next question is from darryl lalique. 394 01:08:46.710 --> 01:09:06.990 Janetta Coats: The Community of havili and norco have been exposed to eat to emissions, since the plant was constructed and we currently do not know how high the cancer risk rate was before 1985. 395 01:09:09.360 --> 01:09:18.870 Fran Verhalen: And that is correct, we do not have information, I do not have information previous really previous to 2014 for me. 396 01:09:21.480 --> 01:09:25.530 Fran Verhalen: But that is a concern consideration and a concern. 397 01:09:26.700 --> 01:09:27.330 Fran Verhalen: As. 398 01:09:28.410 --> 01:09:33.810 Fran Verhalen: The risk from ethylene oxide would be similar regardless of the year. 399 01:09:35.220 --> 01:09:57.870

Janetta Coats: Thank you fran The next question is there an explanation as to why the 2020 emissions are higher than they were in 2017 through 2018 even though Union Carbide installed a scrubber in 2020. 400 01:10:00.180 --> 01:10:03.510 Fran Verhalen: Thank you for the question that that is a good question um. 401 01:10:05.160 --> 01:10:21.930 Fran Verhalen: Each year the facility will have different processes that it uses and different production rates part of that is more market driven so there will be some fluctuation in the emissions, depending on what. 402 01:10:23.520 --> 01:10:25.140 Fran Verhalen: What processes are used. 403 01:10:26.250 --> 01:10:31.920 Fran Verhalen: How much material is produced so there's going to be some fluctuation in that.  $4 \cap 4$ 01:10:34.350 --> 01:10:44.310 Fran Verhalen: I don't know specific reasons, and I will pass the question on to Union Carbide and we'll post an answer, thank you. 405 01:10:45.060 --> 01:11:05.820 Janetta Coats: Thank you, the next question is from eartha nance, the question is, you mentioned that low amounts of easy to ethylene oxide do not cause immediate harm what is that amount of level of ethylene oxide. 406 01:11:08.850 --> 01:11:11.970 Fran Verhalen: That question is very good um. 407 01:11:13.740 --> 01:11:19.800 Fran Verhalen: I will have to look up the exact amount and we'll post this online, but basically. 408 01:11:22.350 --> 01:11:31.560 Fran Verhalen: It would be more from an OSHA value perspective, the occupational safety and health, administration values. 409 01:11:32.700 --> 01:11:37.920 Fran Verhalen: that are going to be associated with people who are working.

410 01:11:40.260 --> 01:11:48.570 Fran Verhalen: working more closely and around ethylene oxide and that for that immediate harm. 411 01:11:50.250 --> 01:12:00.180 Fran Verhalen: The low amounts i'll have to check on the actual amount, and we can get that posted out on the website for you, I apologize for not having that information available tonight. 412 01:12:00.960 --> 01:12:14.430 Janetta Coats: Okay, thank you fran at this time, we will go to the folks that have called in by phone to check and see if anyone would like to unmute and ask a question. 413 01:12:14.970 --> 01:12:29.250 Janetta Coats: So Tom if you can assist in those efforts, and I do not see anyone, but your eyes are much better than mine, so can you can you help me with this effort, please. 414 01:12:29.520 --> 01:12:49.170 Tom Ruiz: Sure, Joe neta let's give a moment for folks who did call in by phone to unmute themselves, they have the opportunity now to ask a verbal question and again folks on the phone, you can unmute yourself if you press star six janina let's give a let's give a few seconds. 415 01:12:50.490 --> 01:12:52.710 Tom Ruiz: To see if any anyone unmute. 416 01:12:52.830 --> 01:12:55.290 Janetta Coats: yeah they little mute button tends to hide itself. 417 01:13:04.590 --> 01:13:11.220 Tom Ruiz: A genetic doesn't appear to be any questions from folks on the phone, we could check back in a little bit. 418 01:13:11.670 --> 01:13:23.190 Janetta Coats: Okay, thank you, Tom for your assistance greatly appreciate it The next question is from David Mitchell Davis question did anyone from EPA. 419 01:13:23.760 --> 01:13:46.200 Janetta Coats: or D eq monitor Union Carbide while his employees took his measurements of the flare and other outlets that led them to reduce their emissions estimates, or were these reported figures.

420 01:13:50.280 --> 01:13:50.820 Fran Verhalen: Excuse me. 421 01:13:52.320 --> 01:13:56.010 Fran Verhalen: um I do not know if anyone observed. 422 01:13:57.870 --> 01:13:59.130 Fran Verhalen: Pardon me the. 423 01:14:02.820 --> 01:14:05.580 Fran Verhalen: try again sorry brother my throat. 424 01:14:07.980 --> 01:14:14.640 Fran Verhalen: I don't know if anyone from EPA or ld eq actually observed the. 425 01:14:15.990 --> 01:14:20.130 Fran Verhalen: The stack test measurement of the flare and other outlets. 426 01:14:21.240 --> 01:14:21.780 Fran Verhalen: Pardon me. 427 01:14:23.130 --> 01:14:23.490 Fran Verhalen: If. 428 01:14:25.050 --> 01:14:29.460 Fran Verhalen: If that is usually a test that is conducted by a third party company. 429 01:14:30.600 --> 01:14:36.420 Fran Verhalen: And so i'm not sure that we will ask that question when we talk to Union Carbide. 430 01:14:37.110 --> 01:14:45.990 Janetta Coats: hey frank, we will pause for a moment to let you get a drink of water and just for a second folks if you guys don't mind. 431 01:14:47.340 --> 01:14:53.970 Janetta Coats: Or if there's someone else in the air division that would like to still be involved friend.

432 01:14:55.050 --> 01:15:00.510 Janetta Coats: refresh yourself, please let me know that and we can continue with the questions. 433 01:15:01.500 --> 01:15:02.460 Janetta Coats: Just let you know that. 434 01:15:02.790 --> 01:15:13.860 Kim Ngo: Yes, genetic this is Kim I was just wondering, would it be all right to ask the audience members to right next to their name to just indicate where they're from. 435 01:15:15.030 --> 01:15:19.860 Kim Ngo: If they're with ld eq if there with a Congressional office you know. 436 01:15:20.190 --> 01:15:22.680 Kim Ngo: Well, President that would be really helpful. 437 01:15:22.680 --> 01:15:24.030 Kim Ngo: To us to get to know y'all. 438 01:15:24.390 --> 01:15:30.780 Janetta Coats: Yes, thank you, Kim for that, but in the very beginning, we did ask that they include their name and affiliation. 439 01:15:31.020 --> 01:15:31.950 Kim Ngo: Okay okay. 440 01:15:32.700 --> 01:15:37.770 Janetta Coats: Thank you, but we can regenerate that and and thank you so much for bringing that to our attention. 441 01:15:38.550 --> 01:15:40.200 Janetta Coats: Thanks jenna Thank you Kim. 442 01:15:41.370 --> 01:15:42.600 Fran Verhalen: Okay Jeanette i'm back. 443 01:15:42.660 - > 01:15:44.160Fran Verhalen: sorry about that everybody.

444 01:15:44.400 --> 01:15:45.840 Janetta Coats: yay fran. 445 01:15:48.570 --> 01:15:49.740 Janetta Coats: Back she's back. 446 01:15:49.800 --> 01:16:12.960 Janetta Coats: Sorry okay fran so The next question is from si si O P H Ai NS a bomb lash la sh and the question is in both presentations coordination between the EPA and 1d eq was mentioned, to increase transparency. 447 01:16:13.980 --> 01:16:14.790 Janetta Coats: However. 448 01:16:15.810 --> 01:16:35.850 Janetta Coats: This seems to be negligent on the grounds that 1d eq has most recently been found to have critical issues with their monitoring and enforcement, as well as digitization system. 449 01:16:36.720 --> 01:16:54.360 Janetta Coats: In addition, when concurrently looking at the EPA a's and El de TUs website on the same topic, they are inconsistent and contain contradictory information so. 450 01:16:55.260 --> 01:17:21.450 Janetta Coats: How can we trust that this emphasis on coordination between the two agencies will actually help the Community be appraised of current environmental hazards and increased transparency it can't be transparent, if the information is inconsistent or intentionally misleading. 451 01:17:22.560 --> 01:17:29.100 Janetta Coats: And this representative or Community person is from New Orleans Louisiana. 452 01:17:30.840 --> 01:17:33.960 Fran Verhalen: Well that's a long, long question um. 453 01:17:35.340 --> 01:17:38.250 Fran Verhalen: What I got out of the question was how to. 454 01:17:42.060 --> 01:17:50.640

Fran Verhalen: How to coordinate better between the agencies, so that our information is consistent and addresses. 455 01:17:52.050 --> 01:17:53.520 Fran Verhalen: environmental hazards. 456 01:17:57.090 --> 01:17:58.770 Fran Verhalen: Because i'm talking about. 457 01:18:00.480 --> 01:18:03.150 Fran Verhalen: we're really talking about ethylene oxide here. 458 01:18:04.830 --> 01:18:09.990 Fran Verhalen: We are in communication with ld Q, working with them. 459 01:18:11.130 --> 01:18:24.180 Fran Verhalen: For these different facilities that emit ethylene oxide and we are working to coordinate our efforts on both ensuring that. 460 01:18:25.350 --> 01:18:37.920 Fran Verhalen: The communication with the company's is consistent and that we are getting the information that we need from the companies with regard to a mission control for ethylene oxide. 461 01:18:39.720 --> 01:18:43.650 Fran Verhalen: I cannot speak to other discrepancies. 462 01:18:44.730 --> 01:18:57.390 Fran Verhalen: or contradictory information I can talk to you about what I know about the ethylene oxide emissions and the emission controls that we are trying to work with companies to a pain. 463 01:18:58.560 --> 01:18:59.670 Janetta Coats: So thank you fran. 464 01:19:00.060 --> 01:19:02.250 Fran Verhalen: we'll see if we can get some additional information. 465 01:19:03.330 --> 01:19:06.990 Fran Verhalen: will talk with 1d eq and post anything additional to the website.

01:19:07.770 --> 01:19:12.750 Janetta Coats: Okay, thank you, the next question is from Kimberly terrell. 467 01:19:13.860 --> 01:19:25.860 Janetta Coats: And kimberly's question is the natta the national air toxics assessment cancer estimates have been described as very conservative. 468 01:19:27.270 --> 01:19:39.330 Janetta Coats: Do these estimates account for occupational exposures or increase suspect ability of children, pregnant women. 469 01:19:40.620 --> 01:19:47.460 Janetta Coats: In uncompromised individuals or other sensitive sub populations. 470 01:19:51.240 --> 01:19:54.600 Fran Verhalen: That is a wonderful wonderful question um. 471 01:19:56.190 --> 01:19:56.490 It. 472 01:19:57.780 --> 01:20:01.380 Fran Verhalen: The modeling that is done is conservative. 473 01:20:02.730 --> 01:20:17.940 Fran Verhalen: My understanding and I don't know all the details, and we will clarify this, but my understanding is it does not include the occupational exposures, but it doesn't account for increased susceptibility. 474 01:20:19.140 --> 01:20:24.210 Fran Verhalen: of some of these categories that are listed, it certainly evaluates. 475 01:20:25.530 --> 01:20:26.100 Fran Verhalen: Children. 476 01:20:30.060 --> 01:20:36.960 Fran Verhalen: The epidemiological information that is used as the basis of some of the risk models.

01:20:38.820 --> 01:20:41.130 Fran Verhalen: will come from occupational exposures. 478 01:20:43.410 --> 01:20:46.710 Fran Verhalen: Though the risk itself is not. 479 01:20:48.660 --> 01:20:59.400 Fran Verhalen: Not including that type of exposure so we're really looking at others um I don't know about the immuno compromised individuals were pregnant women. 480 01:21:00.420 --> 01:21:04.830 Fran Verhalen: will have to i'll get with the risk assessors and get back to you on this. 481 01:21:05.820 --> 01:21:06.720 Janetta Coats: Thank you fran. 482 01:21:07.770 --> 01:21:12.690 Janetta Coats: The next question is from Scott eustace in New Orleans Louisiana. 483 01:21:13.950 --> 01:21:33.660 Janetta Coats: And he says 1d eq reports that Dow Union Carbide emitted 5.35 tons in 2019 which might result in a risk of 848 in 1 million. 484 01:21:34.890 --> 01:21:42.330 Janetta Coats: It is permitted to emit 66.39 tons annually. 485 01:21:43.470 --> 01:21:57.300 Janetta Coats: Can dq or anyone from EPA answer why the permitted limits are so much higher than the actual releases. 486 01:21:59.280 --> 01:22:15.540 Fran Verhalen: Is Scott, thank you for the question this talks about permits, you know we were just not prepared and we're not going to discuss that tonight we do have your question and we will post an answer online thanks. 487 01:22:16.740 --> 01:22:17.490 Janetta Coats: Thank you. 488 01:22:20.310 --> 01:22:30.990

Janetta Coats: OK, the next question comes from Sharon loving can EPA require fence line monitoring at the facility. 489 01:22:34.050 --> 01:22:35.040 Fran Verhalen: At this time now. 490 01:22:36.750 --> 01:22:44.370 Fran Verhalen: I regulations are not established for fence line monitoring for ethylene oxide. 491 01:22:45.390 --> 01:22:47.010 Fran Verhalen: At an industrial facility. 492 01:22:48.150 --> 01:22:55.200 Janetta Coats: Okay, thank you friend now Tom I am going to need your eyes again whether we've got a hand raised here. 493 01:22:57.060 --> 01:23:04.530 Janetta Coats: Mr lash if you could star six and unmute your hand is raised and address your question to fran. 494 01:23:06.390 --> 01:23:08.340 Siobhain Lash (she/her/hers/ella): hi it's pronounced siobhan last. 495 01:23:08.340 --> 01:23:12.450 Janetta Coats: Your bond Thank you so much, and I apologize for just killing your name. 496 01:23:12.810 --> 01:23:14.310 Siobhain Lash (she/her/hers/ella): that's Okay, I get that all the time. 497 01:23:16.230 --> 01:23:17.700 Janetta Coats: Thank you, thank you. 498 01:23:17.850 --> 01:23:27.960 Siobhain Lash (she/her/hers/ella): yeah, of course, thank you for having this meeting I think it's very important and the rationale for my last question is because communities must be able to trust the agencies. 499 01:23:28.380 --> 01:23:35.640 Siobhain Lash (she/her/hers/ella): Who relate the messages that contain vital information with respect to their health risk and associated exposure to ethylene oxide.

500 01:23:36.030 --> 01:23:43.500 Siobhain Lash (she/her/hers/ella): So my follow up question is what sorts of measures are the EPA in ld Q taking to establish trust between. 501 01:23:43.890 --> 01:23:56.490 Siobhain Lash (she/her/hers/ella): The directly impacted communities and the agencies as it stands, both agencies have a pretty substantial history of letting these communities down through gaslighting them or ignoring concerns and requests for public hearings. 502 01:23:59.790 --> 01:24:10.290 Fran Verhalen: um well we're trying to make changes here at EPA with starting with these meetings and actually working very hard to. 503 01:24:11.310 --> 01:24:25.590 Fran Verhalen: build back our trust, this is an area that our administrator Michael regan wants us to correct, and so we are having these meetings now to hear. 504 01:24:28.020 --> 01:24:37.140 Fran Verhalen: From the communities and to work very hard very diligently to address Community concerns. 505 01:24:38.790 --> 01:24:39.960 Fran Verhalen: Gloria. 506 01:24:41.550 --> 01:24:48.150 Fran Verhalen: Could you would you like to add anything else to this comment and question. 507 01:24:49.470 --> 01:25:11.340 Gloria Vaughn: i'm just that we have one of the things that we've done and gentlemen, want to also add something to this that we have met wrestling with the Canadian also what with specific stakeholders and they're, the ones who helped us craft this meeting in terms of how the best reach folks. 508 01:25:13.140 --> 01:25:32.550 Gloria Vaughn: We we, I think, have made exceptional efforts and making sure that we get the word out to everyone and and work within our agency to address the what we were what we have been told, from the Community was what their needs are what it is a bit.

01:25:35.310 --> 01:25:41.790 Janetta Coats: All right, thank you Gloria we have a hand raised from miss Nancy if you would star six to unmute. 510 01:25:45.330 --> 01:25:54.810 Earthea Nance: Thank you appreciate it okay so fran everywhere i've ever seen on the EPA website and I have been reading it for years I teach it and everything. 511 01:25:55.440 --> 01:26:02.910 Earthea Nance: They use for hundred million it's unacceptable cancer risk those that's the phrase that is in EPA publications. 512 01:26:03.180 --> 01:26:14.940 Earthea Nance: The definition of that but you're saying protective of human health are not protected of humanism, can you give me some understanding of what that difference is why did you not use the word, unacceptable cancer risk. 513 01:26:18.480 --> 01:26:19.290 Fran Verhalen: and 514 01:26:20.370 --> 01:26:35.400 Fran Verhalen: we're moving away from unacceptable cancer risk because we feel that any cancer risk is unacceptable and that becomes unreasonable to go to zero risk. 515 01:26:37.110 --> 01:26:38.850 Fran Verhalen: It you know. 516 01:26:40.920 --> 01:26:49.080 Fran Verhalen: Just walking out the front door is some risk at any point in time so that goes above above one in a million. 517 01:26:50.850 --> 01:27:01.860 Fran Verhalen: So we were trying to move away from just unacceptable risk to not protect of health, which is what we're trying to do is be protective of human health and so we're just. 518 01:27:02.910 --> 01:27:18.300 Fran Verhalen: Moving away from that term a little bit more, because there is risk in many things that we do, day in and day out and we're trying to focus much more on being protective of human health.

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01:27:21.030 --> 01:27:25.020 Fran Verhalen: from hazardous materials sure, thank you, thanks for the question. 520 01:27:25.560 --> 01:27:38.850 Janetta Coats: Thank you, the next question is from David Mitchell David Mitchell question, please explain where EPA is in establishing an ambient air standard. 521 01:27:40.020 --> 01:27:54.450 Janetta Coats: or industry specific standard for et oh emissions that take into account the Ai R is, which stands for the integrated risk information system. 522 01:27:56.940 --> 01:28:03.270 Fran Verhalen: wow um well i'm going to call upon my my good friend Mike kerber to help with this one. 523 01:28:05.220 --> 01:28:05.670 Fran Verhalen: To. 524 01:28:06.690 --> 01:28:16.410 Fran Verhalen: help me with this one, please, if you would and if Mike is not available then I will have to get you a question, get you an answer back oh. 525 01:28:16.440 --> 01:28:19.560 Mike Koerber: Mike is available and fran i'm happy to step in at this point. 526 01:28:20.100 --> 01:28:20.400 Mike. 527 01:28:22.140 --> 01:28:30.540 Mike Koerber: What our mission is at EPA is to implement the Clean Air act and under the Clean Air act in regulating chemicals like ethylene oxide. 528 01:28:31.470 --> 01:28:39.840 Mike Koerber: What we are required to do is establish standards on the amount of emissions that a facility admits to the outdoor air. 529 01:28:40.410 --> 01:28:50.700

Mike Koerber: do not have the authority to set nationally, I mean air quality standards under that provision of the Clean Air act or authority is to set emission standards. 530 01:28:51.330 --> 01:29:01.620 Mike Koerber: And to regulate the amount of emissions to the outdoor air and setting those standards, there are a number of considerations that we are required to consider under the act. 531 01:29:02.100 --> 01:29:17.880 Mike Koerber: Technology costs and risk come into play as well, so fran has talked about some of the risk information here that will be important information for us to consider as we revisit our current emission standards for these types of industries. 532 01:29:20.280 --> 01:29:22.410 Janetta Coats: Thank you for that assistance we appreciate it. 533 01:29:23.670 --> 01:29:42.060 Janetta Coats: frame, we now have a follow up question from Mrs sharon's question which states what would be required for EPA, to be able to require fence line monitoring, could you please say more about why this is not possible. 534 01:29:42.870 --> 01:29:49.740 Fran Verhalen: Sure um and and you know I appreciate you asking the follow up question for this. 535 01:29:51.240 --> 01:30:09.270 Fran Verhalen: In order to establish something like fence line monitoring EPA as Mike was explaining we have our regulations, so we would have to write a new regulation in doing that, we would have to evaluate. 536 01:30:09.810 --> 01:30:34.740 Fran Verhalen: different parameters, is there a technology that can be used by the industry to measure at the fence line at a level that would provide us information that we can make a decision on so in in the case with ethylene oxide, do we have technologies that. 537 01:30:36.150 --> 01:30:37.260 Fran Verhalen: can easily. 538 01:30:38.910 --> 01:30:56.970 Fran Verhalen: collect a sample and measure the amount of ethylene oxide in the air, that is a reliable method and it's a reliable instrument that

would be a consideration that we would have to do and then move forward and go and look at. 539 01:30:59.430 --> 01:31:17.370 Fran Verhalen: Each of the different technologies that are required to do that, so it becomes a regulatory process and as part of that regulatory process, we will look at technology that's available to be able to meet the regulation so at this time. 540 01:31:19.440 --> 01:31:22.590 Fran Verhalen: We are not considering fence line monitoring. 541 01:31:23.880 --> 01:31:28.290 Fran Verhalen: Well, I take that back, we do not have fence line monitoring and our regulations that this time. 542 01:31:29.310 --> 01:31:36.090 Fran Verhalen: As we go through our regulatory review, it would be a consideration that we would evaluate. 543 01:31:37.440 --> 01:31:45.240 Fran Verhalen: As part of the process and it may or may not be added to a regulation based on. 544 01:31:48.120 --> 01:31:59.430 Fran Verhalen: The availability of technology and as Mike said some other factors that we have to consider is is cost, you know how expensive, will it be so. 545 01:32:00.030 --> 01:32:07.230 Janetta Coats: Thank you fran at this time we'd like to go again to the phones for verbal questions as we've mentioned earlier. 546 01:32:08.100 --> 01:32:18.480 Janetta Coats: Every voice matters, and we want to make sure that we offer an opportunity for those that desire to speak to be able to do so, so we will go again to the. 547 01:32:19.080 --> 01:32:37.950 Janetta Coats: phones for verbal questions again, if you would like to speak will give you a couple of seconds to hit star six and unmute or you can raise your hand whichever you prefer, so do we have anyone on the phone that would like to star six to unmute and speak.

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01:32:40.440 --> 01:32:43.050 Fran Verhalen: I see Mr Malik wiley. 549 01:32:43.710 --> 01:32:46.290 Janetta Coats: Darrell I see Mr Derek there you go. 550 01:32:47.370 --> 01:32:52.140 Janetta Coats: If you could unmute and ask your question, we would appreciate it. 551 01:32:52.590 --> 01:32:53.010 Yes. 552 01:32:54.480 --> 01:33:04.230 Darryl Malek-Wiley: Excuse me um I know next week we're gonna have been hearing about the phonics which is just cross river another F1 oxide, a mission or. 553 01:33:04.950 --> 01:33:19.710 Darryl Malek-Wiley: And so, when you're doing risk calculations you're looking just plant by plant, what about cumulative impact from these two plants that are near close by, and how are you going to deal with that. 554 01:33:21.420 --> 01:33:21.960 Darryl Malek-Wiley: That issue. 555 01:33:23.040 --> 01:33:25.080 Fran Verhalen: Thank you for the question um. 556 01:33:26.340 --> 01:33:27.480 Fran Verhalen: In the past. 557 01:33:28.860 --> 01:33:30.270 Fran Verhalen: We have looked at. 558 01:33:31.410 -> 01:33:39.990Fran Verhalen: Some forms of cumulative impact from multiple facilities, we are currently working. 559 01:33:41.940 --> 01:33:42.420 Fran Verhalen: On. 560

01:33:43.500 --> 01:33:57.720 Fran Verhalen: A risk evaluation that would add cumulative risk together we don't have all the methodology standardized yet, and it may be several years before we get there. 561 01:33:58.110 --> 01:34:13.320 Fran Verhalen: But we are aware that that is an important issue, and we are working to overcome the science background that we need with it, so I hope that addresses your question. 562 01:34:15.600 --> 01:34:16.410 Janetta Coats: Thank you fran. 563 01:34:16.740 --> 01:34:36.900 Darryl Malek-Wiley: yeah as a follow up you know, a concern I have is i've been working with the Community of Huntsville since 85 3037 years into risk and most likely the risk was higher in the past we don't have data so i'm having a hard time believing that. 564 01:34:37.950 --> 01:34:45.810 Darryl Malek-Wiley: One in 700 it's you know the number, so I just think that there's gotta be some way to deal with. 565 01:34:46.890 --> 01:34:52.260 Darryl Malek-Wiley: legacy risk and factored that into your calculations and. 566 01:34:53.550 --> 01:35:06.450 Darryl Malek-Wiley: If we're looking at one and 700 700 million what kind of emergency action is EPA gonna take to get Union Carbide to bring that number down rapidly. 567 01:35:10.710 --> 01:35:19.290 Fran Verhalen: That I don't know about and I will have to get an answer back to you on that part of the question i'm. 568 01:35:23.550 --> 01:35:27.000 Fran Verhalen: Mike do you have anything to add to that. 569 01:35:29.640 --> 01:35:44.160 Mike Koerber: The question about cumulative impacts from historical standpoint, in terms of the legacy impacts, is an excellent point and that is one that we will need to look at further within the Agency going forward but excellent comment.

570 01:35:44.790 --> 01:35:45.630 Fran Verhalen: Thank you very much. 571 01:35:46.230 --> 01:35:51.000 Janetta Coats: Thank you, thank you, the next question is from Maya ny. 572 01:35:52.350 --> 01:36:03.870 Janetta Coats: her question, so the I understood the answer to a previous question to be that you use industry are reported data in the modeling. 573 01:36:04.890 --> 01:36:18.930 Janetta Coats: Why were there no checks and balances by EPA or the eq during that process, how can the Community trust, but it's being reported. 574 01:36:20.460 --> 01:36:24.150 Fran Verhalen: Thank you for the question and I apologize for your confusion. 575 01:36:26.160 --> 01:36:46.020 Fran Verhalen: When industry submits their data it goes through a quality assurance quality control check by the state, and then by EPA, so we do look at the data we do evaluated and we look for discrepancies in the data. 576 01:36:47.730 --> 01:36:48.750 Fran Verhalen: And so. 577 01:36:51.060 --> 01:37:04.740 Fran Verhalen: We are trying to ensure that the data are correct, there are specific procedures that companies use that have been reviewed and standardized by regulatory agencies that. 578 01:37:06.780 --> 01:37:08.670 Fran Verhalen: are used to calculate. 579 01:37:09.930 --> 01:37:18.060 Fran Verhalen: The emissions or if they're measured, there are specific standard methods that are used to. 580 01:37:20.220 --> 01:37:38.520 Fran Verhalen: collect the measurements of emissions, so the amount that's used, and those are those go through a review process those

methods go through a review process by the agencies and typically go through. 581 01:37:39.600 --> 01:37:39.990 They. 582 01:37:41.730 --> 01:37:43.890 Fran Verhalen: just go through the reviews so. 583 01:37:45.690 --> 01:38:07.620 Fran Verhalen: We do have some checks and balances on that system, and we do use those to check the number so i'm I hope that helps a little bit more with the trust factor, because we, we are reviewing those and I apologize if I misled you in to say that we don't do any of that we didn't. 584 01:38:08.730 --> 01:38:13.650 Fran Verhalen: I just don't know the frequency of a specific measurement. 585 01:38:14.670 --> 01:38:16.080 Fran Verhalen: From from a facility. 586 01:38:17.850 --> 01:38:29.760 Janetta Coats: Thank you friend, we have another question from this nance and that question is is ethylene oxide, a public health emergency. 587 01:38:31.380 --> 01:38:33.000 Fran Verhalen: wow yeah. 588 01:38:34.110 --> 01:38:36.270 Fran Verhalen: That is a great question. 589 01:38:38.910 --> 01:38:50.730 Fran Verhalen: And it depends on how you define public health emergency and right now i'm looking at you know in thinking coven it's a pandemic. 590 01:38:52.110 --> 01:38:54.360 Fran Verhalen: With with ethylene oxide. 591 01:38:55.800 --> 01:38:57.210 Fran Verhalen: i'm looking at. 592

01:38:58.350 --> 01:39:02.970 Fran Verhalen: A chronic risk, it is not. 593 01:39:04.050 --> 01:39:12.420 Fran Verhalen: an acute risk meaning it's not an immediate risk at the concentrations that we're looking at so. 594 01:39:14.250 --> 01:39:15.420 Fran Verhalen: perception wise. 595 01:39:16.800 --> 01:39:25.140 Fran Verhalen: I would say I I don't know that I would consider it a public health emergency, though it is a health risk. 596 01:39:27.210 --> 01:39:35.880 Janetta Coats: Thank you fran there's a question a hand raised from miss stephanie Cooper if you would star six and ask your question is Cooper. 597 01:39:41.970 --> 01:39:46.740 Stephanie Cooper: Thank you so much, and thank all the presenters and the listeners as well. 598 01:39:48.270 --> 01:39:48.720 Stephanie Cooper: wow. 599 01:39:50.130 --> 01:39:53.100 Stephanie Cooper: I have so much information and. 600 01:39:54.540 --> 01:39:56.670 Stephanie Cooper: I am I get straight to my question. 601 01:39:58.200 --> 01:40:02.730 Stephanie Cooper: But if you don't mind a few minutes to go to and then answer you just gave a few minutes to go. 602 01:40:03.450 --> 01:40:11.280 Stephanie Cooper: At a doctor's office that word acute means really, really bad, especially with a pandemic going on, I really don't see in my I. 603 01:40:11.700 --> 01:40:23.160

Stephanie Cooper: am pretty showing the view his eyes as well that's that's not imminent an emergency in critical as well, but but that's my perception Okay, I have a question as far as. 604 01:40:24.750 --> 01:40:35.910 Stephanie Cooper: We all know what the acronym stands for right Environmental Protection Agency, you want to protect us right and i'm pretty sure you quys do a thorough job with pre planned and unplanned in this. 60.5 01:40:36.480 --> 01:40:43.290 Stephanie Cooper: forum that we had at the table now dishes about Union Carbide and everything and as well. 606 01:40:43.860 --> 01:41:01.830 Stephanie Cooper: And my question is, does is if EPA is one of those persons who come to the table and say Union Carbide I need to have a REP you need to have a representative here because of the questions that the audience are going to X, because it is regards to you and it's also in regards to. 607 01:41:05.370 --> 01:41:05.730 Stephanie Cooper: What. 608 01:41:08.100 --> 01:41:09.750 Stephanie Cooper: you're saying and. 609 01:41:14.490 --> 01:41:19.080 Stephanie Cooper: Then, and then marketing is that the EPA and. 610 01:41:21.390 --> 01:41:29.760 Stephanie Cooper: 21st century you're saying i'm sorry I lost contact your say in the 21st century, you do not have any instrument. 611 01:41:31.980 --> 01:41:32.940 Stephanie Cooper: That can. 612 01:41:36.960 --> 01:41:43.170 Stephanie Cooper: point out how much an ethylene is in the air you're talking about what's at risk. 613  $01:41:44.430 \rightarrow 01:41:45.330$ Stephanie Cooper: You talk about.

614 01:41:46.950 --> 01:42:01.890 Stephanie Cooper: How when you need to update yourself with critical issues as what's being talked about on this phone i'm not alone, I really am at a loss, because to me if your acronym stands for to protection agency for. 615 01:42:02.700 --> 01:42:18.840 Stephanie Cooper: The people and is critical that these industries follow the rules or regulations and guidelines and be fine if not on what i'm saying is that to me, there is no constructive financial. 616 01:42:19.980 --> 01:42:24.720 Stephanie Cooper: Fine, because of all that has happened with the industry. 617 01:42:25.290 --> 01:42:30.300 Stephanie Cooper: That not that's my opinion, my question is this, how can you all, better assess. 618 01:42:30.570 --> 01:42:46.590 Stephanie Cooper: Better address the current 21st century questions that has been embedded on this phone call because I heard a lot of i'll get back to you that's a mighty have to answer this question so forth, and so on, yes, the trust issue is there. 619 01:42:46.980 --> 01:42:53.490 Stephanie Cooper: And i'm not the only one, but now, a lot of people have trust issues, even with the information and I thank you so much for presenting. 620 01:42:53.790 --> 01:43:01.890 Stephanie Cooper: Even with the information that's presented, because to me they're not definitive to me and they're not telling the Community and the public that. 621 01:43:02.700 --> 01:43:07.920 Stephanie Cooper: We all know that the direction does not discriminate when it comes to pollution any mission. 622 01:43:08.340 --> 01:43:23.550 Stephanie Cooper: So that means is going all over the place, so that means that I don't care, I was in baton rouge or whatever either you're going to be affected directly or indirectly that's my question and, and I

know when the information that you're giving.

623 01:43:24.720 --> 01:43:29.280 Stephanie Cooper: you're giving it to the best of your ability and i'm very much appreciate that. 624 01:43:29.910 --> 01:43:38.940 Stephanie Cooper: very much appreciate it and i'm pretty sure I echo the same sentiments of people that own this phone call right now and I kind of like took some notes of some of the things that would discuss. 625 01:43:39.600 --> 01:43:56.130 Stephanie Cooper: So my wall down to the question is eminent trust, because in a prior years Hong Kong right now we have enough forum on me somebody is listening, why all of these years, we finally got a forum, because of the influx. 62.6 01:43:57.090 --> 01:44:10.980 Stephanie Cooper: of industries and can to alley in the alley of disproportionate your black and Brown and, yes, now has mangled his way into areas of imminent and prominence right now. 627 01:44:11.430 --> 01:44:23.040 Stephanie Cooper: Meaning my white brothers and sisters, you understand, so why is it that it took all of that to get here for us to have this forum, and we want factual information as well. 628 01:44:23.400 --> 01:44:36.660 Stephanie Cooper: So that is my question I don't mean to put all of that up on you, as you can see i'm frustrated and I really am so again I answer as much as you could what all of that, I think you so much for listening and everybody else on the phone guys well, thank you. 629 01:44:37.800 --> 01:44:41.310 Fran Verhalen: Thank you for your comments and you're right i'm. 630 01:44:42.390 --> 01:44:48.510 Fran Verhalen: we're not addressing everything that we could address tonight. 631 01:44:50.400 --> 01:44:56.760Fran Verhalen: there's a lot of information that we're trying to provide, and this is. 632 01:44:59.400 --> 01:45:01.560 Fran Verhalen: The first meaning and.

633 01:45:03.030 --> 01:45:13.710 Fran Verhalen: There may be more in your area right now we're trying to get information out to you about a chronic risk, it is. 634 01:45:15.000 --> 01:45:16.680 Fran Verhalen: You use the word eminent. 635 01:45:17.760 --> 01:45:18.600 Fran Verhalen: For us. 636 01:45:19.950 --> 01:45:27.090 Fran Verhalen: it's chronic it's not at concentrations that are high enough for us to raise it to eminent. 637 01:45:28.140 --> 01:45:31.770 Fran Verhalen: So that's one of the. 638 01:45:32.850 --> 01:45:36.180 Fran Verhalen: restrictions we have of trying to. 639 01:45:37.530 --> 01:45:41.820 Fran Verhalen: Do something fast um and I do hear that. 640 01:45:42.870 --> 01:45:52.560 Fran Verhalen: A lot of industry has moved into your area recently, and I do hear that you've had industry in your area for a very long, long time. 641 01:45:56.340 --> 01:46:06.750 Stephanie Cooper: And I don't mean to interrupt what you just said and no and no one has done anything about it because APA de que even have come down to our area as well. 642 01:46:07.140 --> 01:46:14.640 Stephanie Cooper: made us on of paper we have email address so Gordon show on, let us know that Okay, if something happens with. 643 01:46:15.570 --> 01:46:28.590 Stephanie Cooper: The methanol plant or within the industry we're going to call it, you know they got through from it, nothing happened you got all the information and nothing happened, and I even extra questions okay so hot EPA can make a definitive.

644 01:46:29.820 --> 01:46:36.960 Stephanie Cooper: Give us a definitive answer and then reply back to us when you're having this forum in this meeting on Dan brown's. 645 01:46:37.350 --> 01:46:47.040 Stephanie Cooper: On that ground can you divide the chew and be equal and fair, even though you have in this forum for the Community on damn ground. 646 01:46:47.520 --> 01:47:01.740 Stephanie Cooper: And guess what man, we never received any vendor permit were given a guess what i'm probably after what they got the receipt of all information was given to let us know that lives in the vicinity. 647 01:47:02.820 --> 01:47:11.880 Stephanie Cooper: Of these industries and we never received anything back at all, no nothing and before you know it. 648 01:47:12.960 --> 01:47:21.330 Stephanie Cooper: They will granted a permit, so we got a lot of trust issue going on and saying something and doing it man man that's two different things on. 649 01:47:21.990 --> 01:47:29.340 Stephanie Cooper: Absolutely, and I hate to put all of this one you, and then the audience as well, but, as you can see not only me were frustrated. 650 01:47:29.610 --> 01:47:39.060 Stephanie Cooper: And we apologize for the fact that it took all of this now, we got a pandemic, people are dropping left and right and it has to be imminent but someone to say hey that's. 651 01:47:40.200 --> 01:47:51.360 Stephanie Cooper: Excellent I found all over the place it's a small trace of it, but now we got a pandemic and people are dying and getting sick respiratory all of those days are gone no call may and. 652 01:47:52.470 --> 01:48:00.510 Stephanie Cooper: appalled right now man, but the people who are in position and position to do these job and I know that hard. 653 01:48:01.620 --> 01:48:06.810

Stephanie Cooper: But, just like I chose to be a teacher everybody chose their destination for the application. 654 01:48:07.740 --> 01:48:25.440 Stephanie Cooper: If you choose that compression on that is also work on the best thing you can force people be a service be whatever you need to do to serve the people, that is a good day, indeed, he killed shop and protection agency and my question if. 655 01:48:27.030 --> 01:48:33.450 Stephanie Cooper: you're protecting it really good people in the Community Thank you so much. 656 01:48:34.320 --> 01:48:34.830 Janetta Coats: Thank you. 657 01:48:35.430 --> 01:48:42.930 Fran Verhalen: Thank you you're welcome Thank you and and, yes, we are trying to be very protective of people in communities. 658 01:48:44.220 --> 01:48:52.290 Fran Verhalen: We we do serve we serve a lot of communities and we're working there and we are. 659 01:48:53.370 --> 01:48:59.040 Fran Verhalen: we're entering your Community now to see what we can do, and to hear from you. 660 01:49:00.180 --> 01:49:15.090 Fran Verhalen: And you know i'm I do apologize for EPA for not getting back to you on the permits, however, I don't have any information about that, so I wish I had some specific information for you. 661 01:49:15.600 --> 01:49:16.500 Stephanie Cooper: Okay hey. 662 01:49:18.630 --> 01:49:21.630 Janetta Coats: This is this yet again and we're kind of. 663 01:49:22.830 --> 01:49:31.500 Janetta Coats: nearing eight o'clock, but we do have a couple more messages in here, but I just remind everyone that if we do not get to your question that.

664 01:49:31.950 --> 01:49:38.820 Janetta Coats: They will be answered because they are in the chat box section so we'll go to this next question from the resident. 665 01:49:39.240 --> 01:50:06.420 Janetta Coats: And it says if EPA cannot even be certain that the background readings, that they have done, which found background readings thousands of times higher than the part per trillion the iris value again that integrated risk information system value, how can they consider fence line monitor. 666 01:50:09.810 --> 01:50:14.850 Fran Verhalen: I think I understand the first part of it um. 667 01:50:17.430 --> 01:50:23.010 Fran Verhalen: With our with our background sampling that that we have done. 668 01:50:24.810 --> 01:50:33.060 Fran Verhalen: The areas that we aren't certain about are those that are the lowest concentrations that are very close to. 669 01:50:34.560 --> 01:50:52.110 Fran Verhalen: What is called method detection limit, and that is going to be the lowest concentrations, that we can rely on the real reliably measure on the instruments that we have so it's very, very low and that's where our uncertainty is. 670 01:50:53.820 --> 01:50:57.930 Fran Verhalen: With respect to fence line monitoring. 671 01:50:58.950 --> 01:51:08.160 Fran Verhalen: Concentrations at fence lines typically are higher, we do have instruments that can read the higher. 672 01:51:10.800 --> 01:51:15.240 Fran Verhalen: The higher methods, however, they are. 673 01:51:17.070 --> 01:51:18.330 Fran Verhalen: not always. 674 01:51:21.480 --> 01:51:21.900 Fran Verhalen: So.

675 01:51:23.550 --> 01:51:23.940 Stephanie Cooper: We are. 676 01:51:25.890 --> 01:51:29.880 Fran Verhalen: We are trying to work, our technology on this. 677 01:51:31.890 --> 01:51:44.640 Janetta Coats: Okay, thank you friend now we've got a question here guys I know we're nearing the end here we're trying to work as fast as we can to get questions from everyone's boys there's a question here from. 678 01:51:46.140 --> 01:52:00.690 Janetta Coats: let's see what did I do with it here, it is, what are the penalties to the industry for not having protective of health levels since 2014 and that that is from initials m F that's the only initials there. 679 01:52:03.360 --> 01:52:04.710 Fran Verhalen: i'm sorry, one more time genetic. 680 01:52:05.280 --> 01:52:10.470 Janetta Coats: What are the penalties to the industry, for having. 681 01:52:11.250 --> 01:52:12.450 Fran Verhalen: loads that are protective. 682 01:52:12.540 --> 01:52:19.020 Janetta Coats: Know protective of health level since 2014 that's the way the question is stated. 683 01:52:19.350 --> 01:52:21.030 Janetta Coats: So I right. 684 01:52:21.090 --> 01:52:21.720 and 685 01:52:24.390 --> 01:52:27.150 Fran Verhalen: With respect to penalties. 686 01:52:34.320 --> 01:52:43.890

Fran Verhalen: it's a difficult question to answer, because when i'm, of course, the first thing I think about with the penalty is you know, a financial penalty that would be associated with. 687 01:52:46.020 --> 01:52:52.290 Fran Verhalen: You know compliance issues and that's a whole different area. 688 01:52:54.720 --> 01:52:55.320 Fran Verhalen: You know. 689 01:52:56.490 --> 01:53:11.160 Fran Verhalen: gosh i'm we're gonna have to get back to you on this one, because that's not an area that i'm knowledgeable in that's not something that I have an I don't believe I have anybody who's with our. 690 01:53:12.720 --> 01:53:20.190 Fran Verhalen: Compliance assurance and enforcement division online tonight, so I apologize for not being able to address that. 691 01:53:21.720 --> 01:53:36.660 Fran Verhalen: We do work with the facilities to the industry's to ask them to do more than they're required to do at times that is voluntary efforts that they are working with so. 692 01:53:37.620 --> 01:53:48.510 Fran Verhalen: Jeanette um yes man, do we, we do have Union Carbide online, who was going to do a presentation, do we have a few minutes left for that. 693 01:53:50.100 --> 01:53:52.530 Janetta Coats: And let me check with. 694 01:53:53.610 --> 01:53:59.550 Janetta Coats: Its maximum on the line or did he have another meeting defer that question. 695 01:54:01.470 --> 01:54:01.980 let's see. 696 01:54:03.030 --> 01:54:05.490 Fran Verhalen: I did have a presentation ready for us this evening. 697

01:54:05.820 --> 01:54:07.440 Janetta Coats: Yes, yes, yes. 698 01:54:10.770 --> 01:54:19.710 Janetta Coats: So for those that desire to stay on we are respectful of everyone's time and we are near eight o'clock. 699 01:54:21.780 --> 01:54:33.540 Janetta Coats: friend, we can turn the MIC over and and go from there, and again I believe, for the most part the meetings was for the Community, and I do not see any additional fan raise from the Community. 700 01:54:33.960 --> 01:54:42.630 Janetta Coats: Nor additional questions in the chat box so i'll turn it over to to you fran and we can reach out to the industry. 701 01:54:43.380 --> 01:54:44.850 Fran Verhalen: alrighty okay. 702 01:54:45.180 --> 01:54:45.840 um. 703 01:54:47.220 --> 01:54:49.620 Fran Verhalen: I know we had Denise. 704 01:54:50.760 --> 01:54:53.880 Fran Verhalen: dylon on earlier from. 705 01:54:55.200 --> 01:55:02.010 Fran Verhalen: Union Carbide and she did have a about a 10 minute presentation Denise are you still with us. 706 01:55:03.870 --> 01:55:06.210 Denise DeLaune: I friend, this is Denise too long, can you hear me. 707 01:55:06.450 --> 01:55:13.770 Fran Verhalen: I can, and i'm going to shut down my presentation and let you have dinner, if you will. 708 01:55:15.810 --> 01:55:16.320 Fran Verhalen: Thank you. 709

01:55:18.270 --> 01:55:25.020 Denise DeLaune: Okay, and just to let you know we're having some communication network issues here so hopefully it'll come through okay. 710 01:55:25.560 --> 01:55:34.080 Denise DeLaune: just want to say, good evening, and thank you to everybody and EPA for having us here tonight really to listen and to share information with the Community. 711 01:55:34.530 --> 01:55:43.530 Denise DeLaune: My name is Denise dylon on the site leader for Union Carbide St Charles operation facility and hornbill and i've been here since September of 2019. 712 01:55:44.190 --> 01:55:52.260 Denise DeLaune: i've been with down Union Carbide over 23 years and i'm from Louisiana attended Ellis shoe and I started my career here at the site. 713 01:55:52.590 --> 01:56:01.320 Denise DeLaune: I keep coming back to the site, because of the family, culture, here we have at the site I enjoy living in the area and the engagement with the local Parish. 714 01:56:02.070 --> 01:56:10.500 Denise DeLaune: I live currently in New Orleans, but I believe twice in the area and St Charles Parish and I really enjoyed living here and also raising my kids here in the area. 715 01:56:17.280 --> 01:56:27.180 Denise DeLaune: So just to tell you a little bit about the site itself, we are, we are a wholly owned subsidiary of Dow and we began operations here in 1966. 716 01:56:27.630 --> 01:56:33.900 Denise DeLaune: there's about 2000 acres of land and we employ about thousand employees and 1500 contractors. 717 01:56:34.320 --> 01:56:43.290 Denise DeLaune: we're really proud to have been an OSHA star site for over 20 years we have a strong safety record and employee injury rate that's one of the best in the in the country. 718 01:56:43.860 --> 01:56:53.940

Denise DeLaune: We are an eye Park, so we do have other tenants that are here on site with us, we produce products at St Charles that go into thousands of household products that improve everyday life. 719 01:56:54.420 --> 01:57:03.480 Denise DeLaune: it's really pharmaceuticals break fluids paints adhesives textiles and our products qo into personal care products like toothpaste so. 720 01:57:03.900 --> 01:57:23.280 Denise DeLaune: detergents and fabric softener and many more things safety is really at the heart of everything that we do here we're especially honored to earn the ACC responsible care Award for safety for waste minimization for energy efficiency and also for our Kovac 19 response. 721 01:57:27.240 --> 01:57:35.910 Denise DeLaune: We know that open communication with our Community is really a key to success, and so we are committed to listening to concerns questions and needs. 722 01:57:36.270 --> 01:57:44.790 Denise DeLaune: We have a long term Community advisory panel for the site, I think, a very successful one, in addition to the other outreach that we do in the Community. 723 01:57:45.330 --> 01:57:52.260 Denise DeLaune: We appreciate that needs continue to change and we adjust our approach and we're adjusting that appropriately as needed. 724 01:57:52.530 --> 01:58:03.600 Denise DeLaune: For example, last year with the coven situation we heard through our CAP door advisory panel that wi fi hotspots was a big need in the Community, and so we took action to support their. 725 01:58:04.230 --> 01:58:14.010 Denise DeLaune: We have about 4000 employees and contractors across the state i'm employed by that ink and so we have to protect our license to operate. 726 01:58:14.490 --> 01:58:25.260 Denise DeLaune: And through our caps we engaged our decision makers, our policymakers really at the institutional level to ensure we meet or exceed government regulatory and Community expectations.

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01:58:25.890 --> 01:58:33.030 Denise DeLaune: We prioritize Dallas direct given with opportunities that enable employees to volunteer alongside or Community members. 728 01:58:34.050 --> 01:58:45.210 Denise DeLaune: During things like hurricanes and flooding in our doubt gives, which is our direct giving to the Community that supports educational programs diversity projects and also health and environmental causes. 729 01:58:45.600 --> 01:58:49.380 Denise DeLaune: One specific collaboration we're very proud of is our collaboration. 730 01:58:50.190 --> 01:59:03.420 Denise DeLaune: With handle high school on a doubt leadership Academy, which is intended to partner with the students there with diverse students, in particular, to give them work experiences and education, you know, to make them empower them for the future. 731 01:59:06.570 --> 01:59:17.430 Denise DeLaune: In addition to our Community engagement we're in our third decade of setting sustainability goals and 18 years and to setting system and to our sustainability reporting, this is not something new. 732 01:59:17.880 --> 01:59:32.250 Denise DeLaune: data sets aggressive holistic goals and we've accelerated our actions around sustainability, not only for 2025 but also further to 2050 and these goals are focused on maximizing environmental and social values. 733 01:59:33.090 --> 01:59:44.940 Denise DeLaune: Specific to environmental protection, we have world leading operations is one of the target areas it's focused on improving environmental, health and safety, as well as our natural resource efficiency. 734 01:59:45.780 --> 01:59:56.580 Denise DeLaune: For our operations globally and TAO but also here at St Charles this means me working to reduce emissions and also optimizing our facilities, including our EEO assets. 735 01:59:56.910 --> 02:00:03.000 Denise DeLaune: And just recently we issued our first MSG or environmental, social and governance report.

736 02:00:03.360 --> 02:00:16.350 Denise DeLaune: And this report transparently shows our company action around inclusion and diversity Community interactions governance and also environmental protection, all of which play a key role, right here at St Charles. 737 02:00:19.230 --> 02:00:25.770 Denise DeLaune: We know the importance of Eo and the production of many products that people use and consume our families consume each day. 738 02:00:26.430 --> 02:00:36.360 Denise DeLaune: products made from me to help to grow food they enable transportation and they also help our families products like break fluids shampoos laundry detergents. 739 02:00:36.630 --> 02:00:43.110 Denise DeLaune: And over the last year, these codes of these products have been especially critical during our coven times. 740 02:00:44.100 --> 02:00:52.890 Denise DeLaune: To build on the long term efforts to drive improvement or company set up an ios steering team that continues to build the work we've done to safely operate. 741 02:00:53.160 --> 02:01:02.640 Denise DeLaune: With Eo for over 70 years the team is driving best in class practices that help to make us better and that keep our employees, safe and help to keep the Community safe. 742 02:01:03.480 --> 02:01:11.760 Denise DeLaune: Our work is focused on several key areas, those include detailed training for safe handling practices for Eo for ethylene oxide. 743 02:01:12.240 --> 02:01:17.970 Denise DeLaune: Looking for looking at technology improvements and how we can drive our missions toward zero. 744 02:01:18.840 --> 02:01:32.160 Denise DeLaune: Ensuring best in class calculation and measuring methodologies for Eo and strong operating disciplines in our plan and running highly reliable assets, because we know that reliability and safety go together. 745

02:01:36.090 --> 02:01:39.840
Denise DeLaune: We want to let you know about the actions already taken to reduce emissions. 746 02:01:40.260 --> 02:01:47.970 Denise DeLaune: we're compliant with the ld key roles and the air permits and the EPA maximum achievable control technology or MAC standards. 747 02:01:48.360 --> 02:02:04.080 Denise DeLaune: The work we've done between 2014 and 2018 reduced our inside emissions by approximately 64% and, as mentioned earlier by the EPA we've continued to drive improvement and will continue to do that, we did that in 2020 and 2021. 748 02:02:04.560 --> 02:02:10.260 Denise DeLaune: We completed a project that changed the rail car loading process to minimize event source to our player. 749 02:02:10.770 --> 02:02:23.100 Denise DeLaune: In 2021 we installed a scrubber to further reduce emissions and he has recovered back into the process and we added event flow and he value monitoring for both of our players and 2018. 750 02:02:23.820 --> 02:02:35.790 Denise DeLaune: The team also took our actions to update emission calculations and make sure that we had were accurately reporting results, because we were using pretty conservative assumptions in the past, which was kind of an industry standard. 751 02:02:36.570 --> 02:02:43.440 Denise DeLaune: This included vent testing or storage vessels, it also included updating these admission calculations for the events to the player. 752 02:02:44.460 --> 02:03:02.490 Denise DeLaune: We know that there was a lot of discussion around regulation and emissions risk and it down, we fully embrace and we advocate for safe handling of chemicals, we support the efforts to redefine reasonable limits for emission standards based on the best available, science and technology. 753 02:03:04.950 --> 02:03:11.610 Denise DeLaune: That believes that no Community should bear an adverse environmental health outcome as a result of our operations. 754

02:03:11.850 --> 02:03:21.360

Denise DeLaune: And we've been committed to very high operational and safety practices at our site for a long time it's consistently met or exceeded regulations and applicable laws. 755 02:03:21.690 --> 02:03:25.320 Denise DeLaune: And this has been recognized externally, but we're going to continue to do this. 756 02:03:25.980 --> 02:03:39.120 Denise DeLaune: we've worked with ethylene oxide, for more than 70 years we appreciate the chemistry, we have expertise and and SMEs, here we know the value that the product brings and at the same time we're going to continue to reduce emissions. 757 02:03:39.600 --> 02:03:43.740 Denise DeLaune: and operate within regulations provided but LP the EPA and ld. 758 02:03:44.730 --> 02:03:53.520 Denise DeLaune: We know it's our responsibility to our Community, to use the best available, science and technology to end advanced monitoring capabilities to reduce emissions. 759 02:03:53.850 --> 02:04:04.860 Denise DeLaune: And we're going to continue to engage with you the Community to listen to concerns to questions and to needs, just like we've done for decades and also through these Community advisory panels. 760 02:04:05.220 --> 02:04:11.850 Denise DeLaune: We know that collaborating with our near neighbors is really key to improving our Community success and our success. 761 02:04:12.210 --> 02:04:24.720 Denise DeLaune: And we're going to continue to engage with decision makers and policymakers as well at the institutional level, to meet Community expectations and to meet and exceed government and regulatory requirements. 762 02:04:25.170 --> 02:04:38.100 Denise DeLaune: We really do appreciate the time this evening and we share to share a little bit about our operations and our company, and we look forward to listening we've done look, you know appreciated listening to you this evening, thank you very much. 763 02:04:40.080 --> 02:04:55.170

Janetta Coats: Thank you Denise again this is genetic codes and we would like to thank everyone again for attending this meeting on ethylene oxide, we value your time and, as we mentioned earlier, we wanted to.

## 764

02:04:56.340 --> 02:05:01.830 Janetta Coats: respect your time and we're running just a tad bit over, but again, please use the.

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02:05:02.400 --> 02:05:15.420 Janetta Coats: addresses that we've given you guys to reach out for additional questions and also want to make you guys aware again of Gloria bond the EPA associate director for environmental justice contact information.

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02:05:16.230 --> 02:05:33.390

Janetta Coats: Her phone number is 22146657538 if you would like to reach out to her as the associate director for environmental justice, please do so again, thank you for your time and you guys have a great night, thank you.