

WEBVTT

1

00:01:20.640 --> 00:01:21.210
Janetta Coats: Are you there.

2

00:01:24.840 --> 00:01:41.280
Debora Browning: Good evening and welcome to the ethylene oxide etfs zoom Community meeting for Shell technology Center in Houston Texas, my name is Deborah Browning with EPA and i'm the moderator for this evening next slide please.

3

00:01:44.310 --> 00:01:51.030
Debora Browning: For those attending language interpretation services instructions are posted on the screen.

4

00:01:51.840 --> 00:02:10.410
Debora Browning: This will assist our participants to enable the appropriate language preference for English, Spanish or Viet many services if selecting the element Nice, please use the French interpretation again, please select the French interpretation.

5

00:02:11.460 --> 00:02:18.390
Debora Browning: I would like to welcome and introduce the Spanish interpreters tomorrow CREST bro and Lester Lima.

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00:02:19.500 --> 00:02:26.220
Debora Browning: I would also like to introduce the Viennese interpreters how, when and miki don't.

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00:02:27.450 --> 00:02:44.370
Debora Browning: For those requiring American sign language services, the interpreter window is available to pan the interpreter on the screen, I would like to welcome and introduce the interpreter sign language interpreters Karen Evans in Korean language next slide please.

8

00:02:46.950 --> 00:02:49.950
Debora Browning: This is a zoom meeting and due to the size of our audience.

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00:02:50.520 --> 00:03:02.070
Debora Browning: All participants are in listening mode only except for the speakers microphones at the end of the presentations EPI will address questions during the question and answer session.

10

00:03:02.670 --> 00:03:13.020

Debora Browning: Participants may write the question in the chat box during the presentations However, the questions will not be answered until the Q amp a session next slide please.

11

00:03:15.420 --> 00:03:24.990

Debora Browning: Your comments are very important to us in this meeting is focused on hearing from the citizens in the Houston area near the shale technology Center.

12

00:03:25.620 --> 00:03:39.750

Debora Browning: Any questions related to industry permits any enforcement, including inspections and surveillances or legal actions or about other areas or facilities will not be addressed during this Community meeting.

13

00:03:41.040 --> 00:03:41.610

Debora Browning: Yes.

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00:03:41.670 --> 00:03:44.940

dgarcia: Can you please just speak just a little bit slower I just got a comment.

15

00:03:45.360 --> 00:03:46.320

Debora Browning: Okay, thank you.

16

00:03:52.230 --> 00:04:10.710

Debora Browning: You may send these questions for other questions or comments related to ethylene oxide, to the EPA region six email box for a response at our six ethylene oxide@epa.gov.

17

00:04:12.300 --> 00:04:29.760

Debora Browning: This event is being recorded and will be posted to the EPA region six websites for ethylene oxide these web page links will be posted in the chat box as an announcement on the right side of your long term strain next slide please.

18

00:04:33.510 --> 00:04:45.270

Debora Browning: For zoom meeting best practices during the Q amp a session, in addition to encouraging everyone to writing the question in the chat box, you may raise your hand to ask a question.

19

00:04:45.780 --> 00:04:58.980

Debora Browning: Those participants dialing in will also have an opportunity to ask a question during the Q amp a session we're not speaking, please mute your microphone next slide please.

20

00:05:01.800 --> 00:05:12.660

Debora Browning: This slide shows an example of where to find the mute button and the buttons at the bottom of your screen for the chat box and to raise your hand.

21

00:05:14.850 --> 00:05:16.320

Debora Browning: Next slide please.

22

00:05:19.080 --> 00:05:30.090

Debora Browning: During the Q amp a session my EPA colleague genetic codes will be assisting me with hand raised checks phone dial in and chat box questions.

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00:05:33.840 --> 00:05:44.580

Debora Browning: If you would like to send a question to be read in the chat box, but prefer to remain anonymous you may do so through a direct messaging option in the chat box.

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00:05:45.000 --> 00:05:59.010

Debora Browning: This slide shows an example of where to find the direct messaging option in the chat box select message option, then use the arrow down to select direct message to genetic codes.

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00:06:00.270 --> 00:06:01.560

Debora Browning: Next slide please.

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00:06:05.850 --> 00:06:20.910

Debora Browning: EPA would like to welcome our Texas Congressional delegation state and local offices in the environmental justice stakeholders, along with members of the community and attending and participating in this meeting.

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00:06:22.080 --> 00:06:37.050

Debora Browning: In partnership with the Texas Commission on environmental quality TC eq EPA would like to introduce Dr Michael honeycutt TC eq chief toxicologists to make welcoming comments.

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00:06:39.000 --> 00:06:48.870

Michael Honeycutt: Good evening i'm Dr Michael honeycutt chief toxicologists for the Texas Commission on environmental quality and i'm happy to be here this evening, thank you.

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00:06:53.430 --> 00:06:54.750

Debora Browning: Thank you, Dr honeycutt.

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00:06:56.820 --> 00:07:12.150

Debora Browning: EPA would also like to welcome Mr Kent gone Zur with Shell technology Center as the site general manager, Mr dancer is present to hear from the Community about their concerns.

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00:07:13.080 --> 00:07:25.320

Debora Browning: At this time, I would like to introduce EPA environmental justice representatives we have with us tonight matt to Haider with EPA headquarters.

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00:07:25.980 --> 00:07:39.810

Debora Browning: director of the environmental justice office jonah Pope EPA region six director, with the office of communities tribes and environmental assessments.

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00:07:40.380 --> 00:07:52.290

Debora Browning: and glory Yvonne EPA region six associate director for environmental justice gianna, can you please unmute your MIC and provide general comments.

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00:07:53.460 --> 00:08:06.510

JPOLK03: Thank you Deborah good evening as Deborah said i'm gianna poke and I serve as the director for region six EPA office of communities tribes and environmental assessment.

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00:08:06.990 --> 00:08:18.390

JPOLK03: I want to thank you for your time and your participation, this evening, as EPA shares important information concerning ethylene oxide emissions in your community.

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00:08:18.840 --> 00:08:28.710

JPOLK03: And ethylene oxide risks to human health and provides an opportunity for you to ask questions we're very concerned about hearing from the Community.

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00:08:28.980 --> 00:08:38.550

JPOLK03: And we want to make sure that you have plenty of opportunity to ask questions so that's that's what we'll be doing staying for for quite a while and hearing those questions.

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00:08:39.060 --> 00:08:49.260

JPOLK03: And we had hoped to share this important information with Community members and person, but continue to be protective of everyone during this pandemic.

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00:08:49.710 --> 00:09:00.120

JPOLK03: So we are holding meetings virtually I hope that you and your families are safe and we look forward to the time and we can safely gather again.

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00:09:00.720 --> 00:09:13.860

JPOLK03: My special thank you this evening to a group of Community stakeholders from Texas and Louisiana who expressed their ethylene oxide concerns to our EPA administrator.

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00:09:14.550 --> 00:09:25.380

JPOLK03: This past spring EPA invited this group of stakeholders to work with us to improve our outreach to communities concerning F1 oxide.

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00:09:25.830 --> 00:09:35.220

JPOLK03: Including recommendations on how to remove language barriers provide meeting notices and improve our communication materials.

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00:09:35.730 --> 00:09:43.920

JPOLK03: With the Community stakeholders, we have a common goal of providing you the best information in the best manner.

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00:09:44.580 --> 00:09:54.960

JPOLK03: This stakeholder group also recommended Community participation in these meetings so this evening we appreciate Dr Patrice babin.

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00:09:55.320 --> 00:10:07.230

JPOLK03: director of Harris counties pollution control and Miss Kristen Lee for joining us from the Community, they will be speaking following EPA presentation this evening.

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00:10:07.830 --> 00:10:14.070

JPOLK03: Also, as we heard from our stakeholders, there is concern among Community members.

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00:10:14.640 --> 00:10:25.920

JPOLK03: In certain situations where they might may feel like they need to remain anonymous and so as Deborah shared we've provided an opportunity for.

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00:10:26.220 --> 00:10:32.490

JPOLK03: Community members to post their questions or their statements, via the private chat.

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00:10:33.030 --> 00:10:41.940

JPOLK03: To genetic coats, and so I would encourage you to use that if you're uncomfortable asking questions and identifying yourself so feel free to use that.

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00:10:42.450 --> 00:10:47.580

JPOLK03: So um again, thank you for your time and your participation this evening.

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00:10:48.180 --> 00:11:07.260

JPOLK03: I would like to introduce your very strong Community advocate in our office Gloria Yvonne associate director for environmental justice, who i'm sure many of you may already know through her tireless efforts and getting information out to communities Gloria i'll turn it over to you.

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00:11:10.260 --> 00:11:12.240

Gloria Vaughn: Thank you Jana and thank you Deborah.

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00:11:14.130 --> 00:11:32.430

Gloria Vaughn: Good evening I am going Yvonne associate director for environmental justice in the office of Community tribes and environmental assessment and the EPA EPA office and region six I have been fortunate to Nathan in or talk with some of you who are attending this Community.

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00:11:33.450 --> 00:11:36.270

Gloria Vaughn: But those who I have not met my name is.

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00:11:37.770 --> 00:11:54.270

Gloria Vaughn: On the person who sends you notice this the credit opportunities training opportunities meeting invitations opportunities to comment on anything related projects and your contact or issues that you want to bring to EPA attention.

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00:11:55.380 --> 00:11:58.740

Gloria Vaughn: We appreciate your time and the sacrifices that you have made.

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00:12:00.780 --> 00:12:04.440

Gloria Vaughn: Please reach out to me if you have suggestions for making better.

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00:12:05.730 --> 00:12:08.700

Gloria Vaughn: I will place my contact information in the chat box.

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00:12:09.870 --> 00:12:21.210

Gloria Vaughn: But those of you who are calling in by phone can also reach me by phone at 2146575 read.

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00:12:22.410 --> 00:12:24.510

Gloria Vaughn: Your feedback is very important.

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00:12:25.950 --> 00:12:27.630

Gloria Vaughn: Thank you for attending tonight.

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00:12:28.770 --> 00:12:31.230

Gloria Vaughn: And I know him and me go back to jada.

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00:12:35.160 --> 00:12:45.870

JPOLK03: Thank you Gloria again, we welcome you to the meeting this evening, thank you for your time I am so pleased to introduce.

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00:12:46.380 --> 00:12:57.900

JPOLK03: matt too hot to the director of the office of environmental justice in our headquarters office, I think it is really a statement from the agency of how important.

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00:12:58.290 --> 00:13:06.750

JPOLK03: This is to our administrator and to get information out to communities for matt to be participating with us this evening.

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00:13:07.050 --> 00:13:20.220

JPOLK03: I certainly appreciate his time it's a long day for him, but I know how passionate he is about getting information out to communities and so i'm I welcome that this evening, and thanks matt for joining us i'll turn it over to you, thank you.

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00:13:21.660 --> 00:13:28.950

1202***867: hey thanks thanks john so much, I really appreciate both the time tonight just help open up the meeting.

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00:13:29.580 --> 00:13:37.470

1202****867: But more so, I appreciate the folks who have joined us from the Community from other parties that support the Community.

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00:13:38.250 --> 00:13:48.210

1202****867: The purpose of tonight is to really hear those Community concerns the realities of the communities that are are impacted or potentially impacted.

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00:13:48.900 --> 00:13:57.030

1202****867: By this chemical and and that's what we really want to focus on tonight is is to make sure that we're sharing the information that we have.

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00:13:57.690 --> 00:14:06.540

1202****867: More answering the questions whenever we can and and the ones we can't we're taking note of those to follow up on, but really to hear from.

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00:14:07.020 --> 00:14:28.020

1202****867: What are those concerns or how is it impacting your lives, what do you need to see from us to make sure that you in the Community feel confident that your government and the Environmental Protection Agency are doing everything we can to make sure y'all are protected.

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00:14:29.310 --> 00:14:35.130

1202****867: This is, this is obviously a chemical of concern for all of us, and as john was saying, even though.

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00:14:35.640 --> 00:14:48.210

1202****867: This is a, this is a chemical that we're primarily concerned about only in some some in some specific areas of the United States and lagos' in the Texas Louisiana Gulf coast area.

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00:14:49.320 --> 00:15:01.800

1202****867: This is a national priority for us at EPA, it is, it is one of the highest profile issues we're handling today there's a lot of folks all across the Agency, who are committed to making sure.

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00:15:02.220 --> 00:15:19.560

1202****867: That we're handling this in a transparent way, in a way that is grounded in the science and in a way that is also centered on the realities of the impacts and concerns of the communities that are most impacted and, and that is that, as you all that is why we're having this meeting.

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00:15:20.370 --> 00:15:21.660
1202****867: So we just want to make sure that.

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00:15:21.660 --> 00:15:37.440
1202****867: folks are folks are are are assured in our attention on this and and the reality that we know, especially from the early days when we first started understanding the seriousness of this chemical and the potential for it to cause.

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00:15:37.440 --> 00:15:39.060
1202****867: concern that.

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00:15:39.090 --> 00:15:51.270
1202****867: That that, especially in those early days, a lot of concern was generated, there was a lot of questions and and we're we're we're super aware.

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00:15:52.230 --> 00:16:01.140
1202****867: Of what that means for you all who are actually living in the Community that you're worried about your health that you're worried about the health in the future of your family.

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00:16:01.260 --> 00:16:08.070
1202****867: including your children you're worried about what it means for for your entire communities and and their futures.

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00:16:08.730 --> 00:16:19.680
1202****867: And so that's why we're handling this with such a high priority across EPA it's why we're being very deliberate and making sure we're engaging with the communities across the United States.

84

00:16:20.280 --> 00:16:33.120
1202****867: That are potentially impacted by this and are already feeling the impacts from it in terms of just not knowing what is going on, or not being clear on on what to be concerned about or how dangerous it might be.

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00:16:34.200 --> 00:16:38.760
1202****867: So that is what we really want to focus on here tonight, I know we've probably got a lot of folks on.

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00:16:39.210 --> 00:16:50.520
1202****867: from other levels of government or from business and industry or from environmental groups, if we have time at the end wait, of course, welcome those folks to join in.

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00:16:50.880 --> 00:16:55.050

1202****867: and give us their perspective or answer other questions, maybe that other folks have raised.

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00:16:55.680 --> 00:17:00.990

1202****867: But we really want to focus tonight on sharing the information that we have, and that we have prepared.

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00:17:01.500 --> 00:17:09.900

1202****867: And we're we've we've held several of these meetings and we're always looking to make sure that we're improving the information we we have available to try to answer.

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00:17:10.320 --> 00:17:14.640

1202****867: and anticipate the concerns and questions that we're already getting from communities.

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00:17:15.420 --> 00:17:21.210

1202****867: But once we shared some of that information that we have we want to focus on hearing from those impact and Community members first.

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00:17:21.930 --> 00:17:40.620

1202****867: that's that's The point of this meeting that's its purpose but it's also write that in any meeting that we start with hearing from the impact and Community Members and their concerns and your lived experience and your realities, as the starting point for our conversation that's been.

93

00:17:41.700 --> 00:17:52.500

1202****867: A big shift at EPA with with Michael regan being our administrator he constantly talks about centering the mission of EPA on environmental justice.

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00:17:52.890 --> 00:18:00.540

1202****867: And this meeting tonight and wanting to really focus on the voices of Community members in your reality that's part of that centering the mission.

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00:18:01.230 --> 00:18:11.370

1202****867: we're doing it now we're doing it early we're doing it first and it's going to be a driving consideration as we move forward through this issue in the in the coming days, weeks, months and years.

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00:18:12.210 --> 00:18:19.170

1202****867: Because this is going to be an issue that that EPA wrestles with for some time, and we want to make sure that we are transparent with you all.

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00:18:19.830 --> 00:18:27.420

1202****867: That we always lift up your voices and that we are accountable to you for making sure that as we move through this issue.

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00:18:27.780 --> 00:18:34.290

1202****867: You see, the responsiveness from EPA and how we make our decisions and assuring that we're doing everything we can.

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00:18:34.950 --> 00:18:42.840

1202****867: To make sure that you are protected and you are assured in that protection for you, for yourselves, for your family members, for your children for your communities.

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00:18:43.440 --> 00:18:53.520

1202****867: So thank you all again so much for joining us tonight we know it's a it's a burden to folks take time out from their families to take time out from their jobs.

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00:18:54.030 --> 00:19:03.780

1202****867: To take maybe, what are the only hours you might get for some stretched to maybe just relax and not have to worry about these sorts of things, but now you got to worry i'm good you got to share your words with us.

102

00:19:04.500 --> 00:19:13.860

1202****867: So we greatly appreciate that we appreciate you taking the time because it is absolutely critical for us to hear from you all in order to make the right decisions.

103

00:19:14.490 --> 00:19:24.480

1202****867: So if that john i'll pass it back to you Thank you so much i'm actually at a attic ej Community minute meeting and Maryland tonight that's why I had to call in so i'm gonna have to go back and join this other meeting.

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00:19:25.290 --> 00:19:39.720

1202****867: But I know john and other folks and region six are y'all are in good hands with them, and I look forward to hearing about how this meeting goes through through the remainder of the session, and thank you all again so much for taking the time to share your stories with us.

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00:19:41.250 --> 00:19:53.490

JPOLK03: Thank you matt so much and really like the slide in front of everybody says this is for the Community so thanks for that emphasis matt will turn it back to Deborah and we'll get started, and thanks so much.

106

00:19:56.790 --> 00:20:11.520

Debora Browning: And he gianna Gloria and matt We appreciate your comments now I would like to introduce David Garcia EPA region six director for the air and radiation division for opening comments.

107

00:20:12.810 --> 00:20:25.830

dgarcia: Thank you debra and, yes, I just want to add to mats discussion we are anxious to hear and hear from the Community, and I want to welcome you to this next couple of hours, where we're going to have a discussion on ethylene oxide.

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00:20:26.580 --> 00:20:36.570

dgarcia: As never mention my name is David Garcia, I am the director of the air and radiation division, where the US EPA region six in Dallas Texas.

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00:20:37.140 --> 00:20:42.360

dgarcia: The EPA is presenting this Community meeting on potential associate potential.

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00:20:43.140 --> 00:20:51.390

dgarcia: associated with an F missions of ethylene oxide from the Shell technology Center facility located in Houston Texas.

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00:20:51.840 --> 00:20:58.740

dgarcia: We will provide information on the current estimated risk from emissions of ethylene oxide from this facility.

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00:20:59.520 --> 00:21:10.260

dgarcia: What actions Shell technology Center has completed since 2014 until 2020 and what EPA is planning to do to regulate this toxic.

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00:21:11.010 --> 00:21:20.100

dgarcia: Now ethylene oxide is a significant building block for many use everyday consumer products and is used as a steriliser for medical equipment.

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00:21:20.730 --> 00:21:37.860

dgarcia: During our periodic review of of risk from the this air toxic chemical EPA determine that ethylene oxide presents a greater potential risk for getting cancer three inhalation inhalation or breathing route of exposure.

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00:21:38.670 --> 00:21:51.810

dgarcia: However, across the nation, the total missions of toxic air pollutants are declining and air quality monitoring data show that concentrations of individual air toxic pollutants in the air are trending downward.

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00:21:52.500 --> 00:22:00.000

dgarcia: The despite these trends some local areas are facing challenges from ethylene oxide emissions.

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00:22:01.020 --> 00:22:21.210

dgarcia: In 2014 and based on the latest national air toxics assessment ethylene oxide significantly contributed to potential elevated cancer risk in less than 1% of the census tracts across the United States, one of those census tracts is located in Houston Texas.

118

00:22:22.440 --> 00:22:31.860

dgarcia: I have good news for you, since 2014 based on the emission reductions through engineered controls and corrections to the admission estimate calculations.

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00:22:32.220 --> 00:22:46.410

dgarcia: That ethylene oxide emitted from this facility has significantly reduced and EPA estimated that the potential risk for methane oxide, to develop cancer is now less than 100 in 1 million.

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00:22:47.850 --> 00:23:01.080

dgarcia: Now EPA has started reviewing some of the industry air toxics regulations that use ethylene oxide in their process or produce ethylene oxide emissions through the chemical production process.

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00:23:02.070 --> 00:23:20.460

dgarcia: In the future, as part of our regulatory development process we anticipate that you and other public stakeholders will have the opportunity to provide your comments and feedback to EPA during the regulatory proposal stage as updates to the Eric toxics rules are considered.

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00:23:22.110 --> 00:23:33.750

dgarcia: Now Community outreach on ethylene oxide is a critical issue for EPA administrator Michael regan we will be addressing your questions, after the presentation by EPA.

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00:23:35.400 --> 00:23:42.000

dgarcia: And after the Community advocates speak, we appreciate you taking the time today to join us.

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00:23:42.510 --> 00:23:56.940

dgarcia: With that in mind, please allow me to introduce miss miss Frances for halen chief of the region's air monitoring and brand section, she will provide more details on potential risk from an ethylene oxide justin.

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00:24:00.270 --> 00:24:01.650

Fran Verhalen: Good evening, thank you, David.

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00:24:02.520 --> 00:24:20.760

Fran Verhalen: My name is Francis for halen and i'm a supervisor for the US Environmental Protection Agency in the Dallas office, I will be speaking on the risks posed by ethylene oxide emissions from the Shell technology Center in Houston Texas.

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00:24:22.290 --> 00:24:35.430

Fran Verhalen: tonight's discussion is specific to ethylene oxide emissions from this facility i'm focusing on providing you information on ethylene oxide uses.

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00:24:36.480 --> 00:24:42.450

Fran Verhalen: The health effects from breathing ethylene oxide both short term and long term risks.

129

00:24:43.710 --> 00:24:51.570

Fran Verhalen: Information on what the facility has done to update its information on emissions of ethylene oxide.

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00:24:53.100 --> 00:25:01.560

Fran Verhalen: EPA conclusions After reviewing updated technical information and the risk modeled for the facility.

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00:25:02.580 --> 00:25:07.380

Fran Verhalen: And more accurate information provided by the facility and TC eq.

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00:25:11.160 --> 00:25:15.900

Fran Verhalen: ethylene oxide is a colorless gas at room temperature.

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00:25:17.130 --> 00:25:20.250

Fran Verhalen: It is flammable, which means it can burn.

134

00:25:21.540 --> 00:25:31.920

Fran Verhalen: It is a chemical component in making other chemicals and for common household products like detergents or carpeting.

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00:25:33.630 --> 00:25:49.920

Fran Verhalen: It is a sterilizing agent for materials that cannot be heated or gotten wet, for example, ethylene oxide sterilize is the respiratory tubing used in hospitals or the masks and gowns used by doctors and nurses.

136

00:25:53.070 --> 00:26:04.680

Fran Verhalen: While ethylene oxide has many uses EPA has determined that it is a carcinogen, meaning that exposure to this air toxic can cause cancer.

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00:26:06.990 --> 00:26:21.990

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.

138

00:26:24.270 --> 00:26:35.280

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.

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00:26:37.050 --> 00:26:43.620

Fran Verhalen: Another question is, if we are actually measuring ethylene oxide, or if it is something different.

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00:26:47.700 --> 00:26:58.980

Fran Verhalen: We began examining this question after monitoring studies of ethylene oxide in the air near an industrial facility in Illinois in 2018 and 2019.

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00:27:00.480 --> 00:27:05.460

Fran Verhalen: We found it at monitors downwind of the facility which we expected.

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00:27:06.480 --> 00:27:11.400

Fran Verhalen: Because the wind will carry ethylene oxide from a facility toward the monitors.

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00:27:13.080 --> 00:27:27.360

Fran Verhalen: But the studies also detected ethylene oxide, although at lower levels and monitors that were upwind of the facility indicating the possibility that background ethylene oxide exists.

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00:27:31.650 --> 00:27:45.360

Fran Verhalen: EPA has found concentrations of ethylene oxide in the outdoor air that are not clearly linked to a particular industrial facility, such as a chemical plant or steriliser.

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00:27:47.280 --> 00:27:51.840

Fran Verhalen: We do not yet know where the ethylene oxide is coming from.

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00:27:53.370 --> 00:28:09.390

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.

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00:28:11.400 --> 00:28:24.900

Fran Verhalen: EPA has sampled the air in both urban and rural cities across the nation to monitor the concentrations of air toxics including ethylene oxide.

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00:28:26.520 --> 00:28:34.710

Fran Verhalen: While these lower levels of ethylene oxide suggest there is a background level of to in the outdoor air.

149

00:28:36.150 --> 00:28:42.180

Fran Verhalen: EPA is not yet certain about exact background concentrations.

150

00:28:44.010 --> 00:29:00.300

Fran Verhalen: Regardless of where the ethylene oxide comes from inhalation of ethylene oxide above certain concentrations may harm or negatively impact a person's health through continuing exposure over one's lifetime.

151

00:29:04.140 --> 00:29:17.100

Fran Verhalen: i'm here tonight to tell you about potential health risks associated with air emissions of ethylene oxide from the Shell technology Center facility in Houston Texas.

152

00:29:18.630 --> 00:29:31.440

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.

153

00:29:33.300 --> 00:29:44.820

Fran Verhalen: When we the scientists at EPA discuss health risk we focus on both short term risk and long term or lifetime risk.

154

00:29:46.950 --> 00:29:55.590

Fran Verhalen: Tonight I am focusing on risks from breathing air toxics you may hear this called inhalation risk.

155

00:29:57.960 --> 00:30:06.930

Fran Verhalen: short term risks, also known as acute risks are those potential risks that impact quickly.

156

00:30:08.490 --> 00:30:18.180

Fran Verhalen: For ethylene oxide, we associate this risk with workers who come into contact with high concentrations of ethylene oxide.

157

00:30:19.980 --> 00:30:29.400

Fran Verhalen: short term inhalation exposure of workers to high levels of ethylene oxide, has resulted in serious physical effects.

158

00:30:30.660 --> 00:30:40.560

Fran Verhalen: For those of you living in the communities near the Shell technology Center this situation or type of risk is not likely or probable.

159

00:30:42.960 --> 00:30:44.490

Fran Verhalen: Long term risks.

160

00:30:45.780 --> 00:30:53.460

Fran Verhalen: or chronic risks are those potential risks that may develop over years of exposure.

161

00:30:55.170 --> 00:31:19.530

Fran Verhalen: Long term effects from breathing in lower concentrations of ethylene oxide for multiple years can but do not always include cancer

irritation of the eyes skin and respiratory passages and effects to the nervous system, such as headaches or memory loss.

162

00:31:21.570 --> 00:31:37.500

Fran Verhalen: The scientists at EPA have determined that a long term or lifetime exposure of about 70 years to ethylene oxide increases the estimated risk of developing certain cancers.

163

00:31:40.410 --> 00:31:46.890

Fran Verhalen: Let me start with an explanation about what the potential increased cancer risk means.

164

00:31:49.170 --> 00:31:52.800

Fran Verhalen: EPA discusses increased cancer risk.

165

00:31:53.850 --> 00:32:01.230

Fran Verhalen: As a comparison of the number of people at risk of developing cancer, for every 1 million cases.

166

00:32:02.370 --> 00:32:08.280

Fran Verhalen: You may hear it as a potential risk of 10 in a million or 100 and a million.

167

00:32:09.870 --> 00:32:15.600

Fran Verhalen: This risk is in addition to the chances of developing cancer for other reasons.

168

00:32:18.510 --> 00:32:30.090

Fran Verhalen: This slide shows the emissions for ethylene oxide in 2014 and 2018 and the associated risk estimates for the shell technology Center.

169

00:32:32.220 --> 00:32:39.540

Fran Verhalen: Using the 2014 emissions inventory information in the national air toxics assessment.

170

00:32:40.710 --> 00:32:52.680

Fran Verhalen: EPA modeled the potential increased cancer risk in the Houston area from ethylene oxide, to be over 290 cases in 1 million.

171

00:32:53.790 --> 00:33:01.170

Fran Verhalen: And EPA determined that the ethylene oxide emissions were from the Shell technology Center facility.

172

00:33:03.660 --> 00:33:22.290

Fran Verhalen: We at the EPA consider access cancer risk that are estimated to be above 100 in 1 million as not sufficiently protective of human health and in need a further evaluation to address this concern.

173

00:33:24.000 --> 00:33:32.970

Fran Verhalen: This is one of the reasons we are here tonight to tell you that there is an increased risk of developing cancer from breathing ethylene oxide.

174

00:33:35.310 --> 00:33:37.260

Fran Verhalen: Using Shell technology centers.

175

00:33:38.790 --> 00:33:49.410

Fran Verhalen: Emission inventory information EPA modeled and found that the potential risk and increased cancer, to be 40 in 1 million.

176

00:33:52.110 --> 00:34:13.980

Fran Verhalen: EPA uses actual annual emissions for a specific year to develop the estimated lifetime risk because the amount of annual emissions changes, based on a facilities use of ethylene oxide, the associated risk continues to change.

177

00:34:15.810 --> 00:34:23.760

Fran Verhalen: For 2020 Shell technology Center showed an increase in emissions compared to the 2018 emissions.

178

00:34:26.100 --> 00:34:39.570

Fran Verhalen: The facility attributes this increase to lower operational efficiency for its primary mission control unit for ethylene oxide due to facility interruptions caused by the coven.

179

00:34:40.590 --> 00:34:41.280

Fran Verhalen: pandemic.

180

00:34:43.590 --> 00:34:53.160

Fran Verhalen: Please note that EPA uses actually missions, for a specific year to develop the estimated lifetime risk.

181

00:34:54.300 --> 00:34:59.820

Fran Verhalen: This risk continues to change as the actual emissions change.

182

00:35:03.210 --> 00:35:13.560

Fran Verhalen: In 2016 EPA published the integrated risk information system or iris assessment for ethylene oxide.

183

00:35:14.700 --> 00:35:26.790

Fran Verhalen: This risk assessment underwent two rounds of public comments and two rounds of peer review by the EPA as scientific advisory board.

184

00:35:28.170 --> 00:35:32.400

Fran Verhalen: EPA stands behind the ethylene oxide iris value.

185

00:35:33.690 --> 00:35:37.440

Fran Verhalen: However, you may hear different views this evening about the risk.

186

00:35:38.580 --> 00:35:48.120

Fran Verhalen: i'm not here tonight to debate the different risk values, but rather to explain the risks based on EPA latest scientific assessment.

187

00:35:49.200 --> 00:35:59.880

Fran Verhalen: suggestions to consider risk values other than the iris will be addressed by EPA at a later date, through our formal agency processes.

188

00:36:02.070 --> 00:36:10.650

Fran Verhalen: In developing our risk number for breathing ethylene oxide EPA chooses to be protective and conservative.

189

00:36:12.390 --> 00:36:38.130

Fran Verhalen: We base the increased estimated risk of possibly contracting cancer on someone breathing air with ethylene oxide in it, at the same concentration every day for 24 hours a day for 70 years, it does not mean that it will take 70 years to develop cancer, it could be less or more time.

190

00:36:40.650 --> 00:36:51.030

Fran Verhalen: We do not expect a one time or short term exposure of low concentrations of ethylene oxide to cause immediate harm to a person's health.

191

00:36:54.150 --> 00:37:11.760

Fran Verhalen: We found that a long term exposure, that is a lifetime, or about 70 years exposure to ethylene oxide increases the potential risk of certain cancers, including non hodgkins lymphoma myeloma.

192

00:37:12.330 --> 00:37:14.460

Fran Verhalen: And lymphocytic leukemia.

193

00:37:16.080 --> 00:37:25.170

Fran Verhalen: Some studies also conclude that long term exposure to ethylene oxide may increase the risk of breast cancer.

194

00:37:28.560 --> 00:37:32.460

Fran Verhalen: The EPA used the human exposure model in.

195

00:37:33.660 --> 00:37:39.450

Fran Verhalen: to perform the risk assessments for sources emitted air air toxic to the air.

196

00:37:40.980 --> 00:37:45.150

Fran Verhalen: This model only addresses the inhalation exposure.

197

00:37:46.260 --> 00:38:05.010

Fran Verhalen: It is designed to predict estimated risks associated with chemicals emitted into the air that is air toxics released into the air that move beyond a facilities property boundary and remain in the facility of the facility.

198

00:38:07.110 --> 00:38:20.760

Fran Verhalen: In this case we use the emissions and facility information from tells Shell technology Center and ran the model to predict the estimated risk from this facility in 2018.

199

00:38:22.530 --> 00:38:32.340

Fran Verhalen: The results of this model provide estimates of potential cancer risk and non cancer hazards for the chemicals evaluated in the model.

200

00:38:33.960 --> 00:38:44.040

Fran Verhalen: The actual health of an individual and one's likelihood of developing cancer may be affected by other factors.

201

00:38:45.210 --> 00:38:52.140

Fran Verhalen: Examples of these factors include how long a person is exposed to an air toxic.

202

00:38:53.640 --> 00:39:00.990

Fran Verhalen: What their regular routines normally are and what air toxic a person is exposed to.

203

00:39:02.940 --> 00:39:14.550

Fran Verhalen: More information about the risk and modeling can be found at [www dot EPA dot govt.](http://www.epa.gov)

204

00:39:15.780 --> 00:39:25.620

Fran Verhalen: Forward slash F E R a forward slash risk dash assessment.

205

00:39:26.730 --> 00:39:28.260

Fran Verhalen: dash and.

206

00:39:29.370 --> 00:39:31.080

Fran Verhalen: dash modeling.

207

00:39:32.220 --> 00:39:33.570

Fran Verhalen: dash human.

208

00:39:34.830 --> 00:39:36.420

Fran Verhalen: dash exposure.

209

00:39:37.560 --> 00:39:38.880

Fran Verhalen: dash model.

210

00:39:40.020 --> 00:39:42.750

Fran Verhalen: dash H E m.

211

00:39:49.560 --> 00:40:03.210

Fran Verhalen: The Shell technology Center is a research laboratory located in West Houston they conduct research on chemicals that improve oil, gas and chemical products, making them more energy efficient.

212

00:40:04.650 --> 00:40:13.980

Fran Verhalen: As EPA began updating information from 2014 to 2020 we initiated discussions with Shell technology Center.

213

00:40:15.180 --> 00:40:23.970

Fran Verhalen: In April EPA sent a letter to Shell technology Center asking for updates on controls of ethylene oxide emissions.

214

00:40:26.760 --> 00:40:44.100

Fran Verhalen: EPA and TC Q held a conference with the facility representatives to discuss the facilities efforts to reduce reported ethylene oxide emissions and the facility provided EPA and TC Q with updated facility information.

215

00:40:49.050 --> 00:41:05.250

Fran Verhalen: The Shell technology Center uses ethylene oxide when testing performance of various chemicals in this case performance of a chemical refers to a wide variety of effects that make a chemical more effective or efficient.

216

00:41:07.650 --> 00:41:15.990

Fran Verhalen: they control their ethylene oxide emissions using two methods, a clean enclosed burner, and the flare.

217

00:41:17.400 --> 00:41:20.550

Fran Verhalen: The burner is the primary control device.

218

00:41:22.140 --> 00:41:26.550

Fran Verhalen: Both controls use heat to destroy the ethylene oxide.

219

00:41:28.050 --> 00:41:35.100

Fran Verhalen: The destruction efficiency for the flare is 99% and for the cleaning clothes burner.

220

00:41:36.210 --> 00:41:39.150

Fran Verhalen: 99 point 99%.

221

00:41:43.440 --> 00:41:45.090

Fran Verhalen: So what does this mean.

222

00:41:47.310 --> 00:41:52.320

Fran Verhalen: The NATO risk evaluation was based on 2014 data.

223

00:41:57.000 --> 00:42:07.050

Fran Verhalen: The reported ethylene oxide emissions released from the Shell technology Center significantly decreased from 2014 to 2019.

224

00:42:09.180 --> 00:42:16.890

Fran Verhalen: The actual emissions were far lower than the estimated values originally reported in the emissions inventory.

225

00:42:19.980 --> 00:42:35.220

Fran Verhalen: EPA also notes that in 2020 during the pandemic that the emissions increased Shell technology Center informed EPA that it was not able to operate its controls efficiently.

226

00:42:35.910 --> 00:42:44.160

Fran Verhalen: Specifically, Shell technology Center was not able to operate the burner, which is the more efficient control device.

227

00:42:44.640 --> 00:43:06.780

Fran Verhalen: As much as they wanted because they did not have the production needed to keep the flow of waste gases high enough for efficient use the facility ended up sending the gases to the flare which still destroys most of them in the emissions, but is not as efficient as the burner.

228

00:43:13.110 --> 00:43:29.370

Fran Verhalen: From 2014 to 2023 emission reductions and or reevaluation of actually mission levels reported ethylene oxide emissions at the Shell technology Center were significantly reduced.

229

00:43:31.020 --> 00:43:38.340

Fran Verhalen: reported 2020 emissions decreased about 45% from the 2014 levels.

230

00:43:40.080 --> 00:43:58.260

Fran Verhalen: This chart shows the ethylene oxide emissions reported in the emissions inventory in orange however Shell technology centers research showed that they had over estimated those values the actual values are shown in blue.

231

00:44:01.440 --> 00:44:17.100

Fran Verhalen: EPA noted the 2020 emissions of ethylene oxide increased to approximately 500 pounds, as can be seen from the emissions trim graph 2020 emissions we're not typical for the side.

232

00:44:18.300 --> 00:44:30.660

Fran Verhalen: As previously mentioned Shell technology Center was not able to efficiently operate the cleaning clothes burner because their production rates were much lower due to.

233

00:44:31.890 --> 00:44:32.820

Fran Verhalen: restrictions.

234

00:44:34.920 --> 00:44:38.310

Fran Verhalen: No further action is recommended at this time.

235

00:44:39.450 --> 00:44:43.770

Fran Verhalen: EPA will monitor the Shell technology centers annually missions.

236

00:44:44.850 --> 00:44:56.130

Fran Verhalen: on an annual basis, you can check on emission inventories and toxic risk inventories from the Shell technology Center and other facilities of interest.

237

00:44:59.640 --> 00:45:08.070

Fran Verhalen: In the past, Shell technology Center has reported its emissions by assuming all the gases flow to the flare.

238

00:45:09.570 --> 00:45:15.060

Fran Verhalen: flare is a less effective control device compared to the clean and closed burner.

239

00:45:16.110 --> 00:45:25.530

Fran Verhalen: This calculation was more conservative and resulted in more ethylene oxide emissions initially reported than actually occurred.

240

00:45:27.000 --> 00:45:51.120

Fran Verhalen: Shell technology began to calculate separate emissions for each control the cleaning closed burner, and the flare this more accurately documents, the actual ethylene oxide emissions for this facility, reducing Shell technology centers reported ethylene oxide emissions significantly.

241

00:45:57.480 --> 00:46:06.600

Fran Verhalen: EPA has been reviewing our regulations that regulate processes that use ethylene oxide and produce emissions.

242

00:46:07.980 --> 00:46:18.900

Fran Verhalen: And may 2020 EPA finalized a revision to the miscellaneous organic chemical manufacturing nish Apps for the Mon room.

243

00:46:20.250 --> 00:46:31.020

Fran Verhalen: In June of 2021 EPA announced that we intend to reconsider certain aspects of the 2020 rule.

244

00:46:32.160 --> 00:46:46.800

Fran Verhalen: In response to five administrative petitions, the agency granted reconsideration on the following aspects of the final rule to provide an additional opportunity for public comments.

245

00:46:48.900 --> 00:47:10.890

Fran Verhalen: First, the use of EPA as iris value for ethylene oxide in assessing cancer risk for the Mon source category, and second, the use of the Texas Commission on environmental quality risk value for ethylene oxide, as an alternative risk value to EPA iris value.

246

00:47:12.150 --> 00:47:22.320

Fran Verhalen: The Agency will issue a Federal Register notice at a future date initiating public review and comment on the issues listed.

247

00:47:23.550 --> 00:47:37.620

Fran Verhalen: EPA is continuing to review all issues raised in the petitions for reconsideration and may choose to initiate reconsideration of additional issues in the future.

248

00:47:40.290 --> 00:47:52.020

Fran Verhalen: EPA is currently preparing revisions to the ethylene oxide emitting commercial sterilization facilities and hospital sterilized years.

249

00:47:52.890 --> 00:48:18.120

Fran Verhalen: We expect to propose these rules for public comment in the coming months, the final rules for these two regulations are expected to be published by the end of 2022 for the commercial sterilized years and the end of 2023 for the hospital stabilizers.

250

00:48:20.460 --> 00:48:27.360

Fran Verhalen: Reviews for three more rules that apply to ethylene oxide production have been initiated.

251

00:48:28.440 --> 00:48:50.430

Fran Verhalen: EPA is scheduled to finalize revisions as appropriate to the poly ether polyphenols production rule the synthetic organic chemical manufacturing industry rule and the organic liquids distribution non gasoline rules in 2024.

252

00:48:52.500 --> 00:49:05.580

Fran Verhalen: any potential revisions would be proposed for public comment at a future date, and there are ethylene oxide emitting facilities in Texas that are currently regulated by these rules.

253

00:49:10.230 --> 00:49:16.500

Fran Verhalen: Shell technology Center has worked to control ethylene oxide emissions from their facility.

254

00:49:18.180 --> 00:49:34.770

Fran Verhalen: there's a reduced estimated cancer risk based on emissions of 40 cases in 1 million, which is below the EPA guideline for estimated cancer risk due to facility emissions.

255

00:49:36.450 --> 00:49:40.920

Fran Verhalen: I remind you that EPA modeling of estimated risks is very conservative.

256

00:49:42.000 --> 00:49:51.840

Fran Verhalen: It assumes a continuous 24 hours per day inhalation exposure to ethylene oxide for lifetime of 70 years.

257

00:49:53.220 --> 00:50:11.820

Fran Verhalen: And more accurate emission inventory numbers have revealed that ethylene oxide emissions at the Shell technology Center were actually below those previously reported no further action is recommended at this time.

258

00:50:13.560 --> 00:50:25.050

Fran Verhalen: Well, no further action is recommended at this time EPA will continue to work with Shell technology to track and monitor the emissions of ethylene oxide.

259

00:50:27.000 --> 00:50:36.600

Fran Verhalen: Because of the reduced risk from this facility, we intend to focus our next efforts on those facilities that have greater risk.

260

00:50:40.860 --> 00:50:47.730

Fran Verhalen: We have provided a web link, for your convenience to look up additional information on ethylene oxide.

261

00:50:48.840 --> 00:51:03.030

Fran Verhalen: This link is found at [www dot EPA dot GEO the forward slash ethylene dash oxide](http://www.epa.gov/geos/ethylene-oxide).

262

00:51:05.340 --> 00:51:11.850

Fran Verhalen: Also EPA hosted an introductory webinar on ethylene oxide in May of this year.

263

00:51:12.900 --> 00:51:23.070

Fran Verhalen: This information can be found at [www dot EPA dot G pov forward slash la](http://www.epa.gov/forward/sla).

264

00:51:24.090 --> 00:51:32.040

Fran Verhalen: Forward slash air dash issues dash Louisiana.

265

00:51:35.460 --> 00:51:50.340

Fran Verhalen: EPA has also provided resources for additional information about air talk sets and regulations for air toxics some of these topics include the list of the air toxic pollutants.

266

00:51:51.420 --> 00:51:54.930

Fran Verhalen: an overview of our risk and technology Program.

267

00:51:56.340 --> 00:51:59.850

Fran Verhalen: And the plain English guide to the Clean Air act.

268

00:52:00.990 --> 00:52:05.520

Fran Verhalen: Thank you for your time this evening Deborah back to you.

269

00:52:10.860 --> 00:52:13.230

Debora Browning: Thank you fran for your presentation.

270

00:52:18.090 --> 00:52:30.540

Debora Browning: API would like to introduce our next presenters Dr latrines babin director of the Harris county pollution control and Kristen Lee resident of laporte.

271

00:52:31.770 --> 00:52:45.120

Debora Browning: We look forward to hearing more from these Community advocates on their Community concerns about ethylene oxide emissions, first we will hear from Dr babin followed by Kristen Lee.

272

00:52:46.170 --> 00:52:49.020

Debora Browning: Dr babin if you'd like to unmute your microphone.

273

00:53:20.490 --> 00:53:21.300

L. Babin: Can you hear me.

274

00:53:21.720 --> 00:53:23.460

Debora Browning: Yes, I hear you Hello.

275

00:53:23.640 --> 00:53:24.780

L. Babin: hello, how are you.

276

00:53:25.440 --> 00:53:32.190

L. Babin: Welcome, so I just had a few questions, I know that there's some complexities in the.

277

00:53:33.450 --> 00:53:40.200

L. Babin: The sampling and the analysis of ethylene oxide, but I did have a couple of questions regarding the process that.

278

00:53:41.220 --> 00:53:51.480

L. Babin: she'll used to do their their sampling I just like to get just a little bit of understanding of how they collected this samples, and whether they they recognize any.

279

00:53:53.340 --> 00:54:03.090

L. Babin: Development of additional complexities and within the canisters that they sampled and also if they had a linkage to where their.

280

00:54:04.350 --> 00:54:10.410

L. Babin: Their facility control information might be found so that we can look at some of that additional information.

281

00:54:17.610 --> 00:54:28.830

Gloria Vaughn: This is Gloria bond, and, before answering your question we're wondering if you have a statement that you'd like to make, or if also Christian would.

282

00:54:29.970 --> 00:54:34.590

Gloria Vaughn: like to make a statement, and once those are done, we would be happy to answer any of your questions.

283

00:54:36.240 --> 00:54:41.190

L. Babin: Turn we do recognize that as an oxide is a very highly.

284

00:54:42.510 --> 00:55:02.250

L. Babin: carcinogenic and compound and we are concerned about the residents, not just in the area of this particular area, but also where there may be cumulative effects from other other communities that may be within the proximal area of the show facility.

285

00:55:03.330 --> 00:55:13.380

L. Babin: We know that there is evidence in human subjects that exposure, causes a risk of lymphoid cancer and breast cancer and females.

286

00:55:14.130 --> 00:55:30.240

L. Babin: So we are interested in the the concentration of the levels found in this area and I will, I will end, at this point, because I do have a couple of other questions, and I do know that you're not ready for questions but um Thank you.

287

00:55:32.040 --> 00:55:35.520

Debora Browning: Dr babin if you could put your questions in the chat box.

288

00:55:35.610 --> 00:55:35.880

L. Babin: We should.

289

00:55:35.910 --> 00:55:41.910

Debora Browning: Definitely answer those hopefully get those addressed whenever we get to the Q amp a session.

290

00:55:43.290 --> 00:55:44.460

L. Babin: Sure, thank you.

291

00:55:44.880 --> 00:55:45.810

Debora Browning: Thank you.

292

00:55:49.110 --> 00:55:55.560

Debora Browning: Christian leader personally if you'd like to make some comments at this time, you have the floor if you'd like to open up your microphone.

293

00:55:56.340 --> 00:55:57.570

Kristen Lee: Thank you, can you hear me now.

294

00:55:58.410 --> 00:55:59.520

Debora Browning: Yes, absolutely.

295

00:55:59.940 --> 00:56:14.970

Kristen Lee: Okay, great first my name is kristin Lee and i'm a resident of laporte i'm also employed by Harris county Commissioner precinct to Adrian Garcia, and I just wanted to clarify because I see so many of my colleagues and.

296

00:56:15.570 --> 00:56:25.680

Kristen Lee: folks I work with frequently on this call that in for the purposes of this meeting i'm speaking on my own behalf and not on behalf of Commissioners yeah.

297

00:56:27.420 --> 00:56:38.220

Kristen Lee: And i'm a longtime resident of the city of port it's a smaller town on the Far East side of Harris county that abuts the industrial cord or along the Houston ship channel.

298

00:56:39.270 --> 00:56:48.300

Kristen Lee: And I just want to thank everybody for this opportunity to speak tonight, I have just a few points i'd like to make about the focus and structure of this evening's meeting.

299

00:56:48.750 --> 00:56:57.840

Kristen Lee: Well, I applaud the EPA for embarking on this Community outreach initiative and I understand that some Stakeholders were likely engaged in the planning process.

300

00:56:58.260 --> 00:57:07.020

Kristen Lee: There remains much room for improvement in this area ethylene oxide emissions and air quality in general are great concern to our Community.

301

00:57:07.800 --> 00:57:23.760

Kristen Lee: And with more robust and inclusive effort to engage, those of us most impacted by ethylene oxide, I know that the EPA will receive excellent substantive useful feedback from the historically marginalized communities this effort is meant to serve.

302

00:57:25.290 --> 00:57:36.750

Kristen Lee: and support and in many of the neighboring communities near the Channel, we have a long and thoroughly researched history of a higher risk and higher rates of cancer than in most other places in a state.

303

00:57:37.410 --> 00:57:44.910

Kristen Lee: That my census tract where I live, boasts a higher total cancer risk than that of the Shell technology Center.

304

00:57:45.660 --> 00:57:59.820

Kristen Lee: That has been discussed tonight, according to the 2014 national air toxics assessment and also my camp my census tract is continuous with several others that also have higher than average or acceptable risk according to that assessment.

305

00:58:00.840 --> 00:58:13.140

Kristen Lee: And to compound the issue, the Far East side of Harris county as a healthcare desert, making it difficult to get the specialist care folks need to have the best shot at addressing the adverse impacts.

306

00:58:14.700 --> 00:58:16.110

Kristen Lee: That we're talking about tonight.

307

00:58:17.400 --> 00:58:27.720

Kristen Lee: it's safe to say that we're eager to know more about the impact of ethylene oxide on our health and quality of life, particularly based on the.

308

00:58:28.290 --> 00:58:42.090

Kristen Lee: The persistent long term exposure the residents experience so In summary, I just encouraged the EPA to double back on its efforts to engage a broader community in this effort.

309

00:58:42.600 --> 00:58:57.750

Kristen Lee: you'll be hard pressed to find communities more impacted or engaged than those on the east side of Harris county and we stand a greatly benefit from the work you're doing in this area, I was pleased to hear miskin ver halen.

310

00:58:59.040 --> 00:59:02.220

Kristen Lee: say that the EPA intends to shift its focus.

311

00:59:03.690 --> 00:59:14.190

Kristen Lee: Now that they've finished the study of the show of technology Center and I look forward to the additional engagement that will follow, thank you.

312

00:59:19.170 --> 00:59:36.720

Debora Browning: Thank you, Miss Lee and thank you, Dr babin we hear your concerns and we appreciate it, and just as a reminder, if you do have additional questions, please feel free to put them in the chat box if you'd like to remain anonymous again, you can use the direct messaging to genetic coats.

313

00:59:40.230 --> 00:59:41.490

Debora Browning: Next slide please.

314

00:59:45.390 --> 00:59:55.770

Debora Browning: we're at the question and answer portion of our meeting your crop comments and questions again are very important to us, an extra time has been included to hear from the Community.

315

00:59:56.340 --> 01:00:04.980

Debora Browning: As mentioned in the bottom at the meeting and just recently, you can still post a question in the chat box using the button at the bottom of your screen.

316

01:00:06.120 --> 01:00:15.300

Debora Browning: We want to hear from as many Community Members as possible, so we ask that you limit your question to two minutes in order to address all the questions.

317

01:00:16.200 --> 01:00:23.280

Debora Browning: As a reminder, this meeting is focused on hear from the citizens in the Houston area near the Shell technology Center.

318

01:00:23.640 --> 01:00:38.790

Debora Browning: Any questions related to industry permits any enforcement, including inspections and surveillances or legal actions or about other areas or facilities will not be addressed during this Community meeting.

319

01:00:39.330 --> 01:00:52.980

Debora Browning: You may send these questions or other ethylene oxide questions now comments to the EPA region six email box at our six ethylene oxide@epa.gov.

320

01:00:54.300 --> 01:00:57.390

Debora Browning: This link will be posted shortly in the chat box.

321

01:00:58.830 --> 01:01:15.750

Debora Browning: EPA will post a list of questions and answers on the EPA region six website listen on the slide and again later in the chat box these web links were included in the announcements and will be forwarded to the States afterwards for distribution.

322

01:01:16.800 --> 01:01:24.900

Debora Browning: My API calling genetic codes will assist me with Q amp a session I will check with genetic periodically for our hand raised check.

323

01:01:25.650 --> 01:01:31.860

Debora Browning: Direct messaging chat box questions and to see if our dial in participants have any questions.

324

01:01:32.820 --> 01:01:53.310

Debora Browning: For those dialing in on the phone please mute your phone by pressing star six there will be an opportunity for phone attendees to ask a question during the session when recognize to speak, you will unmute your line by pressing star six please identify yourself far to asking your question.

325

01:02:00.630 --> 01:02:17.010

Debora Browning: fran, the first question comes from corey Williams and he would like to know why do cancer risk rates vary from year to year, based on a single year's emission right if cancer risk is cumulative over a lifetime.

326

01:02:21.060 --> 01:02:22.590

Fran Verhalen: Thank you for the question.

327

01:02:25.980 --> 01:02:28.650

Fran Verhalen: In order to calculate.

328

01:02:30.090 --> 01:02:39.120

Fran Verhalen: A risk or model, the risk that we have to set some parameters and in order to do that we set an annual rate.

329

01:02:40.590 --> 01:02:58.110

Fran Verhalen: So that we can estimate what the risk would be, and because the concentrations change from year to year, then the risk associated with those parameters change from year to year um.

330

01:02:59.640 --> 01:03:01.020

Fran Verhalen: I understand.

331

01:03:04.800 --> 01:03:13.530

Fran Verhalen: What you're saying about cumulative risk because it's then over a longer period of time that cumulative risk.

332

01:03:15.810 --> 01:03:17.160

Fran Verhalen: But these are.

333

01:03:18.240 --> 01:03:20.820

Fran Verhalen: What we call point in time.

334

01:03:21.870 --> 01:03:27.960

Fran Verhalen: Calculation so we take you know, a set of information.

335

01:03:29.520 --> 01:03:36.330

Fran Verhalen: To run our models so that we can just perform the task and.

336

01:03:39.000 --> 01:03:40.950

Fran Verhalen: So I think i'm going to stop there, thank you.

337

01:03:49.680 --> 01:03:51.480

Debora Browning: fran our next question.

338

01:03:54.510 --> 01:03:57.360

Debora Browning: Excuse me comes from Naomi yoder.

339

01:03:58.770 --> 01:04:06.390

Debora Browning: Why was the plan allowed to continue operations when it wasn't efficiently eliminating eat to emissions in.

340

01:04:08.100 --> 01:04:16.710

Debora Browning: Would they wouldn't wouldn't that be grounds for saying Shell would need to suspend operations until the situation could be remedied.

341

01:04:20.940 --> 01:04:30.390

Fran Verhalen: The, thank you for the question and not not necessarily would have facility need to suspend their operations in this case.

342

01:04:31.980 --> 01:04:48.150

Fran Verhalen: A Shell was still sending their waste gases to a control unit, it was a less efficient control unit, but it was still efficient, and so they were still working to control.

343

01:04:49.740 --> 01:04:58.950

Fran Verhalen: Their emissions and that still allows them to operate that's part it's within the.

344

01:05:00.510 --> 01:05:06.540

Fran Verhalen: The regulatory aspect for shells facility and.

345

01:05:07.650 --> 01:05:09.450

Fran Verhalen: That would be an allowable up or.

346

01:05:10.650 --> 01:05:13.770

Fran Verhalen: parameter operating parameter sorry.

347

01:05:15.390 --> 01:05:15.750

Fran Verhalen: Deborah.

348

01:05:18.780 --> 01:05:36.240

Debora Browning: Thanks fran our next question comes from corey Williams and he'd like to know, has the actual efficiency of the burner and flair been tested and verified by EPA to match the nominal admission rate described by shell.

349

01:05:38.880 --> 01:05:42.420

Fran Verhalen: Oh, thank you for the question i'm EPA.

350

01:05:43.980 --> 01:05:56.220

Fran Verhalen: Normally, does not test the efficiency rates, we do not run and operate the tests ourselves and that information is provided by the facility, the facility.

351

01:05:57.780 --> 01:06:06.480

Fran Verhalen: hires a third party company to run the tests for them and then that information is provided to the State and EPA.

352

01:06:08.190 --> 01:06:10.020

Fran Verhalen: In accordance with the regulations.

353

01:06:11.430 --> 01:06:11.940

Fran Verhalen: So.

354

01:06:13.980 --> 01:06:16.830

Fran Verhalen: i'm sorry, there were, what was the second part of that question.

355

01:06:20.160 --> 01:06:20.700

Fran Verhalen: If you could.

356

01:06:21.210 --> 01:06:23.010

Debora Browning: Sure um.

357

01:06:24.210 --> 01:06:26.850

Fran Verhalen: Can you hear me I can okay.

358

01:06:27.210 --> 01:06:28.920

Debora Browning: um let me get back to it.

359

01:06:30.630 --> 01:06:34.050

Debora Browning: He asked if they actually efficiency of the burner fleur had been tested.

360

01:06:36.090 --> 01:06:39.420

Debora Browning: to match the nominal emission right spot Michele.

361

01:06:40.440 --> 01:06:42.510

Fran Verhalen: Okay, so um.

362

01:06:44.670 --> 01:06:55.530

Fran Verhalen: The testing would be done by Shell, and then they would provide that information what the state and EPA will do is go back and review that information and.

363

01:06:56.310 --> 01:07:09.150

Fran Verhalen: check to see that the tests are operated properly and correctly and that the information is provided in an appropriate manner it's an all the information is there, so.

364

01:07:15.480 --> 01:07:23.040

Debora Browning: Tonight i'd like to check base with you to see if there's any hand resin raises or any direct messaging that you've received.

365

01:07:23.730 --> 01:07:31.560

Janetta Coats: No debra Thank you at this time, I do not see any hand raised or direct messages, thank you.

366

01:07:36.450 --> 01:07:39.360

Fran Verhalen: Deborah did we get Dr bevins questions again.

367

01:07:42.420 --> 01:07:47.010

Debora Browning: i've seen any yet in the chat box.

368

01:07:48.810 --> 01:07:55.740

Debora Browning: It Dr baboons if you'd like to put your questions in the chat box, we definitely will would like to address them.

369

01:07:57.750 --> 01:08:03.990

Gloria Vaughn: Deborah Yes, this is this is Gloria I have received a direct message me I read it.

370

01:08:04.410 --> 01:08:05.700

Debora Browning: Absolutely Gloria.

371

01:08:06.780 --> 01:08:21.120

Gloria Vaughn: Can you please give us the data for the year 2020 as you did, for 2014 and 2018 specifically the number of times released, and the number of cancer cases for the year 2020.

372

01:08:22.860 --> 01:08:32.760

Fran Verhalen: And the risk number for 2020 has not been modeled, yet we will be modeling that gosh.

373

01:08:33.960 --> 01:08:37.440

Fran Verhalen: We have to get the information in and.

374

01:08:38.760 --> 01:08:41.760

Fran Verhalen: Pardon me, and it goes through a quality assurance check.

375

01:08:43.350 --> 01:08:49.110

Fran Verhalen: Before we modeled that information so for 2020 I won't have that the.

376

01:08:51.570 --> 01:08:53.550

Fran Verhalen: Deborah i'm going to scroll back here for a minute.

377

01:08:55.740 --> 01:09:01.380

Fran Verhalen: So for the emissions right would be just over 500 pounds.

378

01:09:02.880 --> 01:09:03.990

Fran Verhalen: In 2020.

379

01:09:05.040 --> 01:09:07.770

Fran Verhalen: So that would be the emission.

380

01:09:09.330 --> 01:09:10.710

Fran Verhalen: volume that was.

381

01:09:11.820 --> 01:09:18.960

Fran Verhalen: emitted during 2020 I don't have the associated risk with that, though, yet that just hadn't been calculated.

382

01:09:22.890 --> 01:09:25.410

Fran Verhalen: Does that address a question Gloria.

383

01:09:26.760 --> 01:09:28.770

Gloria Vaughn: um I would assume yes.

384

01:09:30.330 --> 01:09:38.910

Gloria Vaughn: I also and I don't know if you've seen this but Dr babin was driving so she could not put her question in the chat.

385

01:09:38.910 --> 01:09:43.440

Gloria Vaughn: box so, is it possible to let her just ask her questions.

386

01:09:44.400 --> 01:09:44.820

Yes.

387

01:09:47.100 --> 01:09:48.960

Gloria Vaughn: Dr babin if you.

388

01:09:50.700 --> 01:09:52.980

Gloria Vaughn: Can would you just ask your questions.

389

01:09:54.240 --> 01:09:55.650

L. Babin: Thank you, I pulled over.

390

01:09:57.150 --> 01:10:06.390

L. Babin: I typed in I understand there's some complexity in speaking with a couple of other people from the EPA on the sampling of ethylene oxide due to.

391

01:10:06.930 --> 01:10:18.930

L. Babin: Some growth of i'm going to say organic ethylene oxide in the soma canisters so how did you conduct your sampling and were you able to do that without extracting organically.

392

01:10:20.400 --> 01:10:22.710

L. Babin: Wrong contaminants.

393

01:10:24.240 --> 01:10:30.210

Fran Verhalen: And this would be across the nation we are.

394

01:10:31.410 --> 01:10:36.150

Fran Verhalen: We used the summa canisters to collect samples.

395

01:10:37.260 --> 01:10:40.260

Fran Verhalen: And ran them, we are not.

396

01:10:41.850 --> 01:10:59.910

Fran Verhalen: 100% confident that we do not have cross contamination, one of the concerns we have is the concentrations are very low in the samples there near the machine detection limit if they're near what we can actually.

397

01:11:01.140 --> 01:11:12.270

Fran Verhalen: and accurately say exists and so that is hampering our ability to be confident that the numbers are.

398

01:11:14.100 --> 01:11:19.350

Fran Verhalen: accurate and precise so we may have some.

399

01:11:20.820 --> 01:11:25.920

Fran Verhalen: Growth in the in the canisters we don't know we are studying that and that is one of the.

400

01:11:26.940 --> 01:11:29.490

Fran Verhalen: Research projects that's ongoing at this time.

401

01:11:30.330 --> 01:11:40.710

L. Babin: Okay, and for the EPA, how did you create the risk assessment numbers that you're sharing and can you publicly provide that risk assessment background information.

402

01:11:42.510 --> 01:11:43.740

Fran Verhalen: um the.

403

01:11:45.990 --> 01:11:50.520

Fran Verhalen: Information is posted through the national air toxics associate.

404

01:11:51.810 --> 01:11:55.530

Fran Verhalen: Assessment mineta and.

405

01:11:56.850 --> 01:12:02.730

Fran Verhalen: That information is posted online will make sure that when we.

406

01:12:04.590 --> 01:12:08.070

Fran Verhalen: Post the the question and answer from this will add the.

407

01:12:09.240 --> 01:12:11.400

Fran Verhalen: The web link for for data.

408

01:12:13.650 --> 01:12:13.860

Fran Verhalen: The.

409

01:12:15.210 --> 01:12:20.730

Fran Verhalen: Risk assessment was done, specifically for.

410

01:12:21.810 --> 01:12:26.190

Fran Verhalen: a select group of facilities and I don't know if that's published yet.

411

01:12:27.600 --> 01:12:33.090

Fran Verhalen: And I can check with our technical staff to see if we can.

412

01:12:35.580 --> 01:12:41.730

Fran Verhalen: Get you the information you need, so let me check into that and we'll we'll get back to you on that.

413

01:12:42.420 --> 01:12:47.820

L. Babin: And one last question, I believe I heard, I heard you say that there could have been some some.

414

01:12:49.620 --> 01:13:04.410

L. Babin: accumulation of some ethylene oxide from another source from you know, can you tell me if there's another source that you can add that you identify that may be a contributor to what you, you did observe.

415

01:13:05.430 --> 01:13:06.840

Fran Verhalen: In the background sampling.

416

01:13:06.870 --> 01:13:25.800

Fran Verhalen: Yes, we're not sure of the sources that may have contributed, it would not be a fixed source, we do know that ethylene oxide can occur from a breakdown of mobile sources so from cars and trucks.

417

01:13:26.730 --> 01:13:43.830

Fran Verhalen: And we're trying to determine how much that really is, it may be a tiny amount it may be more than we think, and that is one of the research lines that we're looking at also so we don't know about that some other things that.

418

01:13:45.840 --> 01:13:47.490

Fran Verhalen: we're going to be looking at.

419

01:13:48.930 --> 01:14:09.480

Fran Verhalen: Is other potential sources small sources that we don't know about you know, is there a hospital nearby is there a medical facility nearby that just has some ethylene oxide, you know in their product or you know they're sterilized equipment that they receive.

420

01:14:10.590 --> 01:14:23.310

Fran Verhalen: One of the things that popped up we're tattoo parlors apparently some tattoo parlors will sterilize the needles using ethylene oxide so there's a.

421

01:14:25.230 --> 01:14:33.000

Fran Verhalen: industries that we don't think about all the time that may be contributing the small amounts that were actually picking up.

422

01:14:34.350 --> 01:14:38.310

Fran Verhalen: or it could be as, as you mentioned, you know some sort of.

423

01:14:39.540 --> 01:14:45.690

Fran Verhalen: write down growth or growth for ethylene oxide, which we're looking at all these possibilities at this time.

424

01:14:45.960 --> 01:14:54.780

L. Babin: But, would it be safe to say that that that would be a probably a negligible amount, and the majority of it would have been source facility source.

425

01:14:56.280 --> 01:14:59.370

Fran Verhalen: We don't know yet we don't know yet we're we're looking.

426

01:15:00.510 --> 01:15:08.580

Fran Verhalen: And one of the concerns we have is that, regardless of the source, if the concentration is i'm.

427

01:15:10.380 --> 01:15:15.270

Fran Verhalen: at a level that we find is is not.

428

01:15:17.820 --> 01:15:21.660

Fran Verhalen: protective of human health, then we have to go and find the source.

429

01:15:22.320 --> 01:15:34.110

Fran Verhalen: we're going to have to find it and so we're we are working with it and trying to understand what's going on it's still a problem for us right now, and until we figure out where it's coming from then we'll continue to look.

430

01:15:35.370 --> 01:15:36.000

L. Babin: All right, thank you.

431

01:15:36.750 --> 01:15:39.240

Fran Verhalen: you're welcome, thank you for the questions.

432

01:15:40.590 --> 01:15:50.220

Debora Browning: Thank you, Dr babin I might just wanted to mention that can sponsor for the general manager of the shelf technology Center there in Houston he posted the.

433

01:15:51.480 --> 01:16:05.730

Debora Browning: link, which is ww.shell.us backslash Shell technology Center Houston if you have questions you can send those directly to.

434

01:16:06.510 --> 01:16:21.090

Debora Browning: The Shell technology Center, so it is posted in the chat box so going to our next question fran is from Anthony de souza and hope I pronounced the name correctly.

435

01:16:22.050 --> 01:16:34.980

Debora Browning: The question is, what did the facility do to reduce emissions, was it just production related decreases or is there any prominent admission control change implemented at the facility.

436

01:16:38.430 --> 01:16:39.180

Fran Verhalen: There were.

437

01:16:42.090 --> 01:16:52.560

Fran Verhalen: A lot of the reductions came from improving their calculations and their their estimates, but they did.

438

01:16:54.450 --> 01:17:04.530

Fran Verhalen: Work on getting more of their emissions to go primarily to the clean and closed burner, with the exception of 2020.

439

01:17:06.090 --> 01:17:11.160

Fran Verhalen: So that they had a higher efficiency and destruction efficiency.

440

01:17:12.660 --> 01:17:32.400

Fran Verhalen: The other thing that Shell technology has told me that they're working on is substituting other chemicals for ethylene oxide, since this is a research facility they're looking at other chemicals that would have similar properties that would.

441

01:17:33.840 --> 01:17:37.470

Fran Verhalen: produce this same effects is ethylene oxide.

442

01:17:38.910 --> 01:17:52.320

Fran Verhalen: so that they can actually stop using it so they're looking at ways to substitute this chemical in their their products so they're they're working on different things so part of it is.

443

01:17:53.370 --> 01:18:09.930

Fran Verhalen: A difference in the control part of it is correcting calculations and being more precise in there, the number that they're using in their calculations and then the third is actual reduction of the amount of ethylene oxide that they use.

444

01:18:18.000 --> 01:18:19.410

Debora Browning: For and I have another.

445

01:18:20.610 --> 01:18:31.890

Debora Browning: it's really probably more a comment it's from Lola and Kevin beard and it's they wrote the sea 14 call and see 12 ratio is up when.

446

01:18:32.400 --> 01:18:53.820

Debora Browning: He to would help uncover the source, I personally measured the sea 14 see 12 ratio in ECE met as mccririck CEO over 40 years ago i'd like to thank Shell for posting their see their St SS on their website, unlike some communities.

447

01:18:56.640 --> 01:19:03.750

Fran Verhalen: Well, and you know it's great the cellos able to post that information and that it's useful.

448

01:19:07.590 --> 01:19:13.410

Debora Browning: I want to touch base with genetic and to see if we have any hand houses or any direct messages.

449

01:19:14.100 --> 01:19:22.140

Janetta Coats: No Deborah at this time, we do not have any hand raised or direct messages there goes one, there is a.

450

01:19:23.340 --> 01:19:30.510

Janetta Coats: You bet if you would like to star six and unmute your MIC and ask you a question, we would appreciate it.

451

01:19:32.430 --> 01:19:33.000

Janetta Coats: Thank you.

452

01:19:40.920 --> 01:19:41.940

Yvette Arellano: hi good afternoon.

453

01:19:42.510 --> 01:19:43.080

Fran Verhalen: My name is.

454

01:19:44.400 --> 01:19:54.150

Yvette Arellano: And I am the director with fence line watch where an environmental justice organization focused on stopping multi generational harm example.

455

01:19:54.570 --> 01:20:07.680

Yvette Arellano: The mute energetic effects associated with ethylene oxide and my question was are there issues or harms with ethylene oxide associated to just air.

456

01:20:08.310 --> 01:20:23.040

Yvette Arellano: Or is it is there a potential for water contamination, the reason I ask is because Shell technologies is located right above the brace by you park that is used by the Community, frequently.

457

01:20:23.850 --> 01:20:31.500

Yvette Arellano: And then the second one, I noticed, you had a question in Spanish is is there an AC filter that can protect.

458

01:20:32.970 --> 01:20:38.820

Yvette Arellano: Individuals inside of their home from ethylene oxide, or is it going to go inside regardless.

459

01:20:41.400 --> 01:20:43.920

Fran Verhalen: um, thank you for the question those.

460

01:20:44.940 --> 01:20:50.580

Fran Verhalen: Very good questions um let me, let me start with the water question.

461

01:20:53.970 --> 01:20:56.130

Fran Verhalen: I mean we're here tonight because it's.

462

01:20:57.210 --> 01:20:57.990

Fran Verhalen: When we.

463

01:20:59.430 --> 01:21:15.570

Fran Verhalen: evaluated the risk, it was for inhalation but ethylene oxide breaks down fairly rapidly in water, so it is not a persistent chemical in water, it will break down pretty quickly with water so.

464

01:21:16.530 --> 01:21:37.530

Fran Verhalen: we're not seeing that that is an issue and we don't see the same risk for for water ethylene oxide in water, because it seems to break down very rapidly i'm in your second question, for an air conditioner filter that would.

465

01:21:38.760 --> 01:21:41.130

Fran Verhalen: capture ethylene oxide.

466

01:21:44.100 --> 01:21:52.620

Fran Verhalen: In talking with our technical experts, I understand that some of the high efficiency.

467

01:21:53.760 --> 01:22:00.180

Fran Verhalen: Carbon filtration units can trap ethylene oxide.

468

01:22:01.980 --> 01:22:08.160

Fran Verhalen: they're not always affordable for people there.

469

01:22:09.690 --> 01:22:15.780

Fran Verhalen: It will it's usually not affordable for residential use um.

470

01:22:16.950 --> 01:22:20.520

Fran Verhalen: ethylene oxide as an air toxic is a very small.

471

01:22:21.960 --> 01:22:26.610

Fran Verhalen: molecule that would pass through most air conditioning filters.

472

01:22:27.840 --> 01:22:35.040

Fran Verhalen: And so we have not found much, but some of the more expensive carbon.

473

01:22:36.600 --> 01:22:42.120

Fran Verhalen: Carbon pipe filters could potentially do that they're usually in.

474

01:22:43.200 --> 01:22:45.330

Fran Verhalen: industrial and commercial operations.

475

01:22:47.250 --> 01:22:58.290

Fran Verhalen: Sorry, I don't have a better better answer for you on that one but, thus far, we don't have a commercial application for residential air conditioning filters that would work.

476

01:23:01.230 --> 01:23:02.460

Fran Verhalen: But thank you for the questions.

477

01:23:07.500 --> 01:23:13.740

Debora Browning: I asked you also for translating the Spanish question for us that's most appreciative.

478

01:23:18.360 --> 01:23:23.160

Debora Browning: Our next question friend comes from BSC magazine.

479

01:23:24.420 --> 01:23:35.460

Debora Browning: And it's brad Martin he lives in league city and he's read some data that indicates that the new EPA RS value of one part per trillion.

480

01:23:36.030 --> 01:23:42.930

Debora Browning: PPT is well below background concentrations found in our environment from natural sources.

481

01:23:43.590 --> 01:24:07.470

Debora Browning: He also read that TC eq released in effect screening level esl for ethylene oxide of 2.4 parts per billion ppb which is significantly different than EPA value his question is can EPA or TC eq help explain why there is such a difference in these two values.

482

01:24:09.510 --> 01:24:11.070

Fran Verhalen: i'm sure.

483

01:24:13.080 --> 01:24:13.560

Fran Verhalen: there's.

484

01:24:14.940 --> 01:24:20.640

Fran Verhalen: Two two main differences between the way EPA evaluated the information and.

485

01:24:21.930 --> 01:24:24.150

Fran Verhalen: PC Q evaluated the information.

486

01:24:26.220 --> 01:24:30.660

Fran Verhalen: Basically, we used a different model.

487

01:24:31.890 --> 01:24:47.640

Fran Verhalen: In our risk calculation than TC EPA used a different risk model in our risk calculation then TC eq and then secondly EPA included.

488

01:24:49.800 --> 01:25:00.510

Fran Verhalen: Information associated with breast cancer studies and TC Q did not Dr honeycutt would would you like to say a few words also.

489

01:25:01.770 --> 01:25:04.740

Michael Honeycutt: yeah yeah sure fran you've described it.

490

01:25:06.240 --> 01:25:26.280

Michael Honeycutt: API poster value in 2016 and we published artists in 2024 years later, so we had the benefit of more information and several agencies have looked at breast cancer data, then concluded that it's not a conclusive link between breast cancer in humans and ethylene oxide.

491

01:25:27.840 --> 01:25:35.460

Michael Honeycutt: So EPA is just more conservative than ours, but they're you know they're both conservative values.

492

01:25:38.310 --> 01:25:38.730

Fran Verhalen: Thank you.

493

01:25:46.620 --> 01:25:47.460

Debora Browning: Thank you, Dr hynek.

494

01:25:48.480 --> 01:25:56.520

Debora Browning: um next question comes from corey Williams and it's it's he has two questions so i'm going to start with the first question.

495

01:25:57.780 --> 01:26:05.430

Debora Browning: it's has any fence line or Community monitoring been conducted at this or any other Houston area to facility.

496

01:26:07.980 --> 01:26:19.710

Fran Verhalen: At this time, I do not know of any fence line monitoring for ethylene oxide in the Houston area that has been conducted I don't know if any, and it has not been conducted at Shell Shell technology.

497

01:26:25.140 --> 01:26:25.710

Debora Browning: So there's.

498

01:26:26.730 --> 01:26:28.950

Debora Browning: actually have two more additional questions from.

499

01:26:28.980 --> 01:26:42.360

Debora Browning: jury so i'll start with the first one and it's parts of laporte have a much higher model pants or risk rates and even the uncorrected cancer risk rates, you know the Shell facility.

500

01:26:42.930 --> 01:26:52.260

Debora Browning: To us 330 in a million, when will the risk to those communities be addressed more directly by EPA and communicated to the residents.

501

01:26:56.490 --> 01:26:58.020

Fran Verhalen: Well i'm.

502

01:27:06.420 --> 01:27:13.290

Fran Verhalen: EPA has been working on looking at risks as.

503

01:27:15.180 --> 01:27:17.400

Fran Verhalen: As we can um.

504

01:27:18.660 --> 01:27:27.810

Fran Verhalen: gosh one of the reasons that we're here tonight, was because of the change in the risk value for ethylene oxide in.

505

01:27:29.730 --> 01:27:36.180

Fran Verhalen: And so we do feel that there is quite a bit of concern associated with that.

506

01:27:38.220 --> 01:27:38.820

Fran Verhalen: i'm going to.

507

01:27:40.260 --> 01:27:48.720

Fran Verhalen: ask for a lifeline from Mike kerber Mike is with our office of air quality planning and standards.

508

01:27:49.740 --> 01:27:54.030

Fran Verhalen: Mike can you provide a little additional information on this, please.

509

01:27:56.460 --> 01:27:56.730

1919***478: hi.

510

01:27:57.930 --> 01:28:01.170

1919***478: hi this is Mike so what specifically but I.

511

01:28:02.340 --> 01:28:05.460

1919***478: think you gave a good start to the answer work more you're looking for.

512

01:28:06.390 --> 01:28:14.670

Fran Verhalen: i'm just you know right now we're looking primarily at the ethylene oxide, you know, is there.

513

01:28:15.840 --> 01:28:23.400

Fran Verhalen: You know, an initiative, a timeline for looking at other other risks and other areas for air toxic.

514

01:28:25.020 --> 01:28:39.900

1919****478: i'm sure that is a good question so you referred a few times to the national toxic assessment, which is something that we've done periodically over the past couple of decades we're moving to something that's more frequent.

515

01:28:41.070 --> 01:28:49.920

1919****478: And and using more current information trying to pry air toxic status on a national scale on an annual basis, going forward.

516

01:28:50.430 --> 01:28:57.210

1919****478: Starting with an update later this year and then providing updates every year going forward.

517

01:28:57.660 --> 01:29:04.890

1919****478: Eventually, what we'd like to do is combine that air toxics information as part of our annual trends report that we put out.

518

01:29:05.400 --> 01:29:11.430

1919****478: That trends report typically it looks at things like ozone and particulate matter some of the more common air pollutants.

519

01:29:12.000 --> 01:29:25.320

1919****478: But we'd like to be set up and have your toxics information provided in there as well, so communities across the country can have access to more timely information about everything that's for the year that they're breathing.

520

01:29:29.490 --> 01:29:31.020

Fran Verhalen: Thank you Mike appreciate it.

521

01:29:33.330 --> 01:29:37.890

Debora Browning: Thanks Mike a friend this other second part of the question and.

522

01:29:39.570 --> 01:29:51.480

Debora Browning: may have helped with the first part, but the second part is what does EPA doing to help people who already have experienced cancer or felt sick after breathing air pollution near the source.

523

01:29:54.450 --> 01:29:55.650

Fran Verhalen: we're great question.

524

01:29:56.280 --> 01:29:56.880

yeah.

525

01:30:02.760 --> 01:30:04.530

Fran Verhalen: wow you know.

526

01:30:12.270 --> 01:30:13.020

Fran Verhalen: We do.

527

01:30:20.850 --> 01:30:23.070

Fran Verhalen: That one's out of my ballpark um.

528

01:30:25.710 --> 01:30:35.850

Fran Verhalen: You know I i'm sorry, Mr Williams i'm gonna have to get an answer back to you I just you know we're here, you know, we want to hear you we want to listen to you.

529

01:30:37.080 --> 01:30:39.690

Fran Verhalen: We are here to.

530

01:30:41.730 --> 01:30:47.130

Fran Verhalen: provide you some information about what's going on with Linux is associated with that.

531

01:30:48.660 --> 01:31:02.370

Fran Verhalen: You know, and we do a lot of other work, but my area of specialization is in air monitoring So when I start getting to the health impacts that's you know that's out of my.

532

01:31:03.420 --> 01:31:13.020

Fran Verhalen: My wheelhouse i'm sorry I can't address that question for you um let me see if I can get some information for you and and we'll get you some some answers, thank you.

533

01:31:15.690 --> 01:31:18.360

Gloria Vaughn: Deborah this is Gloria before.

534

01:31:20.790 --> 01:31:24.390

Gloria Vaughn: I sit in the Chair, where some people are saying that they are having trouble.

535

01:31:26.850 --> 01:31:46.380

Gloria Vaughn: Direct message into neta and I see also we provided information as to how to do it if they're still having trouble direct messaging to neta they can direct message me there as a matter of fact, I do have another direct message to read when you're ready.

536

01:31:47.370 --> 01:32:03.540

Debora Browning: Okay, thank you Gloria hours sending some direct responses on how to find Jeanette his name, so I appreciate you letting us know and using your name as an alternative for a direct message and now would be a good time to go ahead and master direct message.

537

01:32:04.320 --> 01:32:19.050

Gloria Vaughn: Okay um, the question is, it is known that there is a 59% risk of childhood leukemia for children living within a two mile radius of the Houston chip channel.

538

01:32:20.670 --> 01:32:30.870

Gloria Vaughn: Why hasn't been addressed by EPA, it is a serious concern to families living within the two mile radius of the Houston ship town.

539

01:32:34.650 --> 01:32:37.290

Fran Verhalen: Childhood leukemia is.

540

01:32:39.060 --> 01:32:40.320

Fran Verhalen: so hard.

541

01:32:41.970 --> 01:32:45.390

Fran Verhalen: To understand and into excel and.

542

01:32:46.890 --> 01:32:53.430

Fran Verhalen: It you know my heart goes out to the families and, of course, to the the children who have leukemia.

543

01:32:56.580 --> 01:32:57.450

Fran Verhalen: You know i'm.

544

01:32:59.040 --> 01:33:05.760

Fran Verhalen: geez i'm focused on the ethylene oxide tonight, not the Houston ship channel there's a lot of areas down there that.

545

01:33:08.670 --> 01:33:16.830

Fran Verhalen: We can look at and i'll take that back to our management team and.

546

01:33:17.970 --> 01:33:22.980

Fran Verhalen: Let them know that this is a big concern and that.

547

01:33:24.450 --> 01:33:30.630

Fran Verhalen: We need to take a look at this in more detail and more depth and, of course, you know and.

548

01:33:31.710 --> 01:33:32.160

Fran Verhalen: You know.

549

01:33:33.270 --> 01:33:40.500

Fran Verhalen: We have representatives from the state here also and from the county so we'll we'll see if we can.

550

01:33:42.540 --> 01:33:49.710

Fran Verhalen: come up with something you know i'm not sure exactly what it's gonna be but that's that's real that's difficult to.

551

01:33:50.760 --> 01:33:51.420

Fran Verhalen: comprehend.

552

01:33:58.110 --> 01:34:04.680

Debora Browning: Thank you Gloria for reading that direct message i'm Gloria do you by chance, have any other direct messages.

553

01:34:06.780 --> 01:34:08.040

Gloria Vaughn: No, not yet.

554

01:34:13.170 --> 01:34:21.270

Debora Browning: Not me check with genetic request to see if we have another hand raise or any other direct messages to her.

555

01:34:22.890 --> 01:34:26.670

Janetta Coats: Yes, we do have another hand raise from a bit.

556

01:34:27.390 --> 01:34:29.340

Janetta Coats: He bet you please star six.

557

01:34:29.850 --> 01:34:31.290

Janetta Coats: And unmute your phone, please.

558

01:34:32.940 --> 01:34:33.450

Janetta Coats: Thank you.

559

01:34:33.930 --> 01:34:57.960

Yvette Arellano: hi good afternoon I had a question about exposure many times exposure risk are calculated by work conditions or OSHA standards is that the same here for ethylene oxide is the risk for pregnant mothers or toddlers different when it comes to ethylene oxide.

560

01:34:59.550 --> 01:35:05.850

Fran Verhalen: A great question um in developing the risk model it.

561

01:35:07.830 --> 01:35:09.390

Fran Verhalen: gets it looks at.

562

01:35:13.170 --> 01:35:17.820

Fran Verhalen: different stages of life so children, pregnant women.

563

01:35:19.620 --> 01:35:20.910

Fran Verhalen: athletes.

564

01:35:22.500 --> 01:35:43.650

Fran Verhalen: The elderly, which is and then it's a very conservative model which is how we come up with the risk number we do use the information epidemiological information collected from occupational workers.

565

01:35:46.170 --> 01:35:46.860

Fran Verhalen: As.

566

01:35:48.030 --> 01:35:52.110

Fran Verhalen: In some of the different studies that are done on on workers.

567

01:35:53.190 --> 01:35:57.000

Fran Verhalen: We use that in in the risk calculations.

568

01:35:58.470 --> 01:36:11.250

Fran Verhalen: So we we look at a broad range of research broad range of data and information to develop the risk, so it does include.

569

01:36:13.290 --> 01:36:18.870

Fran Verhalen: Both children and pregnant women and, as you point as you're asking about So yes.

570

01:36:24.360 --> 01:36:33.570

Yvette Arellano: And just has one follow up i'm assuming that the risk for long term is a 70 year risk.

571

01:36:35.910 --> 01:36:50.700

Yvette Arellano: For folks in the Community, who asked about the air conditioning units what that mean that exposure if you're within you know whether it's across the street or within half a mile that's constant.

572

01:36:51.570 --> 01:37:07.410

Yvette Arellano: Is that constant so while people are quarantining because of the pandemic and staying in their homes or maybe doing like garden work their exposure is whether they're in the garden or inside their homes.

573

01:37:09.270 --> 01:37:09.810

Fran Verhalen: um.

574

01:37:12.750 --> 01:37:19.680

Fran Verhalen: that's an interesting question, and thank you for asking about the clarification on it.

575

01:37:20.730 --> 01:37:29.640

Fran Verhalen: The exposure, the risk is based on a person being outside 24 hours a day for 70 years um.

576

01:37:30.750 --> 01:37:32.220

Fran Verhalen: So it assumes that.

577

01:37:33.330 --> 01:37:33.780

Fran Verhalen: You know.

578

01:37:35.400 --> 01:37:39.090

Fran Verhalen: When we're working with the models, we have to make some.

579

01:37:40.500 --> 01:38:08.640

Fran Verhalen: Decisions on just what criteria we're going to use and one of the criteria is that person is outside so by moving inside you're changing the risk also and i'm you know it also assumes a constant concentration, which is not usual from many of the facilities.

580

01:38:10.080 --> 01:38:17.100

Fran Verhalen: You know they have different operations, they may have a plant shut down for turnaround.

581

01:38:18.810 --> 01:38:32.070

Fran Verhalen: They may have batch processing where they don't use ethylene oxide at all in the product they're making so there's differences in concentrations often, and so the.

582

01:38:33.270 --> 01:38:35.370

Fran Verhalen: risk is going to.

583

01:38:38.010 --> 01:38:39.570

Fran Verhalen: The actual.

584

01:38:40.950 --> 01:38:44.580

Fran Verhalen: threat will be a little bit different.

585

01:38:45.840 --> 01:38:49.920

Fran Verhalen: Because of all these different factors, so when we come up with the risk we.

586

01:38:51.570 --> 01:38:56.070

Fran Verhalen: We set some of the those factors.

587

01:38:57.210 --> 01:39:05.940

Fran Verhalen: As a constant so that we have something, just to be able to calculate did that address your question ma'am.

588

01:39:08.160 --> 01:39:18.180

Yvette Arellano: partially, I guess, the only last part to that is just because someone is in their home doesn't mean that they're not exposed.

589

01:39:19.620 --> 01:39:20.670

Fran Verhalen: Correct correct.

590

01:39:21.870 --> 01:39:26.940

Fran Verhalen: If if they are in their home they could potentially be exposed Yes, they could.

591

01:39:28.950 --> 01:39:34.740

Fran Verhalen: It would depend on the concentrations that were crossing the fence line and.

592

01:39:36.450 --> 01:39:38.940

Fran Verhalen: Then dispersion factors.

593

01:39:40.410 --> 01:39:46.860

Fran Verhalen: disruption, you know, or are we having any mixing effect because the winds blowing the winds not blowing.

594

01:39:47.940 --> 01:39:55.440

Fran Verhalen: So there's some differences in how it travels through the air and.

595

01:39:56.550 --> 01:39:59.340

Fran Verhalen: So that there will be different.

596

01:40:00.480 --> 01:40:03.300

Fran Verhalen: Opportunities for the ethylene oxide to.

597

01:40:05.130 --> 01:40:20.130

Fran Verhalen: either be persistent or to break down, and that would be dependent on individual specific circumstances in in and around the home or or an office building wherever.

598

01:40:22.410 --> 01:40:38.250

Yvette Arellano: And can I ask Shell representatives one question that question would be is there an alert system for if you have excess emissions are dangerous amount, maybe, where people would need to evacuate.

599

01:40:40.140 --> 01:40:47.880

Fran Verhalen: You know that will i'll pass that question on to Shell and we'll post that online so.

600

01:40:49.200 --> 01:40:52.890

Fran Verhalen: In Mr khan's or may respond in the chat i'm not sure.

601

01:40:54.090 --> 01:40:55.980

Fran Verhalen: But yeah, thank you for the question but.

602

01:40:57.540 --> 01:41:01.830

Fran Verhalen: we'll get that question to Shell and make sure we get the information back out.

603

01:41:08.460 --> 01:41:13.980

Janetta Coats: Okay, you bet are you done with your question your hand is still raised so would you like to go and.

604

01:41:14.910 --> 01:41:16.410

Janetta Coats: Taking your hand down, please.

605

01:41:16.770 --> 01:41:17.400

Yvette Arellano: Yes, ma'am.

606

01:41:17.820 --> 01:41:19.710

Janetta Coats: Thank you, do you pray Thank you.

607

01:41:21.240 --> 01:41:32.010

Janetta Coats: Deborah I do not see any additional hands raised, nor any direct messages, but we do have a new message in the chat box.

608

01:41:33.030 --> 01:41:41.550

Debora Browning: Yes, I see a couple, I see a couple of messages in the chat box, I do want to just let everyone know that I.

609

01:41:43.020 --> 01:41:56.850

Debora Browning: I don't know why people are not able to direct messaging genetic codes, but please feel free to reach out and direct message Gloria Yvonne and for your messages So yes.

610

01:41:57.270 --> 01:42:06.300

Janetta Coats: By chance, or they misspelling my last name, maybe with seo a Ts if there's not an e mls name, maybe.

611

01:42:07.800 --> 01:42:15.540

Debora Browning: i'm not sure, but I think having Gloria Yvonne as a alternate direct message chat box is a very good option so.

612

01:42:15.600 --> 01:42:16.410

Debora Browning: Absolutely.

613

01:42:16.830 --> 01:42:20.670

Debora Browning: appreciate the Community, bringing it to our attention, so thank you for that.

614

01:42:21.090 --> 01:42:22.020

Janetta Coats: Thank you everyone.

615

01:42:24.060 --> 01:42:44.070

Debora Browning: fran we do have another question, and it may need some clarification, so if it does, we will ask one pars and meet his phone so his question is is there are Community based organization that file the complaint on this issue, who are they, and if you can let us know.

616

01:42:46.020 --> 01:42:46.290

Fran Verhalen: Oh.

617

01:42:47.400 --> 01:42:49.590

Fran Verhalen: um I think I will need.

618

01:42:52.590 --> 01:43:02.670

Debora Browning: me, Mr current position is yeah Mr price Can you help us, can you go ahead and unmute your phone and state your question for friend to address.

619

01:43:03.120 --> 01:43:05.160

Juan Parras: Yes, i'm on the computer, can you hear me.

620

01:43:05.220 --> 01:43:06.060

Debora Browning: Oh yes.

621

01:43:06.150 --> 01:43:08.070

Debora Browning: I can hear you okay.

622

01:43:08.190 --> 01:43:08.670

well.

623

01:43:10.320 --> 01:43:12.960

Juan Parras: My concern regarding the question is that.

624

01:43:14.010 --> 01:43:15.720

Juan Parras: Let me see where it's at now.

625

01:43:16.740 --> 01:43:18.240

Juan Parras: Because I just asked another one.

626

01:43:22.170 --> 01:43:25.950

Juan Parras: The question that you're talking about give me an idea, but again.

627

01:43:27.780 --> 01:43:39.420

Debora Browning: The question you asked Mr RS is you are wanting to know if there was a Community based organization that file the complaint on this issue and where are they in if you can let us know.

628

01:43:39.690 --> 01:43:43.050

Juan Parras: You know, one of the concerns I was concerned about who asked.

629

01:43:44.190 --> 01:43:46.440

Juan Parras: For this to be looking is because.

630

01:43:47.850 --> 01:43:53.190

Juan Parras: I i'm glad somebody did Okay, but but it's a facility, there is way out there and.

631

01:43:54.390 --> 01:44:06.180

Juan Parras: I guess West side of town very privileged and wealthy communities and i'm concerned that and i'm glad that they're concerned about environmental issues, but if they did have an organization that is addressing.

632

01:44:06.930 --> 01:44:19.680

Juan Parras: Environmental concerns, I would like to meet up with them and see we can you know, work together on issues that they are impacted by and maybe they can help us on issues of communities that are impacted in the east end.

633

01:44:20.940 --> 01:44:31.290

Juan Parras: But, but the other question that I just made it that I didn't know which one you want to address until you repeated that was that a environmental justice concerns.

634

01:44:32.220 --> 01:44:41.460

Juan Parras: We have a lot of women, these 10 and they generally do not get this type of attention, and despite the fact that is a community that.

635

01:44:42.300 --> 01:44:53.820

Juan Parras: You know I put on there that there's a 59% childhood probability rate just within a two mile radius just imagine our families and communities are live within two mile radius.

636

01:44:54.270 --> 01:45:11.550

Juan Parras: Of the Houston chip Channel with higher than 50% of possible childhood leukemia and that's serious, I consider that very serious yeah it's not I don't feel that it's been addressed as this issue has been addressed here.

637

01:45:13.470 --> 01:45:23.160

Juan Parras: And I think that's the issue that environmental justice community's needs they need their their questions and their issues address just there seriously.

638

01:45:23.610 --> 01:45:35.910

Juan Parras: As one case here of you know, high levels of cancer, obviously, is interested, but this is just one facility and the Houston chip channel has numerous frontline communities in numerous industries.

639

01:45:38.460 --> 01:45:39.180

Juan Parras: So, help us.

640

01:45:41.430 --> 01:45:43.380

Fran Verhalen: Thank you for your questions um.

641

01:45:44.700 --> 01:45:50.100

Fran Verhalen: Let me, let me start with the first part of it, and why Shell technology Center.

642

01:45:52.560 --> 01:45:56.850

Fran Verhalen: Is the focus this evening i'm back in.

643

01:45:58.650 --> 01:46:00.360

Fran Verhalen: EPA changed.

644

01:46:01.410 --> 01:46:02.130

Fran Verhalen: The.

645

01:46:03.720 --> 01:46:10.230

Fran Verhalen: what's called the inhalation unit risk it's the risk associated with cancer.

646

01:46:11.280 --> 01:46:22.200

Fran Verhalen: i'm for ethylene oxide and in when we evaluated the national air toxics assessment.

647

01:46:24.780 --> 01:46:35.460

Fran Verhalen: We we identified an area near Shell technology Center that had a much higher cancer risk.

648

01:46:36.780 --> 01:46:47.250

Fran Verhalen: than originally thought, and it was due to this due to emissions of ethylene oxide and so.

649

01:46:48.570 --> 01:47:00.240

Fran Verhalen: that's why we're here tonight, was based on that risk factor baffling oxide and based on the emissions from 2014.

650

01:47:02.100 --> 01:47:04.290

Fran Verhalen: And you're right, we need to.

651

01:47:06.060 --> 01:47:13.920

Fran Verhalen: Look at the area on the Houston ship channel evaluate the risks associated in that area.

652

01:47:15.330 --> 01:47:22.770

Fran Verhalen: and see you know where we need to go from here with those.

653

01:47:24.630 --> 01:47:25.770

Fran Verhalen: But right now.

654

01:47:27.240 --> 01:47:31.470

Fran Verhalen: The reason we're having this meeting is because of the ethylene oxide emissions and.

655

01:47:33.240 --> 01:47:38.190

Fran Verhalen: They just happen to be coming from Shell technology Center on the West side of Houston.

656

01:47:40.590 --> 01:47:40.980

Juan Parras: Thank you.

657

01:47:41.550 --> 01:47:43.200

Fran Verhalen: you're welcome, thank you for the question.

658

01:47:44.250 --> 01:47:52.200

Fran Verhalen: And, and I do understand your concern about the high incidence of childhood leukemia in the areas near the ship channel.

659

01:47:56.520 --> 01:48:02.040

Debora Browning: As fan of ought to check in with Gloria to CFC received any additional direct messages.

660

01:48:02.580 --> 01:48:12.870

Gloria Vaughn: Yes, I have Deborah but, before going to this additional direct message I want my to read a message from Mr Michael patrol patrol me.

661

01:48:13.290 --> 01:48:28.020

Gloria Vaughn: And he submitted his message it like 705, so I think we've managed to skip him so he is my cutrone he's from suny ESF Center for environmental medicine informatics.

662

01:48:28.680 --> 01:48:49.650

Gloria Vaughn: He stays in the past did the facility ever released the gas without the glare control device for extended time what was the when was the player first required by EPA the EPA for the facility have records of emissions prior to 1987.

663

01:48:51.090 --> 01:48:56.700

Gloria Vaughn: frank what i'll do is because this is a multi part question so let's go through them one, at a time.

664

01:48:58.230 --> 01:49:07.980

Gloria Vaughn: So its first question is in the past that the facility ever released the gas without the player control device for extended periods of time.

665

01:49:09.990 --> 01:49:17.820

Fran Verhalen: um you know worry we don't have any of the specific information in front of us right now we'll have to look that up um you know.

666

01:49:19.110 --> 01:49:27.510

Fran Verhalen: I don't remember seeing any in the research that I did, but I will have to go back and look that up.

667

01:49:28.590 --> 01:49:31.110

Fran Verhalen: With I just don't have that kind of detail.

668

01:49:31.620 --> 01:49:32.040

Gloria Vaughn: Okay.

669

01:49:32.190 --> 01:49:34.860

Fran Verhalen: And I think on all the questions that.

670

01:49:34.920 --> 01:49:37.560

Fran Verhalen: he's posed I don't think i've got that kind of detail.

671

01:49:37.920 --> 01:49:39.150

Gloria Vaughn: Okay let's just go through them.

672

01:49:39.150 --> 01:49:39.450

Fran Verhalen: and

673

01:49:39.690 --> 01:49:41.010

Fran Verhalen: let's go yeah.

674

01:49:41.130 --> 01:49:47.820

Gloria Vaughn: Okay, the sound is good, the second one was when was the last verse required by ETA.

675

01:49:49.980 --> 01:49:50.280

Fran Verhalen: Who.

676

01:49:51.990 --> 01:49:53.340

Fran Verhalen: will have to look that one up too.

677

01:49:54.570 --> 01:50:03.750

Fran Verhalen: Because i'm not sure when which regulation there under for that flair and so it'll will have to do some research on that.

678

01:50:04.260 --> 01:50:16.170

Gloria Vaughn: Okay does EPA author facilities facility have records of the missions prior to 1987 toxic release inventory inventory reports.

679

01:50:18.930 --> 01:50:35.010

Fran Verhalen: You know we've started looking at that question i'm in general and so far we're not finding a whole lot of specific records, but we're not done looking.

680

01:50:36.330 --> 01:50:56.520

Fran Verhalen: And we didn't look specifically at Shell technology, but we can add that to the list of the ones that we're looking at you know we look for it earlier this week in relation to another another matter so we'll keep looking at that, and if we find anything we'll post that online.

681

01:50:57.270 --> 01:51:17.400

Gloria Vaughn: Okay, and this last one is does the EPA plan to work to obtain and provide risk screening information prior to 1987 risk screening and environment indicators to citizens for this facility and others in the USA.

682

01:51:19.500 --> 01:51:27.000

Fran Verhalen: And do this time we are not planning on going back prior to 1987.

683

01:51:28.440 --> 01:51:31.980

Fran Verhalen: To do that kind of research and analysis.

684

01:51:33.210 --> 01:51:33.930

Fran Verhalen: So we're.

685

01:51:35.160 --> 01:51:37.110

Fran Verhalen: we're not planning it right now.

686

01:51:38.610 --> 01:51:43.830

Fran Verhalen: And what the future hold on i'm not sure, but we are not playing for that one.

687

01:51:45.390 --> 01:51:50.640

Gloria Vaughn: Okay, thank you fran and direct message is.

688

01:51:51.660 --> 01:52:01.740

Gloria Vaughn: What is ETA is calculated cancer risk get into the background levels of do that EPA has measured.

689

01:52:04.710 --> 01:52:06.360

Fran Verhalen: One more time we're going to repeat that.

690

01:52:07.230 --> 01:52:14.130

Gloria Vaughn: What is if he is calculated cancer risk due to the background levels.

691

01:52:15.660 --> 01:52:17.580

Gloria Vaughn: That EPA has measured.

692

01:52:18.540 --> 01:52:23.370

Fran Verhalen: Oh um you know I I don't know that we've calculated that.

693

01:52:26.400 --> 01:52:28.710

Fran Verhalen: Because of the type of.

694

01:52:29.940 --> 01:52:34.770

Fran Verhalen: model we use to calculate risk i'm not sure that we can actually.

695

01:52:35.910 --> 01:52:40.380

Fran Verhalen: use information we have to backtrack the.

696

01:52:43.530 --> 01:52:45.300

Fran Verhalen: risk associated with background.

697

01:52:46.380 --> 01:53:04.500

Fran Verhalen: In model we looked at our one of our major inputs is the volume of emissions from a particular facility and with background we're not real sure where the emissions are coming from so.

698

01:53:06.030 --> 01:53:09.030

Fran Verhalen: You know, and we don't have a quantity so.

699

01:53:10.530 --> 01:53:14.250

Fran Verhalen: i'm not sure that we have a risk model that can add.

700

01:53:15.300 --> 01:53:16.680

Fran Verhalen: And so that's that's kind of a.

701

01:53:19.500 --> 01:53:23.430

Fran Verhalen: technological challenge so we're not there yet.

702

01:53:24.840 --> 01:53:26.610

Fran Verhalen: So why don't information.

703

01:53:27.810 --> 01:53:28.530

Gloria Vaughn: Thank you for him.

704

01:53:28.890 --> 01:53:31.800

Fran Verhalen: Oh you're welcome you're welcome, thank you for asking Gloria.

705

01:53:37.500 --> 01:53:48.750

Debora Browning: Thank you Gloria for the direct message and also thank you for identifying that i've ever looked for tony's question that was definitely an oversight on my part, but i'm glad you were able to spot it for us.

706

01:53:50.220 --> 01:53:54.000

Debora Browning: And fran our next question comes from frank Stafford.

707

01:53:56.430 --> 01:54:03.210

Debora Browning: You could maybe Stafford frank i'm sorry if I got it backwards his question it's kind of a comment.

708

01:54:05.760 --> 01:54:21.540

Debora Browning: In the in the graph about the amount of ego was 24 and 2019 and 2020 it was Father one you indicated the reason for the increase was due to burner being down and habits into the flare.

709

01:54:22.230 --> 01:54:43.590

Debora Browning: I am confused by these values, because the burner is 99 point 99% efficient, while the flare is 99 efficient that's only a 1% drop in efficiency, it does not seem like it should have been that large of an increase of less throughout increased by 20 fold.

710

01:54:47.910 --> 01:54:55.050

Fran Verhalen: It was it Thank you um let me see if I can clear this up and not screw up my math too bad.

711

01:54:57.030 --> 01:55:17.880

Fran Verhalen: It looks like it's just a 1% difference, but it's not it's 100% difference because of the way the engineering calculations are done that's 100% so it's twofold magnitude difference, so you will see that kind of swaying between.

712

01:55:19.350 --> 01:55:36.180

Fran Verhalen: The two numbers, I know one was just over 500 and I think the other one was around 20 so you'll see that that difference and it's the way the engineering calculations are done so it's 100 fold difference, not a not a one one fold difference.

713

01:55:42.870 --> 01:55:56.070

Debora Browning: Thank you fran sure i'm I wanted to do a just a time check it I have 766 and David, would you like to make any last comments, before I get to the last couple of questions that are in the chat box.

714

01:55:58.890 --> 01:56:13.470

dgarcia: um no I everything is going great I don't have any any additional comments, I want to thank everybody for their time and we want to respect everybody's time too, but to the extent that we can answer all the questions I would have would really like to do that.

715

01:56:18.750 --> 01:56:20.850

Debora Browning: Great thanks David appreciate it.

716

01:56:23.190 --> 01:56:25.800

Debora Browning: So i'm Gloria out before I get to.

717

01:56:25.800 --> 01:56:27.360

Debora Browning: The last question, yes.

718

01:56:27.570 --> 01:56:33.120

Janetta Coats: I think we have a hand raised from the organizer Tom rule is.

719

01:56:33.630 --> 01:56:34.980

Debora Browning: Okay, great Tom.

720

01:56:35.520 --> 01:56:47.610

Tom Ruiz: Yes, good evening everyone, good evening everyone Tom Murray CPA region six Deborah I did receive a direct message question it isn't Spanish i'll translate it for you and ask it a fran.

721

01:56:48.450 --> 01:56:49.590

Debora Browning: Great Thank you Tom.

722

01:56:50.430 --> 01:57:04.740

Tom Ruiz: How close does one have to live to be exposed to toxins, I think, in this case it's ethylene oxide, so how close to the facility does one have to live to be exposed to ethylene oxide.

723

01:57:06.600 --> 01:57:11.100

Fran Verhalen: Oh thanks Tom for the question, thank you for translating um.

724

01:57:13.140 --> 01:57:13.770

Fran Verhalen: You know.

725

01:57:15.720 --> 01:57:19.230

Fran Verhalen: Air toxics sits there in the air, they move around.

726

01:57:26.910 --> 01:57:28.440

Debora Browning: fran you're muted.

727

01:57:32.010 --> 01:57:33.450

Fran Verhalen: Okay, am I back on.

728

01:57:33.750 --> 01:57:35.610

Debora Browning: A nice week, yes, we can hear you.

729

01:57:36.750 --> 01:57:39.720

Fran Verhalen: Okay i'm not sure what happened but that's okay.

730

01:57:41.670 --> 01:57:45.270

Fran Verhalen: What I was saying was Thank you, thank you for the question and.

731

01:57:45.420 --> 01:57:46.260

For.

732

01:57:48.630 --> 01:58:03.150

Fran Verhalen: A distance it there's a lot of variables one is the amount of ethylene oxide emissions to will be the prevailing wind pattern, so if.

733

01:58:03.660 --> 01:58:07.740

Fran Verhalen: The winds are coming from the southeast and you live to the Northeast.

734

01:58:08.670 --> 01:58:20.970

Fran Verhalen: The concentrations that would affect you probably aren't as great as if you live in the Northwest but tomorrow the winds are from

the southeast and those of you who are Southwest and those of you who live in the northeast.

735

01:58:22.740 --> 01:58:27.660

Fran Verhalen: could be potentially affected in some days that just swirls so.

736

01:58:30.060 --> 01:58:35.550

Fran Verhalen: Distance is difficult to pinpoint directly.

737

01:58:38.040 --> 01:58:42.900

Fran Verhalen: Using predominant wind directions, you know.

738

01:58:44.160 --> 01:58:49.290

Fran Verhalen: Typically, there in Houston you get the in the.

739

01:58:50.670 --> 01:58:52.560

Fran Verhalen: evening you get the breeze off the.

740

01:58:53.580 --> 01:59:13.260

Fran Verhalen: off the Gulf side and then during the day you usually get the the breezes coming in from you know the Northwest West some of the north sides so there's you know I don't have a great answer for you on that and.

741

01:59:15.000 --> 01:59:17.370

Fran Verhalen: And then dispersion.

742

01:59:18.390 --> 01:59:26.550

Fran Verhalen: As the winds coming coming go it'll break up the ethylene oxide some also so that dude changes the concentration.

743

01:59:28.110 --> 01:59:30.480

Fran Verhalen: So I don't have a great answer for you, Tom i'm sorry.

744

01:59:34.320 --> 01:59:45.870

Debora Browning: That was a great answer fran I have one last question that came into the chat box before I asked it i'd like to touch base with Gloria to see if she had any other direct messages first.

745

01:59:46.080 --> 01:59:47.010

Gloria Vaughn: Yes, I do.

746

01:59:48.060 --> 01:59:58.890

Gloria Vaughn: And the direct message is, can you ask miss the pass, but the study source of his 59% for Kenya cancer rate within two miles.

747

01:59:59.910 --> 02:00:05.340

Gloria Vaughn: So miss apart, if you would like to put that in the chat box or share it with someone.

748

02:00:07.470 --> 02:00:08.010

Gloria Vaughn: or share.

749

02:00:11.910 --> 02:00:12.690

Juan Parras: Daddy Gloria.

750

02:00:14.460 --> 02:00:15.090

Gloria Vaughn: Thank you.

751

02:00:22.200 --> 02:00:27.420

Debora Browning: ran it looks like our last question comes from stephanie Thomas.

752

02:00:29.550 --> 02:00:36.000

Debora Browning: Good evening, did you present information about the demographic information of the surrounding community.

753

02:00:38.130 --> 02:00:50.130

Fran Verhalen: I did not, we have that information, but we just didn't present it this evening um you know if that's something that you would like just just let us know.

754

02:00:50.850 --> 02:01:18.750

Fran Verhalen: We can you can run the ej screen and Gloria if you'll Permit me, where I go wrong, but we have a demographic tool called ej screen that is out on our website, and you can run that and pull down the demographics for pretty much any facility in the nation, I believe, is that right Gloria.

755

02:01:19.920 --> 02:01:21.660

Gloria Vaughn: Yes, that's correct yeah.

756

02:01:22.200 --> 02:01:29.940

Fran Verhalen: Okay, so thank you so um, but we, we do have the ej screens for the area.

757

02:01:31.650 --> 02:01:33.570

Fran Verhalen: Around show.

758

02:01:34.080 --> 02:01:34.800

Gloria Vaughn: You know friends.

759

02:01:35.130 --> 02:01:35.610

Gloria Vaughn: That me.

760

02:01:37.440 --> 02:01:55.500

Gloria Vaughn: Although I said that was correct, but let me do a little clarify Francis put it together for almost any facility in the nation is not so much so, in terms of you look up a facility up and you can do that, but what it does, is it.

761

02:01:56.940 --> 02:02:02.100

Gloria Vaughn: provides information, you can provide get demographic information.

762

02:02:03.120 --> 02:02:18.900

Gloria Vaughn: For communities that are closer facility within a certain radius of a facility, you know what information that you are seeking the ej screen system itself is a other tool itself.

763

02:02:20.100 --> 02:02:21.240

Gloria Vaughn: Has there is a.

764

02:02:22.800 --> 02:02:23.190

Gloria Vaughn: A.

765

02:02:25.080 --> 02:02:40.500

Gloria Vaughn: A tutorial that you can use to go through never tell you things that you need to know what what input, you need and also gives you information on how to interpolate your results, once you receive them.

766

02:02:42.480 --> 02:02:44.490

Fran Verhalen: Thank you Gloria appreciate it.

767

02:02:57.450 --> 02:03:13.140

Debora Browning: Thank you fran for all your responses to these really good questions that we had from the Community tonight i'd like to also thank Jeanette and Gloria for helping with the direct messaging

questions, as well as Tom for translating the Spanish question that Canyon.

768

02:03:15.060 --> 02:03:28.110

Debora Browning: we'd like to actually at this point in time, thank you for attending the meeting on the ethylene oxide for the Shell technology Center here and Eastern and remind you to submit the additional questions.

769

02:03:28.140 --> 02:03:34.020

Debora Browning: To the EPA region six email box are six ethylene oxide at EPA.

770

02:03:35.640 --> 02:03:43.020

Debora Browning: EPA will provide a response to your email so be sure, and include your contact information with your question or comment.

771

02:03:44.160 --> 02:03:57.720

Debora Browning: Additionally, you may submit submit questions to Shell technology center@ww.shell.us backslash Shell technology Center Houston.

772

02:03:59.430 --> 02:04:15.990

Debora Browning: This link is to the Shell question for for members of the Community to submit their questions the shelf technology Center representatives will will provide a response to be sure, and include your contact information with your comment or question.

773

02:04:17.670 --> 02:04:38.820

Debora Browning: For those without can you without a computer access in who are unable to submit written questions any verbal request for additional information that you made by contacting Gloria Yvonne EPA associate director for environmental justice at 214-665-7535.

774

02:04:40.530 --> 02:04:51.420

Debora Browning: All news media inquiries should be directed to the EPA region six press office at our six press@epa.gov next slide please.

775

02:04:54.240 --> 02:04:55.650

Debora Browning: Next slide please.

776

02:04:57.750 --> 02:05:02.160

Debora Browning: This concludes tonight's meeting and this event has been recorded.

777

02:05:03.600 --> 02:05:04.560
Gloria Vaughn: For cutting you off.

778
02:05:04.680 --> 02:05:05.520
Debora Browning: No that's why.

779
02:05:05.640 --> 02:05:07.470
Gloria Vaughn: i'm just wanted to.

780
02:05:08.760 --> 02:05:09.930
Gloria Vaughn: Let everybody know that.

781
02:05:09.930 --> 02:05:10.650
Debora Browning: Cory you're.

782
02:05:10.680 --> 02:05:11.880
Debora Browning: comfortable, can you.

783
02:05:13.320 --> 02:05:14.160
Gloria Vaughn: Is this better.

784
02:05:16.350 --> 02:05:17.040
Gloria Vaughn: Can you hear me.

785
02:05:17.940 --> 02:05:18.870
Debora Browning: Yes, much better.

786
02:05:19.440 --> 02:05:19.980
Debora Browning: Much better.

787
02:05:20.310 --> 02:05:31.020
Gloria Vaughn: Okay, I just wanted everybody to know that corey wins that put some information in the chat regarding your screen and some of the demographic information surrounding.

788
02:05:32.880 --> 02:05:34.440
Gloria Vaughn: area for.

789
02:05:38.550 --> 02:05:44.760
Gloria Vaughn: Around in jail and he says it ej screen says that there are.

790

02:05:46.500 --> 02:05:49.830

Gloria Vaughn: 80 to 95% people of color.

791

02:05:52.140 --> 02:06:03.540

Gloria Vaughn: In the surrounding census tracts, and also that 22 to 39% on low income me pull that information from your screen.

792

02:06:04.020 --> 02:06:10.200

Debora Browning: Oh great um it didn't come up on my screen as quickly as it did yours so appreciate you bringing that to our attention.

793

02:06:13.350 --> 02:06:13.950

Gloria Vaughn: you're welcome.

794

02:06:18.300 --> 02:06:28.950

Debora Browning: I have posted lori's information in the chat box, while she was talking about the ej screen information provided by corey.

795

02:06:29.790 --> 02:06:39.240

Debora Browning: Again, as everyone knows, this event has been recorded and EPA will post the recording along with the Q and a's to the EPA region six websites.

796

02:06:39.900 --> 02:06:49.530

Debora Browning: For a fully knock side written transcriptions of this recording in English, Spanish and Viet monies will also be posted to the EPA website.

797

02:06:50.310 --> 02:07:05.160

Debora Browning: EPA would like to thank our interpreters for the services, this evening, and lastly, and most importantly EPA would like to thank you for participating in this Community meeting if there's no other comments, then I would like to wish everyone a good evening.