

1 SB 673: CUMULATIVE IMPACTS SYMPOSIUM  
2 STATE OF CALIFORNIA  
3 DEPARTMENT OF TOXIC SUBSTANCES CONTROL  
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9 CALEPA HEADQUARTERS  
10 SIERRA HEARING ROOM  
11 SECOND FLOOR  
12 1001 I STREET  
13 SACRAMENTO, CALIFORNIA  
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1 A P P E A R A N C E S

2 STAFF:

3 Ms. Barbara Lee, Director

4 Ms. Ana Mascareñas, Assistant Director, Environmental  
5 Justice and Tribal Affairs

6 Ms. Evelia Rodriguez, Senior Hazardous Substances Engineer

7 Ms. Corey Yep

8 ALSO PRESENT:

9 Dr. Marth Argüello, Executive Director, Physicians for  
10 Social Responsibility

11 Mr. Jack Broadbent, Executive Officer, Bay Area Air  
12 Quality Management District

13 Ms. Ingrid Brostrom, Senior Attorney, Center on Race,  
Poverty & the Environment

14 Ms. Shahla Farahnak, Assistant Deputy Director, State  
15 Water Resources Control Board

16 Mr. John Faust, Branch Chief, Air, Community and  
17 Environmental Research Branch, Scientific Affairs  
Division, Office of Environmental Health Hazard Assessment

18 Ms. Nikita Koraddi, Office of Senator Lara

19 Mr. Brian Leahy, Director, California Department of  
Pesticide Regulation

20 Dr. Howard Levenson, Deputy Director, CalRecycle

21 Ms. Cynthia Marvin, Chief, Transportation and Toxics  
22 Division, California Air Resources Board

23 Mr. Arsenio Mataka, Assistant Secretary, Environmental  
Justice and Tribal Affairs, California Environmental  
24 Protection Agency

25 Mr. Ian MacMillan, South Coast Air Quality Management  
District

A P P E A R A N C E S C O N T I N U E D

ALSO PRESENT:

Ms. Deldi Reyes, United States Environmental Protection Agency, Region 9

Ms. Janet Whittick, Policy Director, California Council for Environmental and Economic Balance

Mr. Walker Wieland, Office of Environmental Health Hazard Assessment

Dr. Lauren Zeise, Director, Office of Environmental Health Hazard Assessment

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1 P R O C E E D I N G S

2 MS. YEP: Hello. I think we'll get -- it's a  
3 little bits past 9:00 and I think we should get started.

4 So first of all, my name is Corey Yep.

5 MS. YEP: I'm one of the staff team members for  
6 implementing Senate Bill 673, as we like to call it, but  
7 it is about updating our permitting regulations to conform  
8 what the law has charged us with.

9 So I want to just go over the housekeeping items.  
10 First of all, evacuation. You will just go down the  
11 stairs and over to the park area. We have rest rooms out  
12 this door to the right, you'll see drinking fountains and  
13 the restrooms.

14 And then -- and I also want to note that there is  
15 a public comment period, and for those who are listening  
16 on-line, that email address to mail in your -- email your  
17 comments or questions is permits p-e-r-m-i-t-s underscore  
18 hwm@dtsc.ca.gov.

19 So now I would like to turn it over to Barbara  
20 Lee, our Director, and -- oh, I'm sorry. Ana Mascareñas  
21 to kind of start this -- today's symposium off.

22 Ana.

23 (Thereupon an overhead presentation was  
24 presented as follows.)

25 DTSC ASSISTANT DIRECTOR MASCAREÑAS: Hi. Good

1 morning, everyone. Welcome to the SB 673, Cumulative  
2 Impacts Symposium. And welcome to all of those who are  
3 also listening to the webcast on-line as well.

4 My name is Ana Mascareñas. I started as the  
5 Assistant Director for Environmental Justice and Tribal  
6 Affairs at DTSC in July of 2015. Last year, our  
7 Department was also provided with resources to build an  
8 Environmental Justice and Tribal Affairs Program, which is  
9 what we're doing right now.

10 I joined the Department of spending about 10  
11 years in Los Angeles working as an environmental health  
12 and social justice advocate, also on immigration,  
13 veterans, and other federal issues, and completing a  
14 Master of Public Health, specializing in environmental  
15 health sciences.

16 The issue of cumulative impacts and precaution is  
17 very important to me in the work that I have pursued, in  
18 working with communities throughout my career.

19 I believe we have responsibility, as we're all --  
20 many of us here as regulators to value community  
21 knowledge, use the best available science and tools and  
22 information that we currently have, and use all of our  
23 communications and legal tools to better serve the people  
24 of California.

25 Many of the staff at CalEPA and DTSC and our

1 partners work very hard to creatively apply their legal,  
2 communication, and community expertise to help solve  
3 issues and to help bring more resources to communities  
4 that are highly impacted by multiple environmental  
5 hazards. All of this is form of pursuing environmental  
6 justice.

7           As you'll hear more about with our speakers later  
8 this morning, SB 673 directs the Department to update  
9 criteria for considering to update the issuance --  
10 criteria for issuance of a new or modified hazardous waste  
11 facility permit criteria considering vulnerability,  
12 cumulative impacts, setback distances and other criteria.  
13 We're here today to open up a conversation, take stock of  
14 what we have, and build partnerships towards examining  
15 cumulative impacts in particular.

16           Thank you very much for being here today, and for  
17 those listening on the webcast as well. We thank you for  
18 your time to think about how we can work together as  
19 communities, as researchers, as regulators to bring these  
20 important issues to the forefront and to better protect  
21 public health.

22           Next, I'd like to introduce Director Barbara Lee.  
23 Her experience, especially working previously with the  
24 CalEPA Advisory Committee on Environmental Justice and her  
25 important work and career in bringing together

1 partnerships to help solve complex issues is very  
2 important in this discussion. And she'll be moderating  
3 many of the pieces here today as this issue is extremely  
4 important to her.

5 So thank you. And welcome, Director Lee.

6 DTSC DIRECTOR LEE: Thank you, Ana. And good  
7 morning to everyone in the room and on the phone. It's  
8 good to see some familiar faces in the audience. As Ana  
9 mentioned, I have been working on issues related to  
10 cumulative impacts -- excuse me -- and environmental  
11 justice for many years now.

12 The CalEPA Advisory Committee on Environmental  
13 Justice that met in the early 2000s did some work in this  
14 space. These conversations have been going on for a long  
15 time. Our sister agencies within CalEPA, the other  
16 boards, departments, and the Office of Environmental  
17 Health Hazard Assessment, as well as sister agencies at  
18 the local level, the air districts, the CUPAs, and at the  
19 federal level with U.S. EPA, there are many people doing  
20 important work on this topic.

21 DTSC is relatively new to this conversation, and  
22 we're excited to have the opportunity to join in the  
23 conversation. The mandate that Senator Lara provided to  
24 us with his vision was instrumental in motivating the  
25 Department to step up, and we're very grateful for his

1 leadership on this.

2           But we're also, as I said, very mindful that a  
3 number of people who are far more experienced in this area  
4 than I am, and that the Department is, have put a lot of  
5 careful thought into how to approach questions of  
6 cumulative impacts, and community vulnerability. And the  
7 Department is right now in the mode of gathering  
8 information, expanding our horizons, and reaching out to  
9 our partners not just in government, but also in the NGO  
10 community, and in the business community, so that we can  
11 make sure we are asking the right questions, so that we  
12 can move forward in a positive direction.

13           I'm not under any illusions that we're going to  
14 solve the problem of community -- sorry, of cumulative  
15 impacts today, or even in the near future, but I am  
16 confident that we can make important progress, and we can  
17 help gather information and set up structures that will  
18 better inform DTSC's decision making, and do that in the  
19 context of the decisions and impacts that our sister  
20 agencies also consider.

21           We're very fortunate today to have with us Ms.  
22 Nikita Koraddi. She is here representing Senator Ricardo  
23 Lara. Senator Lara was the author of Senate Bill SB 673.  
24 That bill directs DTSC to evaluate its permitting  
25 regulations and make some important changes to them so

1 that they are more protective and more responsive to  
2 community needs.

3           We have broken our implementation of that bill up  
4 into multiple phases. The first phase deals with some of  
5 the more straightforward elements that the Senator asked  
6 us to consider. And we've done some workshops on that --  
7 those elements. And you can expect to see a proposal in  
8 the next month or so, as we move forward with that  
9 implementation on the schedule that the Senator set forth  
10 for us.

11           However, the issue of cumulative impacts is a  
12 much more nuanced and complex issue. And the Department  
13 decided we needed to take some additional time to carry  
14 that conversation forward. We're happy to welcome Ms.  
15 Nikita Koraddi here to speak with us. She is a graduate  
16 in political science, excuse me, from UC Berkeley. She  
17 was a Fellow with the Department, and was one of the faces  
18 who welcomed me when I was appointed. She is incredibly  
19 dynamic and she works as legislative consultant for the  
20 Senator, staffs him on issues such as energy,  
21 environmental policy, transportation. He is the Chair of  
22 the Goods Movement Committee, and she supports him in that  
23 work, and advises the Senator on a number of things.

24           We're very happy to have Nikita come back and  
25 address us. And I hope you will join me in welcoming her.

1           Thank you, Nikita.

2           (Applause.)

3           MS. KORADDI: Thank you Barbara. It's really  
4 nice to be back here with my DTSC family. So thanks for  
5 having us. The Senator wasn't able to be here today, but  
6 thanks for letting me give some brief remarks on his  
7 behalf.

8           So Senator Lara authored SB 673 and it was signed  
9 into law in 2015. And really the overarching purpose was  
10 to improve the Department's permitting process by  
11 establishing some really clear standards and criteria as  
12 it relates to cumulative impacts and protective measures  
13 for impacted communities.

14           So Senator Lara represents southeast Los Angeles.  
15 His constituents live alongside heavy industry, freeways,  
16 railyards, metal processing facilities, toxic waste  
17 facilities, and for years have dealt with crisis after  
18 crisis, you know from Exide to Paramount. And so this was  
19 really sort of a community mandate that he carried forward  
20 a couple of years ago.

21           And -- let's see. So for a couple of -- so for a  
22 couple years he's sort of thinking about how to restore  
23 the public's faith in regulatory agencies that are  
24 entrusted with protecting public health and the  
25 environment. And he thought this was a really important

1 component. It was important to have stronger criteria in  
2 place to determine, you know, a facility's compliance  
3 history, past history of violations, and look at a  
4 community's profile and demographics, particularly the  
5 presence of sensitive populations, and cumulative burdens  
6 like those that are in his community.

7           So I know from the Senator's perspective it's  
8 really important to have robust public participation, and  
9 the involvement of all the stakeholders that are really  
10 impacted by DTSC's permitting process, communities,  
11 industry, scientists, researchers, and so he was really  
12 excited to learn that there is a -- you know, a symposium  
13 specifically on cumulative impacts, and has asked me to  
14 follow through with the process and see how the  
15 legislature can continue to be a partner and a resource in  
16 this effort.

17           And so we look forward to being engaged in this  
18 effort. If there's anything that he can do, please don't  
19 hesitate to reach out. I'll be hanging around in the back  
20 and just sort of -- and participating as much as possible.  
21 But this is not my area of expertise. I'm really  
22 interested in learning more, and conveying information  
23 back to him. But this is really important for his  
24 community and he's really appreciative of the  
25 collaborative nature in which this is taking place and all

1 the partnerships in the room.

2 So thanks for having us and I look forward to  
3 being engaged in the process.

4 Thank you.

5 (Applause.)

6 DTSC DIRECTOR LEE: Thank you, Nikita.

7 We're going to have a little bit of background  
8 now on SB 673. I'd like to introduce Ms. Evelia  
9 Rodriguez. She is the -- a Senior Engineer with the  
10 Department, and has been with us for quite a long time.  
11 She was instrumental in bringing forward the Department's  
12 landmark Safer Consumer Products regulations. And we're  
13 thrilled to have her partnering with our permitting depart  
14 -- Permitting Division now on the implementation of SB  
15 673.

16 Evelia.

17 DTSC SENIOR HAZARDOUS SUBSTANCES ENGINEER  
18 RODRIGUEZ: Thank you, Barbara. And thank you, everybody,  
19 for joining us this morning. As you may have heard,  
20 Senate Bill 673 requires the Department to update existing  
21 standards for permit decisions, in specifically permit  
22 denials and permit approvals.

23 The two tracks that were previously mentioned  
24 address the criteria that are in Senate Bill 673. The  
25 first part of the criteria that we are going to tackle

1 this year are the compliance history, the training of  
2 facility personnel, a health risk assessment, financial  
3 assurance which -- financial responsibility which also  
4 includes financial liabilities, and we're also including a  
5 community involvement profile, which is a questionnaire  
6 that summarizes what is known about the surrounding  
7 communities.

8 Our goal is to develop valid standards of  
9 performance on risk that will result in more consistent  
10 and transparent permitting decisions.

11 The second track is the remaining two criteria,  
12 which is cumulative impacts and vulnerable populations is  
13 one. And the second is setback distances to sensitive pop  
14 -- receptors. Now, sensitive receptors are schools,  
15 hospitals, elderly care facilities, and so forth.

16 So these remaining criteria we need to establish  
17 procedures for evaluating the vulnerability of the  
18 communities and the effects of multiple sources of  
19 pollutants. This second track, as has been already  
20 discussed, requires much more thought and the bringing  
21 together of stakeholders. Today's symposia begins this  
22 dialogue, and we encourage your involvement and input  
23 today as we move forward with the cumulative impacts  
24 assessment tools, and how to interpret the results.

25 We're setting the stage today with what CalEPA,

1 OEHHA, and other of our sister agencies have done to  
2 research and develop these tools. We also have brought  
3 today a perspective from local governments, community  
4 advocates, academia, and businesses. Later this  
5 afternoon, we're going to have a Panel discussion with  
6 representatives from the other CalEPA agencies, as well as  
7 the EPA, and local air management districts.

8 The Department is planning on additional  
9 symposia. This is not a one-stop solution. And we're  
10 planning it within the next two months to kind of take a  
11 deeper dive into some of the topics that we discuss today.

12 We're also planning multiple workshops, so once  
13 we start to coalesce, or find a direction, or find areas  
14 that we could work on together, we'd like to set working  
15 workshops, so that we could roll up our sleeves and really  
16 delve into some of these issues.

17 We would like to continue engaging stakeholders  
18 until we could work out regulatory concepts that will help  
19 us create objective criteria for permit decisions. And  
20 again, thank you for your participation. And I continue  
21 to look forward to all of us working together.

22 Thank you.

23 (Applause.)

24 DTSC DIRECTOR LEE: I would now like to welcome  
25 Mr. Arsenio Mataka to come up and speak. Arsenio was

1 appointed by Governor Brown as the Assistant Secretary for  
2 Environmental Justice for the California Environmental  
3 Protection Agency in 2011. Arsenio has a law degree  
4 Humphreys College Laurence Division[sic] School of Law.  
5 And he has a long and very proud history of working on  
6 environmental justice and advocacies representing  
7 communities for the State. And prior to joining the  
8 State, he is instrumental in coordinating environmental  
9 justice activities for CalEPA and its boards, departments,  
10 and offices. And we are honored to have him here to speak  
11 with us.

12 Arsenio.

13 CAL/EPA ASSISTANT SECRETARY MATAKA: I'm going to  
14 be real brief here, because I know there's a lot to get  
15 to, but -- and a lot of the folks in this room have been  
16 sort of grasping and dealing with this issue for a very  
17 long time. But look, there are two things that I wanted  
18 to say today. One is that everyone knows that for  
19 decades, for a very long time, communities throughout the  
20 State, and the nation for that matter, have demanded that  
21 environmental agencies take into account cumulative  
22 impacts when making a permit decision.

23 Now, as we all know, many permit decisions, our  
24 processes rely on CEQA to address cumulative impacts. But  
25 CEQA focuses -- generally speaking, focuses on the effects

1 of the environment, not necessarily the people. And it's  
2 the people, you know, the people -- the people who live in  
3 the midst of, you know, 30 auto repair shops within a few  
4 blocks; the people whose children play next to a freeway;  
5 the people who live next to rows and rows of warehouses or  
6 facilities.

7 And, quite frankly, it's the people who also get  
8 a few years shaved off their life -- their life expectancy  
9 in many of these areas that we see high cumulative impacts  
10 and vulnerabilities. It's these people who also pay the  
11 ultimate price.

12 So this is an opportunity to take into account  
13 the people and their vulnerabilities, and the pollution  
14 sources, and the things that exist amongst them every day.

15 Many of you know this, but prior to coming to  
16 CalEPA, I was -- it was -- my folks and my family were  
17 very active in like the environmental justice scene. And  
18 they would always talk about these cumulative impacts and  
19 these vulnerabilities, these challenges that they were  
20 facing and the community was facing, but it was very hard  
21 to articulate and to sort of translate that anecdotal  
22 evidence into a decision-making processes. You know,  
23 those two things kind of didn't fit too well.

24 And the result was that many of those decision  
25 processes or permit decisions didn't take into account

1 some of those things. And so here the Department of Toxic  
2 Substances Control has a unique opportunity to really look  
3 thoughtfully at these things that many, many have asked us  
4 to consider. And it's not just on DTSC. If you issue a  
5 permit, you know what I'm talking about.

6 So I'm excited. I think this is something that  
7 again the communities have been asking for for a very long  
8 time. Now, we have the opportunity to put our best foot  
9 forward, and see what we can do. And for many of you who  
10 are not DTSC, but have some other regulatory authority, I  
11 would, you know, pay attention here, because this is  
12 something, and -- that is not going to go away. I think  
13 the people of California at least are going to demand that  
14 we take this into account more substantively.

15 And so I want to encourage this effort. I want  
16 to encourage DTSC, because you have a big lift. But at  
17 the same time, it's a huge opportunity. And for those  
18 people that I mentioned earlier, it's something that I  
19 know they would appreciate very deeply.

20 So thank you.

21 (Applause.)

22 DTSC DIRECTOR LEE: We're very fortunate now to  
23 have a presentation from the Office of Environmental  
24 Health Hazard Assessment on their CalEnviroScreen tool,  
25 which they developed in conjunction with CalEPA, and its

1 BDOs over a few -- several years ago. And the tool has  
2 been updated and is now much used. I would first like to  
3 introduce Dr. Lauren Zeise. Dr. Zeise earned her  
4 Doctorate from Harvard University and was appointed by  
5 Governor Brown as the Director of the Office of  
6 Environmental Health Hazard Assessment in December of  
7 2016.

8 She had previously been serving as the Acting  
9 Director since May of 2015, but she has been with OEHHA  
10 since its inception in 1991. She's spent three years as  
11 the Deputy Director for Scientific Affairs, and 21 years  
12 as the Chief of the Reproductive and Cancer Hazard  
13 Assessment Branch at OEHHA, which included managing their  
14 Prop 65 program.

15 Prior to OEHHA's creation, she was chief of the  
16 Cancer Unit at the California Department of Health  
17 Services, and spent several years at the California Public  
18 Health Foundation, as well as at the U.S. Environmental  
19 Protection Agency.

20 She played a leading role in OEHHA's development  
21 of CalEnviroScreen, which was the nation's first  
22 comprehensive statewide environmental health screening  
23 tool. I would like to welcome her now to talk with you.  
24 Thank you Lauren for joining us.

25 (Applause.)

1           (Thereupon an overhead presentation was  
2           presented as follows.)

3           OEHHA DIRECTOR ZEISE: Thank you, Barbara. And  
4 I'm delighted to be able to talk about CalEnviroScreen.  
5 And with you is my staff, John Faust and Walker Wieland  
6 who are going to present the tool, and walk you through,  
7 and give you a demonstration.

8           You know, this CalEnviroScreen grew out of the  
9 concept of environmental justice. And we were faced with  
10 how do we address multiple exposures faced by communities?  
11 We typically use the tool of risk assessment, which has --  
12 it's a very good tool. It has its uses.

13           But as you think about all of the various  
14 exposures within a community beyond the particular element  
15 that you're trying to characterize, risk assessment simply  
16 wasn't up to the task. So we looked to a new tool to  
17 begin a different lens to begin to look at community  
18 exposures through, where we could take into account the  
19 inherent vulnerability of the community, and the increased  
20 susceptibilities of people in the community to effects of  
21 air pollution and other exposures.

22           You know, as you think of things like asthma,  
23 where if someone with asthma is exposed, of course, you  
24 expect to see a much greater response to a given  
25 pollutant, than if somebody doesn't have asthma. So we

1 began to characterize different types of health effects,  
2 the full range of the types of exposures, the different  
3 environmental effects in communities, and also  
4 socioeconomic stressors, which also impact response to  
5 pollutants, and put them all together into a cumulative  
6 impact tool.

7           So what we're doing here is really using  
8 indicators rather than trying to measure each and every  
9 element of exposure in a community, but instead look at  
10 indicators as surrogates for a host of exposures within  
11 different components that affect the community --

12                           --o0o--

13           OEHHA DIRECTOR ZEISE: -- to look across the  
14 communities in California, so we could prioritize those  
15 with larger impacts than others. So the tool was really  
16 focused on looking across the State identifying  
17 communities that are -- were much more impacted than  
18 others. So looking for the greatest impacts. That was  
19 sort of the goal of our -- of our CalEnviroScreen tool.

20           Next slide.

21                           --o0o--

22           OEHHA DIRECTOR ZEISE: So it's a spatial  
23 analysis. CalEnviroScreen is a spatial analysis of the  
24 relative burdens in California communities. And we look  
25 at 20 different indicators that combine into a single

1 score, higher scores meaning more impact.

2           And the analysis is done at a census tract level.  
3 We started off doing it at a zip code level. And within a  
4 zip code, you see varying exposures, varying impacts,  
5 varying vulnerabilities, so we chose to look at a more  
6 refined scale, because that became more representative of  
7 what was actually happening in the community. So the  
8 census tract is really a surrogate for the community.

9           Next slide.

10                           --o0o--

11           OEHHA DIRECTOR ZEISE: And what we found in this  
12 CalEnviroScreen process was that community involvement was  
13 really key to understanding what was going on, and key to  
14 ground-truthing our indicators and our approach. So we  
15 went into different communities. We -- we discussed the  
16 tool, our approach to it, the indicators, and then we --  
17 we drilled down more by providing maps of the different  
18 areas that we were -- the communities that we were  
19 visiting. So we looked at each -- we had different tables  
20 set up with our different indicators that we were using to  
21 characterize the communities. And -- and invited the  
22 community to tell us what were we getting right, where  
23 were we off, what we were getting wrong.

24           And through this process, we really received an  
25 incredible amount of input, so that we could refine our

1 tool. And I think this was really key to the development  
2 of the tool. We're now in the third version. I guess our  
3 last -- our latest version we visited several different  
4 communities throughout the State, Fresno -- well, John can  
5 go into that in a little bit more detail, but really the  
6 community involvement was key.

7 So with that, I'm going to turn -- next slide,  
8 please.

9 --o0o--

10 OEHHA DIRECTOR ZEISE: I'm going to turn this  
11 over to Dr. John Faust who's going to walk you through our  
12 tool, and then Walker Wieland will give you a  
13 demonstration.

14 DR. FAUST: All right. Good morning. Thank you.

15 Yeah, so as Lauren said, I plan to give a broad  
16 overview of the CalEnviroScreen tool, which is now in its  
17 third version. You know, it has been a long time coming.  
18 Director Lee mentioned sort of the -- some of the initial  
19 work that the EJ Advisory Committee provided in moving  
20 this forward.

21 So what I'll do is I won't -- I won't spend a lot  
22 of time on the history, but I want to give you an idea of  
23 the types of information that are included in the tool,  
24 how we combine that information together, we'll talk about  
25 a few examples, and then show a little bit about how the

1 tool is being used and have a demonstration of the results  
2 towards the end, which my colleague Walker will walk  
3 through.

4           So as has been mentioned earlier, you know, the  
5 basis for environmental justice concerns with respect to  
6 cumulative impacts comes from this idea that, you know,  
7 multiple sources of pollution can be located in low income  
8 and minority communities, but that also this idea that  
9 different types of communities may be having different  
10 types of vulnerabilities from health vulnerabilities to  
11 this newer idea about socioeconomic vulnerabilities.

12           And it's this combination of concerns that  
13 multiple pollution sources can be concentrated in certain  
14 areas, along with this idea that there may be vulnerable  
15 populations that brings together in this idea of  
16 cumulative impacts.

17                           --o0o--

18           DR. FAUST: So the focus of CalEnviroScreen has  
19 been based on a definition that was adopted by the  
20 California EPA's Environmental Justice Interagency Working  
21 Group. And it's basically put on this slide, but the idea  
22 is that these types of impacts are -- represent exposures  
23 to public health and environmental effects from combined  
24 emissions and discharges in a geographic area.

25           And they take into account all sources, all media

1 through air, water, and soil, but they also consider the  
2 idea of sensitive populations and socioeconomic factors  
3 where we have information. And this definition has been  
4 what's guided the development of the CalEnviroScreen tool  
5 over the years that we've moved from the first versions to  
6 the more recent version.

7 --o0o--

8 DR. FAUST: So to turn that definition into  
9 something that was a bit more manageable, we developed,  
10 what we called, these components of cumulative impact.  
11 And this is the way we organized the information that go  
12 into the CalEnviroScreen tool. So we have, what we call,  
13 these four components. They're exposures, environmental  
14 effects, sensitive populations, and socioeconomic factors.

15 So the first, exposures. So when we think about  
16 exposures, we think about the ways that people may be  
17 coming in contact with pollution, for example, things in  
18 the air they breathe, the water they drink, or different  
19 ways that they may come in contact with chemicals in the  
20 environment.

21 On the other hand, when we think about  
22 environmental effects, these represent different types of  
23 adverse environmental conditions caused by pollutions.  
24 For example, the presence of contaminated sites or  
25 chemicals in the environment, where there may not be such

1 direct exposures, but there's still a concern or there is  
2 a type of environmental degradation that's occurring in  
3 the community.

4           So those two together represent, what we call,  
5 the pollution burden, this combination of exposure  
6 indicators and then environmental effects indicators. And  
7 then on the other side, we have population measures. And  
8 here, we're talking about sensitive populations. So these  
9 are populations with biological traits, especially health  
10 status that might magnify the effects of pollutant  
11 exposures.

12           And then there's this newer idea of socioeconomic  
13 factors. In a 2010 report, we identified a lot of types  
14 of scientific information that support concern that  
15 socioeconomic factors, like poverty or educational  
16 attainment, are important modifiers for the -- describing  
17 the response to pollution. So we include measures for  
18 this type of factor as well.

19                           --o0o--

20           DR. FAUST: So in developing the tool, you know,  
21 we had a lot of -- a lot of challenges in terms of  
22 bringing -- bringing it together. But one of the things  
23 that has been important is that we were trying to keep it  
24 as relatively simple as possible, meaning we wanted a tool  
25 that was able to communicate information in a way that's

1 understandable and that people can use.

2           The tool brings together types of information  
3 from, you know, different media. So we're thinking about  
4 things that contribute to exposures in air, water, and  
5 soil. And then we had the challenge of trying to find  
6 data to represent each of these different -- different  
7 components.

8           And since the tool was a geographic tool, as  
9 described in the definition, we also needed to provide  
10 information on a geographic basis. So we needed to have a  
11 good understanding of how these different types of  
12 measures that were combined together differed across the  
13 State.

14           And as Lauren mentioned earlier, we initially  
15 worked at a certain scale, the zip code scale, but have  
16 more recently moved to a finer scale of analysis, the  
17 census tract. And then finally, we needed to bring  
18 together this information in a way that allowed us to  
19 compare different communities with each other.

20                           --o0o--

21           DR. FAUST: So when we think about the  
22 indicators, so the pollution indicators, the exposures and  
23 environmental effects indicators, these were representing  
24 health relevant, and widespread environmental concerns  
25 across the State, whereas those associated with the



1 information, some of which is tabular, meaning we have  
2 numbers to represent each of the populations that comes  
3 from the Census Bureau. We sometimes have air monitoring  
4 data that tells us something about the concentrations of a  
5 pollutant in an area.

6 So we had to find a way to -- to pull all this  
7 information together in a -- in a way that allows us to  
8 both combine it and compare it across the State. And  
9 there's a -- you know, a single way for each -- each  
10 specific indicator, but we had to sort of develop and  
11 analyze each indicator individually.

12 --o0o--

13 DR. FAUST: So as we mentioned, the 20 indicators  
14 that are included in the current CalEnviroScreen model are  
15 on this slide. And they fall into these four broad  
16 components. So, for example, the exposure indicators  
17 include measures of ozone and PM2.5 concentrations across  
18 the State, estimates of diesel PM emissions, drinking  
19 water contaminant measures, releases of toxic chemicals  
20 from facilities, pesticide use, and then finally traffic  
21 density.

22 Environmental effects. Again, these represent  
23 different types of environmental concerns for  
24 environmental degradation or the presence of hazards in  
25 the environment. And these includes solid waste

1 facilities, clean-up sites, groundwater threats, impaired  
2 waters, and hazardous waste permitted facilities and  
3 generators. So those are the measures that represent  
4 different types of pollution concerns.

5           And then on the other side of the panel here are  
6 those that represent population. So here, with respect to  
7 sensitive populations, we include a couple of health  
8 measures -- or three health measures, asthma emergency  
9 department visits, a new indicator in this most recent  
10 version, which is a representative of cardiovascular  
11 disease, and then low birth weight infants.

12           And then for the socioeconomic factors, we  
13 include educational attainment, poverty, linguistic  
14 isolation, unemployment, and a more recent indicator that  
15 was added in this most recent version, housing burden low  
16 income households. So these overall represent the 20  
17 indicators that are in the 3.0 version that we've just  
18 finalized.

19                           --o0o--

20           DR. FAUST: So for each indicator, we provide a  
21 score based upon the measure that's available, which is  
22 either a modeled measure or an estimate of a rate, for  
23 example. So for each indicator, each census tract is  
24 assigned a percentile value based upon where it falls in  
25 the distribution across the entire State, so -- and this



1 that estimates ozone concentrations for each tract across  
2 the State.

3           The data come from 2012 to '14. And this just  
4 shows one example of one specific indicator showing the  
5 range of percentiles for this ozone indicator in the San  
6 Joaquin Valley with the scores -- the higher scores are  
7 shown with the red color, so you see the higher levels as  
8 you move to these inland areas.

9                           --o0o--

10           DR. FAUST: Another example, the Hazardous Waste  
11 Indicator, so this represents a combination of both  
12 permitted hazardous waste facilities, as well as large  
13 quantity hazardous waste generators. The indicator itself  
14 takes into account both the site type and the status, as  
15 well as the proximity of these facilities to residential  
16 populations.

17           For many of them, we do include perimeter  
18 information, so we have boundaries for these areas. And  
19 then the indicator itself, the measure for each census  
20 tract is the weighted sum of all of these individual  
21 facilities within the area. And for this measure, we use  
22 information that comes from us from DTSC.

23                           --o0o--

24           DR. FAUST: So this slide is here just to  
25 illustrate the scoring method. So we apply, what we call,

1 a buffer to each facility, to determine how close it is to  
2 where anybody lives. So facilities or sites that are  
3 closest to where people live receive a higher score and  
4 then as you move farther out, they receive a relatively  
5 less -- less weight. And then again, we do sum all the  
6 facilities within the tract.

7 This just shows an example of how we treat  
8 different facilities. I told you we take into account  
9 both site type and status. So here, for the permitted  
10 hazardous waste facilities in this indicator, you know,  
11 for example, if we have a permitted hazardous waste  
12 facility, it's a landfill, it has a higher weight than if  
13 it's a treatment, or a storage, or a post-closure  
14 facility.

15 We also take into account the type of -- type of  
16 waste that they handle for these facilities as well. And  
17 all of these are added together to come up with an overall  
18 weight for a given facility.

19 And then for the hazardous waste generators, we  
20 also have a similar way of weighting those that takes into  
21 account the amount and type of waste that's generated.

22 --o0o--

23 DR. FAUST: So here when we look at the results  
24 for this specific indicator across the San Francisco Bay  
25 area, just generally looking across, you see, you know,

1 higher weights along the corridor from the refinery areas  
2 in Richmond down through the East Bay with the darker  
3 colors represented on those sides. Although there's  
4 certainly a number of other places that have higher scores  
5 as well.

6 --o0o--

7 DR. FAUST: And then the third indicator that I'm  
8 going to talk about, asthma. Here, we're using  
9 information on emergency department visits for asthma. We  
10 represent the rate as the number of visits per 10,000 in  
11 the population. We spatially modeled age-adjusted data  
12 that come to us from the Office of Statewide Health  
13 Planning and Development, and then analyzed by the  
14 California Environmental Health Tracking Program. So  
15 these data represent emergency department visits.

16 --o0o--

17 DR. FAUST: And here, we just have a map showing  
18 the rates for the San Diego area, and the -- the higher  
19 rates are represented in the darker blue colors that you  
20 see, with lower rates represented by the greener and  
21 yellow.

22 So here, we see higher rates for people who are  
23 in the more central parts of the San Diego urban area.  
24 Although, there are a number of communities that --  
25 outside of this area that also show high rates.

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DR. FAUST: Okay. So we have indicated measures for each of these 20 different indicators. And then to come up with this CalEnviroScreen score, which brings together the information, we combine all this information together. This slide just sort of summarizes that summary.

So we essentially use averages for the percentiles for each of those four components, and then bring that information together to calculate the overall CalEnviroScreen score.

So this overall score can then be sorted highest to lowest, so that those communities that face the highest burdens combined from -- across all of these different indicators can be sorted out and distinguished.

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DR. FAUST: So we make -- we make these results available in a number of different ways. We have scores for all of the census tracts that are available for each indicator, as well as the combined scores for both pollution and population vulnerability. So we have them as a spreadsheet. We also have an on-line tool, which we'll do a quick demonstration of shortly. And then we also have various ways of making the information available for people who are doing spatial analysis and so forth, so

1 that -- so that you can -- we can be as transparent as  
2 possible about the data that's in the tool, and let people  
3 see the results, but also if anyone has an interest in  
4 using the data in a different way, we have the ability to  
5 pull that out and to use that.

6 --o0o--

7 DR. FAUST: So just a few words about using  
8 CalEnviroScreen. You know, it's been a tool that has been  
9 enabled the -- to prioritize the commitment of resources  
10 to communities that face these high burdens. So when we  
11 have these higher CalEnviroScreen scores, we can begin to  
12 sort them, and then, you know, allocate resources to those  
13 that are most impacted.

14 However, the tool also does provide a certain  
15 amount of information for anyone interested in knowing  
16 sort of the setting of a specific area. So, for example,  
17 you can type in your address using the mapping application  
18 and see the types of things that are happening in a  
19 specific area, meaning you can see whether it's likely  
20 that pesticides are driving the score in a particular  
21 area, or traffic density, or population vulnerability, you  
22 know, poverty and so forth. So you can sort of see the  
23 nature of the contributions to impact in a specific place.

24 We do caution that this is not a health risk  
25 assessment. So the CalEnviroScreen score, you know, it

1 looks broadly across many of these different measures, but  
2 it doesn't represent a health risk per se, meaning you  
3 can't use that score to predict the likelihood of a given  
4 health outcome.

5           And then as we've said, it's not a substitute for  
6 the CEQA required cumulative impact assessment. So it  
7 doesn't determine whether a specific project is  
8 contributing significantly.

9   --o0o--

10           DR. FAUST: So within CalEPA, it has been used  
11 as -- to aid ongoing planning and decision making. It's  
12 been applied in the environmental justice small grant  
13 program, more recently in the environmental justice task  
14 force activities, as well as in training and outreach  
15 within the Department.

16   --o0o--

17           DR. FAUST: Probably the most significant use to  
18 date though has been in the implementation of Senate Bill  
19 535, which required that certain investments from the  
20 Greenhouse Gas Reduction Fund go to so-called  
21 disadvantaged communities. And in the past in 2014,  
22 CalEPA used the CalEnviroScreen results to identify those  
23 disadvantaged communities, which the statute requires be  
24 identified by geographic, socioeconomic, public health,  
25 and environmental hazard criteria, which the

1 CalEnviroScreen results were a good match for.

2 But basically, those investments have certain  
3 criteria that have recently been amended, but that a  
4 certain fraction of the funds from the Greenhouse Gas  
5 Reduction Fund must be spent in or to the benefit of those  
6 communities.

7 --o0o--

8 DR. FAUST: So this is the -- this is the result  
9 of the identification. In 2014, CalEPA identified the  
10 highest 25 percent of CalEnviroScreen results as  
11 disadvantaged. That's what the map looks like from a  
12 couple years ago. We've just recently ended a public  
13 process where we've been taking input on how the new  
14 identification will occur.

15 So this is -- this is a couple years ago. While  
16 we know the results are largely similar, there will be a  
17 new identification in the coming days regarding the  
18 disadvantaged communities from the 3.0 results.

19 So at this point, I'm going to turn it over to  
20 Walker Wieland. He's a Research Scientist and GIS analyst  
21 in our department. He's developed the mapping application  
22 that allows us to look at the CalEnviroScreen results. So  
23 I think that will be helpful to let people know sort of  
24 what types of information is readily available.

25 MR. WIELAND: Morning. I'm just going to

1 navigate to our website and show you how to access the  
2 tool, and then just give a short demonstration of the tool  
3 itself.

4 --o0o--

5 MR. WIELAND: So I'm just typing in  
6 oehha.ca.gov/CalEnviroScreen.

7 So this is our CalEnviroScreen webpage with more  
8 detailed information on the development of the tool,  
9 individual indicators, and supplemental analyses. We've  
10 got a link here right at the top for this most recent  
11 version of CalEnviroScreen. Right now, we're on the  
12 CalEnviroScreen 3.0 webpage, which has a link to the  
13 report in both English and Spanish, but it also has our  
14 mapping tool, embedded within the website. But just for  
15 presentation purposes, I'll open it in a new tab.

16 So this is what the mapping tool looks like right  
17 when you first arrive. Just a little bit of information  
18 about what CalEnviroScreen is. So when the user hits  
19 okay, they can see a map of California and all census  
20 tracts throughout the State symbolized based on their  
21 overall CalEnviroScreen score as John had outlined. If  
22 you look on the legend on the right-hand side here, it  
23 shows the range of scores, all the way from the most  
24 impacted communities, the top 10 percent, to this darker  
25 shade of green, the lowest scores for CalEnviroScreen.

1           There are also some census tracts across the  
2 State that are cross-hatched that indicate places that are  
3 highly polluted areas, but do not have an overall  
4 CalEnviroScreen score usually to low population data --  
5 low population counts.

6           So you can enter any location in California on  
7 this map. So I'll just type in Sacramento. It will zoom  
8 to your location and show localized results. So you can  
9 click on any one of the census tracts here and pull out  
10 information on CalEnviroScreen. So I'll just click on  
11 census tract in downtown Sacramento, and a pop-up window  
12 is produced that shows information about the census tract  
13 as it relates to CalEnviroScreen.

14           There's the population, the overall  
15 CalEnviroScreen percentile. Scrolling down a little  
16 further will produce the individual percentiles for the  
17 pollution burden side, and the population characteristic's  
18 side.

19           And then below that is a list of each of the  
20 individual indicators and what percentile they correspond  
21 to. So it's the same for all indicators a higher number  
22 means that that's the higher percentile as compared to  
23 other census tracts throughout the State. So, for  
24 example, clean-ups is a 98th percentile, meaning that the  
25 number and type of clean-up sites here are higher than 98

1 percent of the rest of the State.

2           Scrolling down further is some supplemental  
3 information about -- about the CalEnviroScreen tool,  
4 including information on the age characteristics of people  
5 in the census tract. And further down is a pie chart  
6 that's produced individually for each census tract that  
7 shows the race and ethnicity profile of the census tract.  
8 You can get this information on any census tract in  
9 California.

10           There are some simple tools here as well,  
11 including a little button here that takes you back to the  
12 map of California. This mapping tool is mobile friendly.  
13 So if you have GPS location enabled on your phone or  
14 tablet, you can click on find my location and it will take  
15 you to where you are.

16           There are also some simple tools here including  
17 a -- creating a printout of the mapping screen, and some  
18 simple sharing tools, sharing on social media or producing  
19 a hyperlink of the area you're looking at if you want to  
20 show that area to somebody else.

21           A couple of links here on the top as to get back  
22 to the CalEnviroScreen website. And then I think I'll  
23 just close with saying that we plan on releasing in the  
24 coming weeks individual indicator maps of all of the  
25 indicators within CalEnviroScreen. So, for example, you

1 could look at a map of just asthma or a map of just  
2 clean-up sites throughout California. So those are going  
3 to be coming out very soon also in an interactive format.

4           And last, but not least, John had mentioned  
5 making the data available. We have the spreadsheet --  
6 Excel spreadsheet showing information on CalEnviroScreen,  
7 a Google Earth KML file, and then a couple of GIS files  
8 for download that contain all of the information from  
9 CalEnviroScreen, and then a supplemental paper specific to  
10 our drinking water indicator methodology. So I think  
11 that's it on my end.

12           DR. FAUST: Good. Thank you. Yeah. I do want  
13 to just add. With respect to the individual indicator  
14 maps, which we have made available for the 2.0 and are in  
15 the process of developing and making available. So, for  
16 example, many of those individual indicator maps that  
17 feature the locations of specific sites or facilities,  
18 those facilities' locations are also identified on those  
19 maps, so you don't just see the colors, but you can see  
20 the points for the data that go into the -- go into those.

21           And I did forget to mention that we do have -- we  
22 have a hard copy and a PDF report that describes our  
23 methodology in detail, so that if there's any specific  
24 questions about sort of where the data come from, how  
25 we've analyzed the data, you know, what our reason is for

1 including it, you can find that information in the report  
2 and dig in deeper.

3 So I think we -- are we taking questions?

4 MR. WIELAND: I wanted to mention, yeah, we have  
5 time for a few questions, if there are any.

6 MS. BROSTROM: On the page where you talked about  
7 the caveats, you know, about the -- that this tool isn't  
8 designed to be a health risk assessment. And I understand  
9 you know that is partly based on the relative ranking. I  
10 do see in the future, you know, the next advance for  
11 cumulative impact analysis is, you know, making the tool  
12 able to make some definite health conclusions. What do  
13 you -- what do you see needs to be done in order to get to  
14 that place, and what are some of the barriers to making a  
15 tool that could look at what are the health risks  
16 associated with cumulative impacts?

17 Thanks.

18 DR. FAUST: All right. Yeah. Well, a big  
19 question. Yeah. So Dr. Zeise mentioned at the beginning  
20 some of the challenges that face us in understanding, you  
21 know, sort of this -- this finer level of health risk, you  
22 know, that communities face. I mean, we're -- we're sort  
23 of charged with identifying this bigger picture of  
24 understanding these differences in communities across the  
25 entire State, and we recognize that, you know, there's

1 many different contributors from different types of air  
2 pollutants, you know, different things in the water so  
3 forth, and that sort of understanding that and the  
4 combination of potential vulnerability is -- is, you know,  
5 presently analytically intractable, because of just how --  
6 how much information is required.

7 I do think though, you know, that, you know, a  
8 tool like this that does look broadly, you know, is a  
9 beginning to start to bring together information of the  
10 type that sort of needs to be developed to move in the  
11 direction of understanding risks.

12 You know, I think -- I think we continue to -- to  
13 think that we need to understand information at a finer --  
14 even finer level of resolution. You know, and we're doing  
15 certain things to move in that direction. For example, we  
16 have like air monitoring studies, local air monitoring  
17 studies that begin to tell us something a little bit more  
18 specific about, you know, where differences are occurring,  
19 you know, even below the census tract scale.

20 You know, and we can continue to develop, you  
21 know, an understanding of health risks from individual --  
22 individual chemicals.

23 And I think -- I think we have also a lot of  
24 opportunities to develop some of the information that, you  
25 know, we have in the tool at a finer level to take more

1 chemical specific information into account, when we think  
2 about them individually, and then when we think about them  
3 in combination as well.

4           You know, sort of the question of when that time  
5 is when we converge and have a good understanding of  
6 cumulative risk based upon some of this type of  
7 information, I can't really tell you, but I think we -- we  
8 have chances, but enhance and improve our understanding  
9 incrementally.

10           DTSC DIRECTOR LEE: Thank you, John, and also to  
11 Lauren and Walker for the demonstration and the overview  
12 of the CalEnviroScreen tool. It's an important foundation  
13 on which these conversations are happening. And we look  
14 forward to working more with OEHHA as we seek to develop  
15 methodologies in the future to expand our ability to look  
16 at cumulative impacts in the context of permitting  
17 decisions.

18           I am now going to introduce to you Mr. Ian  
19 MacMillan from the South Coast Air Quality Management  
20 District. Ian runs the -- is the manager for the SCAQMD's  
21 AB 2588 Air Toxics Hot Spots Program. He also was  
22 instrumental in incorporating more stringent guidelines  
23 from the Office of Environmental Health Hazard Assessment  
24 for conducting risk assessment into the South Coast  
25 methodology for assessing risk from stationary sources.

1 The South Coast also operates their MATES Program, which  
2 is a tool they have developed for looking at cumulative  
3 air burden throughout their basin. It was a  
4 groundbreaking tool when they developed it probably about  
5 a decade or more ago, I think.

6           And we are very happy to have Ian here to talk  
7 with us today. It's also -- he's a familiar face for a  
8 number of folks at DTSC, because prior to joining the  
9 South Coast Air Quality Management District, Ian worked  
10 for the Los Angeles school system on their school  
11 construction program and interacted with DTSC staff in the  
12 clearing of school sites for new construction.

13           So welcome, Ian.

14           (Thereupon an overhead presentation was  
15 presented as follows.)

16           MR. MacMILLAN: Good morning. Thank you very  
17 much for having me.

18           So I'd like to give a little perspective on what  
19 one air district does with regards to cumulative impacts.  
20 I should say that it's -- the way that we treat cumulative  
21 impacts might be different than what other air districts  
22 do. We are a very large air district, largest in the  
23 nation, in fact. And so what we might do might be a  
24 little bit different than what smaller or medium-sized air  
25 districts do.

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MR. MacMILLAN: I do want to start off very briefly talking about the different kinds of risk assessments. And this is just one way that I tend to think about it. And so on the top here we're looking at facility based risk assessments. And this is sort of the typical permitting style risk assessment. And this covers what a lot of agencies do, whether it's DTSC, EPA, South Coast AQMD, et cetera.

And really the idea is to look at a specific process, specific facility and see how that impacts those who are around that process or around that facility.

Somewhat similar, but a little different, is a site-based risk assessment. This is more looking at what would happen on an individual site. And this might be something for like a clean up. If there's pollutants added at a particular site, you might want to see what's happening at that site, and what would happen to future residence.

The difference here is that on a site-based one, this is, in some senses, a little bit more like a cumulative assessment, in that you're looking at the total historical pollution load on a site, and then what that might do to future residents or future occupants, I should say.

1           And then lastly, this receptor based. I know we  
2 just heard that CalEnviroScreen is not a risk assessment.  
3 And it certainly is not that, but the idea that there is a  
4 way to look at a receptor, an individual person, or an  
5 individual location and see what is a total pollution  
6 burden on that location.

7           And the reason I bring up these three differences  
8 is really there's a lot of technical analysis that goes  
9 into all of these kinds of assessments. And depending on  
10 what your goal is, that defines how you do your technical  
11 assessment. And so it's a very important thing to  
12 consider when crafting some risk assessment methodologies.

13                           --o0o--

14           MR. MacMILLAN: Very, very briefly, the risk  
15 assessment methodology I think folks here are generally  
16 familiar with it. The basic math underlying risk  
17 assessments is largely the same across all agencies, all  
18 risk assessment types. It's you have your pollutant  
19 toxicity, times your dose, equals your health risk. The  
20 devil is really in the details here though.

21           When you look at each of these circles up on the  
22 top, you know, for example, on the pollutant toxicity,  
23 different agencies assume different toxicity for different  
24 toxic substances. And there's sometimes some very good  
25 reasons for that, but it's one fundamental difference that

1 occurs across agencies.

2           When we look at dose, this also can make a big  
3 difference. For example, the exposure duration, maybe one  
4 assessment uses 30 years, another one uses 70 years.  
5 Maybe in some cases, there's an assumption that children  
6 are more susceptible to toxic pollutants for all -- all  
7 pollutants, and there might be some sort of multiplier  
8 applied for children that is -- one agency might use and  
9 another agency might use, or one risk assessment might use  
10 and another might not use.

11           And so these are some very key factors. For  
12 example, if you look at -- are you looking at a model, are  
13 you looking at a measured concentration? And there's  
14 probably hundreds of other parameters that really affect  
15 the way a risk assessment can be used and what its final  
16 outcome is. And so when thinking about cumulative  
17 assessments, especially if you're going to be combining  
18 across different agencies, or different risk assessments,  
19 any one of these parameters can really affect what the  
20 final result is going to be.

21   --o0o--

22           MR. MacMILLAN: Now, when we look at specifically  
23 air quality health risk assessments, typically these are  
24 more of a facility-based approach. It's, you know,  
25 thinking about for permitting, for example, when a new

1 source is permitted, either a new process or a new  
2 facility, there's a standard facility-based approach where  
3 you look at what are the impacts of a facility on its  
4 surrounding environment.

5           The way most air districts do it in California,  
6 is it's usually on a permit unit basis, so it might be a  
7 single piece of equipment or several pieces of equipment  
8 that are all similar, and -- but for the case where  
9 there's a concern about the total effect of an entire  
10 facility, so some facilities might have many, many permit  
11 units, maybe dozens or hundreds, there's the State law, AB  
12 2588, the Air Toxics Hot Spots Act, which was enacted in  
13 the late eighties, this looks at, in a sense, a cumulative  
14 assessment of an entire facility. And this assessment is  
15 repeating, in that it looks every several years to see  
16 what the toxic pollutants are coming from a facility. And  
17 it's looking at actual concentrations -- or actually  
18 emissions rather.

19           And one of the key pieces of the AB 2588 law is  
20 that it requires air districts by statute to use the new  
21 OEHHA risk assessment guidance -- or actually the --  
22 whatever risk assessment guidance that OEHHA puts forward.  
23 And so this often dictates how air districts conduct their  
24 risk assessments is because of AB 2588.

25           And then finally, like all other agencies, we



1 strategies to meet the ambient air quality standards,  
2 whether they are California standards or federal  
3 standards.

4           Similarly -- and a slightly different approach  
5 was in 1997 our board adopted what are called our  
6 Environmental Justice Initiatives. And this was really  
7 one of the first of its kind in the nation to look at  
8 what's a comprehensive approach to address environmental  
9 justice and to look at toxics impacts and sensitive  
10 communities. And a whole slough of measures came out of  
11 this.

12           The next three bullets here get into part of it.  
13 One was we began a cumulative impacts working group, and  
14 this is back in the early 2000s, and developed a white  
15 paper. Every now and again, I go back and read this white  
16 paper, and much, if not all of it, is still relevant.  
17 It's -- the same issues were around back then are still  
18 around now of how do you determine what is a cumulative  
19 impact, and how do you assess it.

20           We also have our toxics control plans that came  
21 out of the environmental justice initiatives. And these  
22 are looking similar to our air quality management plans,  
23 which look at criteria pollutants. This looks at toxic  
24 pollutants. That morphed into, what we call, our Clean  
25 Communities Plan. And again, this is an idea of taking a



1           MR. MacMILLAN: One way that we try to look at  
2 this -- I want to touch a little bit more in detail on our  
3 MATES study. This is an analysis that looks at both  
4 monitoring data, where we collect samples for an entire  
5 year throughout the basin, and look at toxic pollutants  
6 throughout our basin, as well as a modeling analysis,  
7 where we take the emissions inventory that we have or we  
8 think we understand where the emissions are coming from,  
9 from the mobile sources, such as cars, trucks, trains, and  
10 stationary sources, whether they're refineries or power  
11 plants or what have you.

12           And we throw that all into a dispersion model and  
13 we get a big blobby map that you see there with a lot of  
14 purple there. And so this is the L.A. area. You see all  
15 the black lines on this screen are freeways where we --  
16 Los Angelinos apparently love them. We spend so much time  
17 on them. And we see that the risk is greater, typically  
18 along the freeways, because that's where all the trucks  
19 and cars are, not surprisingly.

20           But this study has also been very useful, when we  
21 put these monitors out, we've actually found new sources  
22 of pollutants and new sources of emissions that -- by  
23 doing this study again and again, we always learn  
24 something new from both the modeling side, as well as the  
25 monitoring side.

1           So the map I'm showing here is from our 2005  
2 assessment MATES III. When we look forward to MATES IV,  
3 which was in 2012, we see all those colors start to  
4 diminish, which is great, great success, right, that we  
5 see that the -- that means that the risk has been going  
6 down substantially. A lot of this is due to a reduction  
7 in diesel particulate matter, but it's very good success.  
8 We see sort of the brightest pattern right down near the  
9 ports, not surprisingly.

10           What we also found out is right about this same  
11 time frame, OEHHA came out with their new risk assessment  
12 guidelines that found that cancer risks are higher than we  
13 previously new. A large part of this is that there is  
14 some new science that's come out that shows that children  
15 are more susceptible to cancer causing compounds than  
16 previously believed, and so when we take that into account  
17 and we use a new OEHHA methodology, we find we have the  
18 exact same map again, that risks are still quite elevated,  
19 and we have a lot of work ahead of us.

20                           --o0o--

21           MR. MacMILLAN: I want to touch on another  
22 approach that we take to cumulative impacts, and this is  
23 air monitor. We'll sometimes do some special studies to  
24 see what air pollution impacts are in a local area. We  
25 have, of course, a region-wide network that provides some

1 information at a couple dozen sites, but we also do some  
2 smaller scale studies as well.

3           And one thing that we're also discovering is that  
4 there's a lot of new technology coming along, that there's  
5 low cost sensors that are becoming available to the  
6 public. There's remote sensing technologies that can tell  
7 us some information about emissions that we just really  
8 didn't know before. And this is something our agency is  
9 very active in both of these efforts to try to make sure  
10 that the information that comes out of these new  
11 technology is something that that can be relied upon, and  
12 we can understand what it's really telling us.

13           One example of this is in the City of Paramount.  
14 It was mentioned earlier this morning. We found a new  
15 kind of technology where we can mount air monitors on  
16 power poles and on utility poles, and collect information  
17 about metals in the air. And this is a really new  
18 technique that was never available before. And once we  
19 started mounting these in this city, and an industrial  
20 part of the city, we found much higher sources of  
21 hexavalent chromium, than we'd ever known about before.

22           And some of these sources we didn't even know  
23 could be sources of hexavalent chromium. But by sticking  
24 these monitors out, we really found some new information.

25           What we found to be very useful from this is

1 really focusing on coordination. And part of this  
2 coordination is what we do within the agency. We're a  
3 very large agency, 700 plus employees, making sure that  
4 our compliance folks are talking to our legal folks,  
5 talking to our planning folks et cetera, so that there's a  
6 common understanding and availability of resources and  
7 tools to make sure that's all coordinated, as well as  
8 working with other agencies, such as DTSC and others, to  
9 make sure that the other agencies understand what we're  
10 doing, and we understand what the other agencies are  
11 doing.

12 We have a lot of regular coordination calls that  
13 are going on. And then lastly also with the public of  
14 making sure we're going out speaking to the public. We  
15 have regular conference calls we hold with the public, and  
16 make sure that -- that this coordination is occurring.

17 --o0o--

18 MR. MacMILLAN: Part of our come -- or our  
19 comprehensive approach to cumulative impacts is also  
20 looking at our regulations. And it's one thing to try to  
21 put in a cumulative program for permitting, but what we've  
22 really found is that one size doesn't fit all when it  
23 comes to regulations. Many sources have their own special  
24 needs and their own special solutions to reduce the  
25 pollution. And so we have a comprehensive strategy to try

1 to reduce pollutants.

2           And so we have many source-specific rules,  
3 whether it's on asbestos, or dry-cleaning, or led  
4 facilities or what have you. We have a continuing  
5 regulatory framework where we try to address pollutants  
6 from every industry that we can.

7           We also provide extra protection for sensitive  
8 populations in some of our rules, whether it's for schools  
9 or for residents. They're also called out in many of our  
10 rules.

11   --o0o--

12           MR. MacMILLAN: We also have a pretty robust  
13 funding program that we administer, either local funds or  
14 State or federal funds. Our agency administers these  
15 funds in most cases to mobile sources of pollution to  
16 again address the diesel particulate matter. But we have  
17 a whole slough of funds that are listed on this slide here  
18 that we try to make sure are used in the most effective  
19 way. Some of these also go to stationary sources.

20           But we've found that this has been a very  
21 effective approach. The funding level goes up and down  
22 year by year, as you can imagine. We're currently at  
23 about 100 million a year with some fluctuation in there,  
24 but we have found this to be very effective at reducing  
25 pollution.

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MR. MacMILLAN: In conclusion, really, there are many ways to assess cumulative risks. And the devil is really in the details, the technical assessments here are quite complex, and it's just something to keep in mind when going down this pathway that the technical approach really -- really matters, because the results we put in affects what comes out.

The primary focus of our agency has been on regulation, but also incentives, and working with partners, and trying to find other ways, because there's not really a one size fits all. And so even if you know where it a cumulative impact might be how you're going to address it. One way is through permitting, but there might be a lot of other ways that agencies can address cumulative impacts.

With that, I'll end my talk. And if there are any questions, I'm available.

(Applause.)

DTSC DIRECTOR LEE: Thank you, Ian.

Unfortunately, Rich Stedman who was also going to speak to us at this time from the Monterey Bay Unified Air Pollution Control District is ill with the flu, and was unable to make it today. I took the opportunity to ask Jack Broadbent who is the Executive Officer at the Bay

1 Area Air Quality Management District if he would like to  
2 just take a couple of moments to talk with us about some  
3 of the creative things the Bay Area Air District is doing  
4 in the space of cumulative impacts.

5           They held a symposium recently. They have their  
6 CARE Program. They've really done some important work in  
7 this area and are one of the leader organizations in  
8 California working on cumulative impacts. And Jack has  
9 agreed to take a few minutes just to fill us in on that,  
10 so thank you, Jack.

11           BAY AREA AQMD AIR POLLUTION CONTROL OFFICER

12 BROADBENT: Thank you, Barbara. Well, I don't need to say  
13 anything more. You just -- you just gave my talk.

14           No. I'd be glad to talk a little bit about what  
15 we're doing in the Bay Area as it relates to trying to  
16 understand and address cumulative impacts. Probably need  
17 to just a -- take a moment just to talk a little bit about  
18 about the Bay Area. I really appreciated Ian's  
19 presentation, because I thought it did a great job of  
20 explaining in terms of from an air quality, a local air  
21 pollution control agency standpoint, how to address  
22 cumulative impacts.

23           And I think the best thing I can tell you is this  
24 is not a new issue to the air pollution control agencies.  
25 We've been seeking to trying to address cumulative impacts

1 for many decades actually. And that's certainly the case  
2 in the Bay Area.

3           The Bay Area Air District is -- or I should the  
4 Bay Area is home to about seven and a half million people.  
5 We have, at the Bay Area Air District, we're roughly about  
6 half the size of the South Coast. We permit, and oversee,  
7 and seek to minimize emissions from about 10,000  
8 facilities in the Bay Area.

9           So the District -- my District is about 350  
10 folks. And as I indicated, we have been working on the  
11 issue of cumulative impacts since I've been there for  
12 nearly 14 years now.

13           So what we have sought to try to address, or how  
14 we've sought to try to address cumulative impacts is  
15 really, first and foremost, of course, through our  
16 permitting program. And I'll tell you about that, because  
17 we have a lot of ongoing continuing work in that area.  
18 Burt as Barbara mentioned, out almost over a decade ago,  
19 we initiated an effort referred to as our Cumulative Air  
20 Raise Evaluation Program, or our CARE Program.

21           And that effort was simply to try to understand  
22 what are the disproportionately impacted communities in  
23 and around the Bay Area, try to map, try to understand  
24 what the relative risk is. And similar to the MATES  
25 Program, I have some great maps. And if I -- if I had

1 better appropriation, I would have been able to show you  
2 these maps.

3           But let me just tell you what we know from our --  
4 from our efforts. We know that we have some communities,  
5 specifically up in Richmond, where there's a high  
6 concentration of, not only stationary sources but also a  
7 number of mobile sources, namely train traffic --  
8 certainly the refineries are there, train traffic, ship  
9 traffic actually as well, what we call the iron triangle  
10 up that way.

11           But as you -- if you can picture it in your mind  
12 the Bay Area, as you move from the Richmond area all the  
13 way down the 880 corridor, it's a highly impacted area as  
14 well. On the Peninsula side the Bayview-Hunters Point is  
15 also a impacted community.

16           And then as you move to the lower part of the Bay  
17 Area, we have basically East San Jose, where the  
18 confluence of freeways, and you have a relatively poorer  
19 community over there in the eastern part of San Jose.

20           Our highest risk in the Bay Area is in the West  
21 Oakland community adjacent to the port. And it's  
22 indicative of the Bay Area. What you have in the Bay Area  
23 is a very dense area. At least seven and a half million  
24 people live essentially adjacent to some fairly big  
25 sources. It's not as spread out as, for example, in L.A.

1 and certainly not as spread out in the San Joaquin Valley,  
2 but rather you have folks living literally right up  
3 against the fence line, and that's definitely the case in  
4 the West Oakland community.

5 Now the West Oakland community, given the fact  
6 that it's next door to the port, it's also, if you know  
7 this area, has a freeway running through it. And when the  
8 earthquake occurred, they rerouted the freeway, and it  
9 rerouted the freeway right through the West Oakland  
10 community unfortunately.

11 So our CARE Program identifies the risk in the  
12 West Oakland community, and it's -- in terms of risk, the  
13 relative risk just from air pollutants, it's on the same  
14 order as what you'll find next to the 710 Freeway down in  
15 L.A. I know that's probably one of the higher risks  
16 as it relates to the Alameda corridor, just that -- the  
17 port and all the trucks up and down that freeway. And we  
18 find very similar risks in the West Oakland community.

19 Now, the good news is through the implementation  
20 of a number of CARB regs, also just frankly focusing our  
21 grant resources, we've been able to reduce that risk, and  
22 that's a good news story.

23 But similar to the MATES findings, when you now  
24 readjust the relative risk with the new OEHHA risk  
25 approach or factors, we see that while the risk has gone

1 down, it's now gone back up in terms of its relative size,  
2 and the relative impacts, largely because of the new OEHHA  
3 risk factors.

4           Now, that's -- it's not to mean that there's more  
5 emissions in those communities, just that we know and  
6 understand that the potency of -- particularly diesel risk  
7 is better understood, and we need to continue to really  
8 attack and address the relative impacts in these  
9 communities.

10           Let me talk a little bit about though, Barbara --  
11 and I won't take too much time, but I appreciate you  
12 giving me the mic, and let me talk a little bit about our  
13 work relative to our permitting efforts.

14           This is an area in which we have -- frankly, have  
15 welcomed any or all new ideas on how to really incorporate  
16 the surrounding when it comes to permitting in our -- in  
17 our stationary source permitting. And I'll just give you  
18 a couple of ways in which we have sought to try to address  
19 this.

20           About four or five years ago, we sought to  
21 identify communities, in and around the Bay Area, wherein  
22 that if a particular source expands or gets added to that  
23 community, that they would face a higher offset ratio with  
24 regard to their new source review program, meaning that if  
25 a new source wanted to locate in the West Oakland or in

1 the Richmond community in the Bay Area, they would not  
2 only have to apply best available control technology, but  
3 they would have to also offset their remaining emissions  
4 on a ratio of similar to say a 1.5 or 2.0 to 1.

5           And our offset ratios now are only 1.1 or 1.2 to  
6 1. So that was our attempt to try to address some of  
7 these disproportionate impacts. We had a very vigorous  
8 rulemaking effort, a very tumultuous debate in front of  
9 our board. Ultimately, the board did not put this  
10 proposal in place, in part because it felt that all areas  
11 of the Bay Area should seek to be able to have as much  
12 protection as possible.

13           And that was just one of many different ideas  
14 that have come out of the idea of trying to try to address  
15 cumulative impacts. We've sought to try to change the  
16 underlying rulemaking that governs our permitting. It's  
17 an idea that was talked about with our CARE Task Force,  
18 when we --

19           DTSC ASSISTANT DIRECTOR MASCAREÑAS: I put the  
20 maps up for you.

21           BAY AREA AQMD AIR POLLUTION CONTROL OFFICER  
22 BROADBENT: That's good. It's not our maps, but it's a  
23 map.

24           Thank you.

25           DTSC DIRECTOR LEE: It's your map.

1 BAY AREA AQMD AIR POLLUTION CONTROL OFFICER

2 BROADBENT: Is it?

3 I can't tell. Oh, okay. Good.

4 So I mention this, because when we first  
5 established the CARE Program, we actually established a  
6 CARE Task Force. And I get a chance to recognize Janet  
7 Whittick, who actually served on the CARE Task Force. And  
8 in the true idea of what a task force is, it started and  
9 ended. We've thought that it's not something that should  
10 have a long-term life.

11 We're now thinking we probably need to  
12 reestablish the CARE Task Force or something like it. And  
13 we're actually contemplating establishing some type of  
14 working group to continue to explore what are some ideas  
15 in terms of addressing cumulative impacts through our  
16 permitting program, and -- but we do know that we need to  
17 do this in a manner in which all voices are heard,  
18 everyone is welcome to the table. So look for Janet and  
19 others here in the room for us to be inviting folks to a  
20 working group where we can continue to explore potential  
21 regulatory approaches.

22 I'll just mention a last few things. Ian, I  
23 thought, did a great job, but we, too, have adopted rules  
24 just to try to seek to reduce the impacts in communities,  
25 particularly when we understand that there are sources in

1 those communities that could be subject to a command and  
2 control rule. So we've adopted a metal melting rule that  
3 impacted a number of sources along the 880 corridor.  
4 We've also adopted a number of refinery rules that reduce  
5 their emissions on the Richmond and the Martinez and other  
6 communities.

7           And we're -- lastly, I'll just mention that we're  
8 working on a rule right now, which is proposed rule 1118  
9 which would seek to be able to require all stationary  
10 sources to ultimately be brought down to a 10 in a million  
11 risk. This will be considered in front of my board  
12 probably in the July time frame. We have been working on  
13 this. The EIR just got posted actually last Friday, so  
14 it's new news. And we're real excited about that proposal  
15 in front of my board.

16           But with that, Barbara, I will stop and thank you  
17 for the opportunity to let you all know what we're doing  
18 in the Bay Area. And thanks for getting that map for  
19 knee. Thanks.

20           (Applause.)

21           DTSC DIRECTOR LEE: I think Jack needs to get an  
22 award for standing up and giving a very cogent  
23 presentation of all of the amazing work that they are  
24 doing in the Bay Area Air District with about five minutes  
25 notice. It's also a testament both to -- to just the

1 technology we have at our finger tips on the Internet, as  
2 well as how easily navigable the Bay Area website is that  
3 we were able to quickly Google BAAQMD CARE map and find  
4 it, and pull it up for folks to take a look at.

5           And that, in and of itself, is a wonderful  
6 example of some of the great work that the Bay Area  
7 District, as well as you heard earlier, the South Coast  
8 Air District have done in this space, which is an  
9 important part of the reason that we wanted to hold this  
10 symposium as DTSC is starting to work on issues of  
11 cumulative impacts and cumulative risk, because so much  
12 good work has gone before us, and we know we're new to  
13 this space, and we are very respectful of the expertise,  
14 and the leadership that our colleagues have shown in this  
15 area in the air districts in OEHHA, and at other  
16 organizations.

17           So at this point, we are now at our break. And  
18 so what time do we come back from the break Evelia?

19           DTSC SENIOR HAZARDOUS SUBSTANCES ENGINEER  
20 RODRIGUEZ: 10:55.

21           DTSC DIRECTOR LEE: 1055. So we have about a  
22 20-minute break now. For those of you on the air, we  
23 will -- will the webcast stay off -- stay on or will we  
24 turn it off during the break?

25           DTSC SENIOR HAZARDOUS SUBSTANCES ENGINEER

1 RODRIGUEZ: We'll go off.

2 DTSC DIRECTOR LEE: So the webcast will go  
3 off-line during the break. We have a 20-minute break now.  
4 And we will resume at five minutes to 11:00.

5 Thank you.

6 (Off record: 10:36 a.m.)

7 (Thereupon a recess was taken.)

8 (On record: 10:59 a.m.)

9 DTSC ASSISTANT DIRECTOR MASCAREÑAS: Hi,  
10 everyone. We're about to get started again.

11 Great. Please start taking your seats.

12 Welcome back from the break, everyone. We're  
13 just pulling in the last folks who are chatting in the  
14 lobby.

15 Welcome back.

16 So we had a fantastic speaker, Dr. Rachel  
17 Morello-Frosch, ready to present to us today. You'll see  
18 her presentation behind me. *The Science of Cumulative*  
19 *Impacts: Implications for Decision Making* is the name of  
20 her presentation. Unfortunately, there is a flu going  
21 through the Bay Area, and she is unable to join us to  
22 actually deliver the presentation in person today. And  
23 she sends her regrets. We will make her presentation  
24 available as part of the follow up to today's symposium.

25 And so she will provide that information, and

1 we'll try and incorporate some of the information that she  
2 also has in her presentation throughout the rest of the  
3 day.

4           Just for folks who don't know Dr. Rachel  
5 Morello-Frosch. She is a professor who holds a Ph.D. in  
6 Environmental Health Sciences, and focuses her research on  
7 environmental health and environmental justice. An expert  
8 in this field, and we are lucky to have her prepare these  
9 materials for us today.

10           With that, we're going to move into the  
11 presentations on -- from the community perspective. And  
12 I'll bring back up Director Lee to introduce our next two  
13 speakers. Thank you.

14           DTSC DIRECTOR LEE: Thank you, Ana. I am happy  
15 to have the opportunity to introduce for everyone two  
16 folks who I've had the opportunity to work with in my  
17 capacity at DTSC, and at least in one case for many years  
18 on issues associated with environmental impacts on  
19 communities.

20           So I'm going to start by introducing Ms. Ingrid  
21 Brostrom. She's a senior attorney at the Center for Race,  
22 Poverty, and the Environment. She's a graduate of UC  
23 Hastings School of Law. And she joined CRPE in 2006 as an  
24 Equal Justice Works Fellow. She currently leads CRPE's  
25 Toxic Free Communities Campaign, which is focused on

1 eliminating or reducing threats to California's low income  
2 communities and communities of color.

3 She also was instrumental in convening The  
4 People's Senate, which is an organization with  
5 representatives from impacted communities around the  
6 State, and works with DTSC to try to address the  
7 community's needs. We've had a very productive working  
8 relationship with her, and she sits on the advisory  
9 committee for our Hazardous Waste Reduction Initiative,  
10 and has been an important contributor to that effort.

11 She also holds degrees in environmental studies  
12 and politics, and interned with the Jane Goodall  
13 Institute, the Center on Biological Diversity, and the  
14 Sierra Club.

15 In addition to Ingrid Brostrom, we're fortunate  
16 to have Ms. Martha Argüello. I've known Martha since we  
17 served together on Cal EPA's Environmental Justice  
18 Advisory Committee in the early 2000s. For the past --  
19 Martha is the Executive Director of Physicians for Social  
20 Responsibility.

21 And for the past 32 years, she's served in the  
22 nonprofit sector as an advocate, community organizer, and  
23 coalition builder. She joined the L.A. Chapter of  
24 Physicians for Social Responsibility in 1998 to launch  
25 their environmental health programs, and became their

1 executive director in November of 2007.

2 She is committed to making the credible voice of  
3 physicians a powerful instrument for transforming  
4 California and our planet into a more peaceful and healthy  
5 place. She's dedicated her career to the environmental  
6 justice movement and is active as a board member on way  
7 too many organizations for me to run through the list now.  
8 But she is quite a force in environmental justice and we  
9 are fortunate to have her as well as Ingrid Brostrom here.

10 I'm going to invite them to come up together and  
11 sit at the table. If you want to stand while you speak,  
12 you can do that, or you can speak from the table,  
13 whichever is easier for you.

14 Thank you so much for joining us.

15 (Applause.)

16 DR. ARGÜELLO: So we decided to change the order  
17 a little. So in 2007 when I became the ED one of my first  
18 official acts as ED was to hire a membership coordinator  
19 who now works at DTSC, the wonderful Ana. So I just want  
20 to acknowledge what a wonderful opportunity we had to work  
21 together.

22 (Thereupon an overhead presentation was  
23 presented as follows.)

24 DR. ARGÜELLO: And so my -- as Barbara had  
25 mentioned, we were -- we served together on the

1 Environmental Justice Advisory Committee at a time when  
2 there was a lot of legislative activity around  
3 environmental justice. And some of those first  
4 activities, you know, in the early 2000 was first, well,  
5 what is environmental justice. Because at that time,  
6 there was a debate, like does that even exist? What is  
7 that? What is an environmental justice problem?

8           And so for advocates who had been talking about  
9 environmental racism, and the lived experience of seeing  
10 less protection, it was sort of always jarring to be in  
11 rooms where you were trying to -- where you were being  
12 told that you had to prove that you were being harmed.

13           And so at -- part of that process two very big  
14 ideas came out of that environmental justice process. And  
15 it was -- you know, everybody board and department was  
16 supposed to develop an Environmental Justice Action Plan.

17           But the two main things that came out of that  
18 were, one, the cumulative impacts tool. So for -- I was  
19 in a meeting and we sort of jokingly thought the  
20 cumulative impacts tool was not designed to distribute  
21 GGRF funds. It was actually in response to many, many  
22 years of political advocacy on the part of impacted  
23 communities saying the tools that you currently have for  
24 evaluating - remember that hazard equation that you saw -  
25 those tools are minimizing the exposures and the impacts

1 that we're feeling in our communities.

2 Those tools that you currently have for  
3 permitting is actually driving health disparities, and  
4 that's how our organization, as a public health  
5 organization, came to be involved in many of these issues.

6 And so there's also a movement in medicine about  
7 moving upstream. But in 2000, we were talking about the  
8 need to develop a way to assess cumulative impacts and a  
9 way to act in a precautionary way. Highly contentious,  
10 both of them, but there we are. So this -- this is really  
11 an attempt to move us upstream to go up to preventing --

12 --o0o--

13 DR. ARGÜELLO: -- exposure. So there's the final  
14 report if you want to look it up. Fifty-three mentions in  
15 that report -- I know Barbara is laughing, because it was  
16 high drama, really exciting. But also some really  
17 important thinking came out of the environmental justice  
18 movement. Massive amounts of community participation.  
19 These rooms were full. We met throughout the State.

20 And so look at it. Forty-one mentions of  
21 precaution, 51 mentions of cumulative impacts. So that  
22 was driven by communities saying we need to do better  
23 about preventing exposure and harm.

24 --o0o--

25 DR. ARGÜELLO: And this is what it looks like,

1 right, in terms of we talk about data and information.  
2 This is what it looks like when you live in an  
3 environmental justice community. So if you live in Watts,  
4 you're going to -- you life expectancy is 73 years. It's  
5 85 in Bel Air. And there's reasons that happened. Yes,  
6 some are land use, but also some are about what we say can  
7 happen in a community, and that -- which is also a  
8 land-use decision, but it's also related to permitting.

9 So I'm going to talk a little bit -- because I  
10 know that there's -- those are land-use decisions, but  
11 they need to -- we need to start moving upstream. Because  
12 even at the local level, when we're making those -- when  
13 planning departments are making those land-use decisions,  
14 they're going to look to an agency, like the Department of  
15 Toxic Substances to give us that basic information about  
16 what we should and should not be putting in communities.

17 --o0o--

18 DR. ARGÜELLO: So this is, again, what a  
19 cumulative impact looks like, and I left a bunch of things  
20 out, right?

21 So I think this morning, I must have used at  
22 least 17 personal care products from the time I got up to  
23 the time I left my house. And I live in a place where the  
24 air pollution is not so bad. But I live less than a half  
25 a mile from a haz -- a facility that's using hazardous

1 chemicals. So those cumulative impacts happen both indoor  
2 -- in our homes, some things we actually buy and use  
3 willingly, and some are involuntary exposures.

4 --o0o--

5 DR. ARGÜELLO: And then this is something I  
6 learned from your past director, and I really loved it.  
7 So I'm very stream of consciousness girl, so my  
8 presentation is going to be very stream of consciousness.

9 But this was presented to me at a meeting by  
10 Debbie Rafael. And I was -- I just can't stop talking  
11 about it. It's three years ago. And she talked about  
12 this being the mission of DTSC, right? We're talking  
13 about you have functions to deal with the sins of the  
14 past, right?

15 So Exide, among one of them, right? And then  
16 there's the sins of the present. And Exide is one of  
17 these that lives in all three, right? And that's often a  
18 problem that there's not neat little boxes. I have neat  
19 little boxes up there, but that's not how it happens.

20 But DTSC's mission is around preventing these --  
21 addressing this sins of the past, dealing with the sins of  
22 the present, and preventing the sins of the future. And  
23 in there, these are the kinds of tools we've used. You've  
24 used risk assessment, cost-benefit analysis, and other  
25 tools to get you to those permitting rules.

1           But there's a fundamental flaw, right, is that  
2 those permits aren't about preventing anything. They're  
3 about saying these are the rules of the game for you to  
4 operate. And there's a disconnect between those rules and  
5 the things that happen to communities who live nearby,  
6 right?

7           So we need better tools. We need better ways of  
8 assessing, you know, that in there, right? So there's  
9 cumulative impacts assessment. Other tools that we can be  
10 using are health impact assessments that are qualitative  
11 tools that root decisions in the way people are going to  
12 experience them. And so the cumulative impact tool is one  
13 more tool.

14                               --o0o--

15           DR. ARGÜELLO: And then some of the things that  
16 we consider is how do we make sewer -- and cumulative  
17 impacts is an attempt to make sure that our assessment or  
18 the permitting -- the data that underlies that permitting  
19 will reflect how people are going to live and experience  
20 that exper -- that contamination, that particular  
21 facility, that particular process.

22           And again, I also understand that it's different  
23 from when you're permitting a new process or a new  
24 chemical versus a facility. And it's ease for me to talk  
25 about them like they're all the same, but I know that in

1 your day-to-day life, those are really different and they  
2 make a difference. So, you know, bear with me for the  
3 generalization.

4           So one of the things that we've been looking  
5 at -- and this is a lot informed by the climate work. And  
6 while my heart, my passion for the environmental justice  
7 movement came out of working on issues of toxins, I have  
8 found myself working on climate change for the last 10  
9 years. And it is really interesting to watch a public  
10 agency have to shift what it does and how it does it,  
11 because the enormity of the problem that it has to  
12 confront.

13           And so there is a book called *This Changes*  
14 *Everything* around climate change by Naomi Klein. And I  
15 think that those of us in the toxics world have been  
16 afraid to say that if you want an economy that's benign by  
17 designed, it does change everything. And so that thinking  
18 within the environmental justice movement around a just  
19 transition from fossil fuels has begun to really obsess us  
20 in the toxics world, and how do we operationalize that.  
21 And then the next question is how do we work with public  
22 agencies to actually begin to have technology forcing  
23 regulations that help move us towards that benign by  
24 design economy, so -- and these are some of the tools that  
25 we think can be used, that -- this community driven

1 decision-making process.

2           And I'll give you an example. We were working on  
3 a football stadium. And those of us in the advocacy  
4 world, no, they're not going to get a CEQA exception, and  
5 we're going to oppose that stadium. That's just terrible.  
6 Why would you put a stadium in downtown L.A. Well, we did  
7 a health impact assessment, and we went and talked to  
8 residents.

9           And you know what, 50 percent of the residents  
10 wanted the stadium, the other 50 percent were opposed, but  
11 everybody agreed on one thing, if there is going to be a  
12 stadium, it should meet X, Y, and Z requirements, right?  
13 It should not displace people. It should not be a driver  
14 of gentrification. The jobs should be local.

15           And that was a lesson for us advocates, right?  
16 It's not always about no. It's about how do we live with  
17 trade-offs. And that's, you know -- and so part of it is  
18 who benefits and who bears the burdens. And so when  
19 you're thinking about the permitting decision, you know, I  
20 would start thinking about who bears the burdens a lot  
21 more than who's reaping the benefits, right, because  
22 that's what happens when there's a scale. Well, we really  
23 need these jobs, and this industry.

24           From our perspective, you're always putting the  
25 thumb on the side of industry in -- and I hate to use the

1 word, but that will -- jobs will trump health, right?

2           And what we're saying is that we need a new model  
3 for how regulators do their work that will help us get to  
4 that new economy, because I work in a community that has  
5 20 percent unemployment, right?

6           And so we're acutely aware of this issue of jobs  
7 and the environment. But when you talk to that community  
8 who lives with 20 percent unemployment, they're saying the  
9 traditional things, save every job. It doesn't work for  
10 them, right, because you have, in that particular  
11 community, a huge reentry population.

12           So, you know, jobs at the stadium or jobs at the  
13 refinery, or jobs -- you know, the one or two jobs at that  
14 local oil extraction site don't mean a lot, right?  
15 Because if you're reentering from prison, you're not going  
16 to be able to access those jobs, right? So it's not just  
17 any job that we're talking about.

18           And we need you guys to know that, right? That  
19 communities actually need economic development where we're  
20 not choosing -- you know, I know I'm going to go to this  
21 job, and I'm going to track home lead exposure, or  
22 actually I'm going to go to this job and not know I'm  
23 tracking home lead exposure, versus, you know, what if --  
24 you know, we're working with a group of domestic workers,  
25 and what if the economic development was about providing

1 them with technical assistance to create green cleaning  
2 products that they make themselves, that they market  
3 themselves, they package themselves in safe, reusable  
4 packaging, and are able to actually build a business model  
5 based on delivering a service that's healthier for the  
6 person who gets the service and the person who provides  
7 it, right?

8           So we're really asking you what are the things  
9 that you can do when you're permitting that help that  
10 vision of a community happen, not the vision that we  
11 currently have, where you've got 30 auto body dismantlers  
12 in one community and no way to say we would like something  
13 else.

14                           --o0o--

15           DR. ARGÜELLO: Oh, I guess that's it. There we  
16 go. So this is the other thing that we think has to  
17 fundamentally shift, right? We have a way of deciding  
18 things, and we never find out about it until like Friday  
19 5:00 p.m.

20           So somebody has decided -- and you work together,  
21 and this usually is industry and the regulatory where  
22 folks deciding, and then it gets announced. And then you  
23 know what happens when you've spent a lot of time and  
24 money on something, you're going to defend it, right?  
25 That's just an instinct.

1           And so then it becomes an issue of defending it.  
2 And when ends up happening is you end up going to a  
3 community where we expect you to do what it says in your  
4 mission you're going to do. And what we hear really is a  
5 defense of a decision where we are not benefiting, where  
6 this balance of benefits and burdens is not working,  
7 right?

8           And so this idea -- so I'm look -- I'm like I  
9 want to know who's in the room, right, because they're  
10 probably thinking what is she talking about?

11           So I am talking about a very radical rethinking  
12 of what your role as regulators are. You know, and I got  
13 the opportunity to work in Nicaragua where in 1986 and  
14 '87 -- if you know your history, you know what was  
15 happening there. And so we as technocrats who worked in  
16 institutions, this is what we sat around and asked  
17 ourselves, how are we going to radically change the way we  
18 do things, so that we're putting people's health first,  
19 right?

20           And one of the first things they did is they  
21 decided health care was a right and a responsibility of  
22 government. They had a really -- and we had a very  
23 interesting approach to economic development, which was  
24 about public-private partnerships. We weren't really  
25 great at regulations, all right, because we saw ourselves

1 as a developing nation, and so regulations got in the way  
2 of that.

3           What is sort of strange is to see that same thing  
4 in this country, where we actually have opportunities to  
5 do things differently. So, let's see, I think I put my.  
6 So we still don't know what goes beyond this, right? For  
7 some decisions, we can figure it out. For other, I think  
8 we still have a lot of thinking and talking to each other  
9 to do to figure out how this gets operationalized and how  
10 you ensure community power --

11                               --o0o--

12           DR. ARGÜELLO: -- so that we're not having  
13 community meetings and processes where we think that we  
14 are going to somehow end up being able to participate in a  
15 decision only to find out not so much, right? So that's  
16 really important, this idea of listening to communities --  
17 actually, listening, not hearing, right? There's a huge  
18 difference.

19           And we see that at every stage, right? There's  
20 times when I'm like I don't want to go to that public  
21 meeting. Public participation is really important. I'm  
22 like yeah, but I'm not a theater major, right? I'm an  
23 activist, and so I don't want my public participation to  
24 be theater.

25           And so how do we drive -- that also has to really



1 though you didn't do it, it's really hard to get to a  
2 conversation, right? So there's this -- I'm feeling very  
3 catholic today. So there's a sense of a mea culpa, but  
4 real contrition, right? Not just guilt but contrition,  
5 which implies you're going to change behavior.

6 So that's really important. And gaining our  
7 trust on that is really important. Looking at models like  
8 TURI, right? We spent a lot of time on the Safer Products  
9 Consumer Regs. And we actually, you know, did not agree  
10 within even the advocacy community about the best approach  
11 to that upstream thing, right? And so we might want to  
12 revisit that.

13 And I threw it -- I threw in the South Coast just  
14 because I was finishing that slide as I -- as he was  
15 talking. But I think that approach to let's look at a  
16 chemical like perchloroethylene and let's figure out a way  
17 to get rid of it. That happened because somebody said  
18 let's figure out a technology that's safer, right?

19 So there is this partnership with research that  
20 is not happening the way that it should be. We are not  
21 saying to research institutions go to paramount and find  
22 me an alternative to chrome plating or find -- go send  
23 your scientist into, you know, some facility that you know  
24 is leaving a mess and figure out how to reengineer or  
25 reprocess or use green chemistry technology.

1           And that, to me, goes beyond -- I don't want a  
2 consumer based approach, right? The Safer Consumer  
3 Products regs are good, but they're going to be based on a  
4 consumer product, right, and who can shop their way out of  
5 being contaminated. I'm asking you to go further upstream  
6 who's manufacturing and who's creating stuff, go in there,  
7 right, because you've got a hazardous waste problem.

8           And the only -- and we can't knock on their door  
9 because, you know, they see us as the enemy, but your  
10 scientists can. And you in a partnership with, you know,  
11 UC Berkeley or UCLA can go in there and say, well, let's  
12 figure this out.

13           We -- you know, a great example of this was the  
14 bill we passed many years ago to remove -- to create pipes  
15 with no lead, right? You had a standard for lead pipe  
16 that was a really small amount of lead. The chemical  
17 manufacturers were like you're going to put us out of  
18 business. All jobs will go away. Oh my, God. What are  
19 we going to do, right?

20           And the crazy environmentalists passed a law  
21 that's going to put us all out of business. Well, we've  
22 just spent the last eight years with UCLA and the  
23 California metal manufacturers doing an alternatives  
24 assessments on a lead-free solder, right?

25           It shouldn't take that long to figure out that



1 just wrong, right, because markets aren't magic. And  
2 without us moving toward creating a new market that's  
3 benign by design, we're going to keep build -- you know,  
4 doing regulatory stuff on top of a system that's  
5 already -- so it's got the inequality baked in.

6           The outcomes of our current economy is to create  
7 more inequality. So, yes, you have a role in that, even  
8 though you're not a social service organization, right?  
9 There's a lot you can do to change the economy. I mean,  
10 we were talking the other day in a community meeting  
11 about -- and I didn't bring it up, but about the stuff  
12 that you guys are doing around soil contamination clean  
13 up, and the economic opportunities embedded in training  
14 people to do it well.

15           And it was about a meeting totally unrelated to  
16 any environmental things, and folks not working on Exide.  
17 But that is spreading in the community. And that's a  
18 model that people want to see, right? And that's where we  
19 get to that model about the sins of the past, the present,  
20 and the future.

21           And I don't know if that's permitting, but you  
22 have to figure out through the permitting process how to  
23 tell people though shalt not pollute, thou shall reduce  
24 your harm, and that will drive economic opportunities.  
25 That will drive the kind of stuff that we want. We'll

1 fight with you on those jobs, because we want those jobs.

2           And, you know, the other part really is that if  
3 we continue with any job is a good job, we continue to  
4 sort of reify this idea that we have -- that we've taken  
5 the best available science about what is risky and said  
6 that's okay, because there's a job tied to it, and just --  
7 that's just not okay, and it's not going to get -- you  
8 know, that's okay for the short-term, but it's not going  
9 to get us where we want. And what our communities are  
10 saying is we want economic development not jobs, because  
11 there's a difference. And really understanding the  
12 difference between that is really important.

13   --o0o--

14           DR. ARGÜELLO: This is how the environmental  
15 justice community has evolved. I would say that, you  
16 know, 10 years ago when we were in this room fighting over  
17 this, we'd not had this conversation about how we, as  
18 environmental justice advocates or public health  
19 advocates, what is our role in helping this economy  
20 transform?

21           Because what we see is we have an extractive  
22 economy. And to many of us that extractive economy is  
23 predicated around race, and racism. And we've got -- so  
24 we've got big oil. We've got this idea that, you know, we  
25 can continue to produce waste, and we're not going to have



1 was identified. There was a recognition that, hey, you  
2 know, as a country and across the world, we're putting all  
3 of our most hazardous, most dangerous facilities  
4 predominantly in low income and in communities of color.

5 And so, you know, one of the first studies was  
6 called Hazardous Waste and Race by the United Church of  
7 Christ. And they really -- they put -- they put numbers  
8 on the paper, and really started looking at the high  
9 levels of disparities.

10 This is actually the second report. And I teach  
11 a class on environmental justice at UC Berkeley. And, you  
12 know, one of the things that I mention in what drove me to  
13 start The People's Senate was this idea that after 20  
14 years -- the first report was done, I think in the 1980s,  
15 and then there was another one done in the 2000s, and the  
16 problem despite the recognition of the disparities, the  
17 problem had gotten worse in those 20 years.

18 So despite all of the advocacy, despite, you  
19 know, agencies having knowledge of the problem, despite us  
20 having better laws and some laws to try to address it, and  
21 some processes in, you know, the executive order, nothing  
22 had put a dent into where we're putting our hazard waste  
23 facilities in the U.S. So this is from Hazardous Waste  
24 and Race at 20.

25 So here, you can see that's -- those are people

1 of color make up nearly 50 percent of people living within  
2 one kilometer of a hazardous waste facility and this is  
3 across the U.S.

4 --o0o--

5 MS. BROSTROM: When you start looking at multiple  
6 facilities, the disparities are even greater. Where you  
7 have 70 -- nearly 70 percent of people living next to  
8 multiple hazardous waste facilities are people of color.  
9 And so, you know, as there's two or three or four or more  
10 hazardous waste facilities, your number -- of your  
11 percentage of people color is going to increase.

12 So this is -- again, this is U.S.-wide. You  
13 know, California, we're way more progressive. You know,  
14 there -- you know, there's more consciousness about race,  
15 right? California has the highest number of people  
16 living -- why isn't this going -- California has the  
17 highest number of people living next to hazardous waste  
18 facilities. We're close to 80 percent of folks in  
19 California.

20 And yes, you know, we acknowledge that California  
21 has higher rates of people of color living in California.  
22 But even taking into -- that into account, California is  
23 in the top 10 states, in terms of the difference between  
24 the -- you know, the percent -- the population in general,  
25 and the people living next to hazardous waste facilities.

1 So California has a problem.

2 --o0o--

3 MS. BROSTROM: With CalEnviroScreen, here I  
4 zoomed into an area that has all lot of hazardous waste  
5 facilities, Los Angeles. This is CalEnviroScreen. One  
6 thing that I do like that DTSC has done is they have this  
7 on their website. They have an overlay of DTSC permitted  
8 facilities with CalEnviroScreen, so you can see that up  
9 there.

10 So this is a map. And you can see that there's a  
11 pretty good correlation between where those red -- those  
12 red areas are, the highest most -- you know, most impacted  
13 census tracts in California and where hazardous waste  
14 facilities are located here.

15 --o0o--

16 MS. BROSTROM: So I want to go back in history a  
17 little bit. I'm not sure how many of you are familiar  
18 with the Cerrell Report this is a dark mark in  
19 California's history. And it's one of the smoking guns  
20 that we have in the environmental justice. We have long  
21 assumed that decision -- land-use decision making was due  
22 to political expediency, the fact that facilities will  
23 locate where it is easiest to do so. Where is it easiest  
24 to do so? It's the places with the least political power.  
25 Those places tend to be low income, and they tend to be

1 non-white.

2           And we actually have a State-sponsored document  
3 that says that, that -- so the Cerrell Report was about  
4 where to site hazardous waste incinerators in California  
5 to avoid -- like -- to avoid like political impediments.

6           So these are quotes from the report. And again,  
7 I know that this is an older document. This is in  
8 the 1980s, but that middle -- that middle quote,  
9 especially the one highlighted, I had to read it a few  
10 times. When I saw it explicitly stated that, "Middle and  
11 higher socioeconomic strata neighborhoods should not fall  
12 at least within one-mile and five-mile radii of a proposed  
13 site".

14           So this is it. You don't get much more explicit  
15 than that. This is the State saying to hazardous waste  
16 operators do not go to wealthier neighborhoods. Don't go  
17 to middle class neighbors. You should target, you should  
18 target low-income communities. And that is our history in  
19 California.

20           So when have most hazardous waste facilities been  
21 permitted in California? It is not in the last five  
22 years. It is not in the last decade. We are dealing with  
23 a history that was based on racial animus. That's where  
24 most of our hazardous waste facilities have come from.  
25 The decisions were made back in the day. And today what

1 decisions DTSC is making are permit renewals.

2           So what duty does DTSC have to rectify, you know,  
3 our problematic history? And I think there is one. I  
4 think there's great deal of responsibility.

5                               --o0o--

6           MS. BROSTROM: So one thing that I often hear is  
7 we don't need to be worried about the proximity of  
8 hazardous waste facilities and low income communities,  
9 because if you're following your permit conditions, you're  
10 safe. So we don't need to worry about that proximity.  
11 And that's just false. That's false.

12           You do have higher risk of physical impacts.  
13 And, you know, there -- you know, when you're in close  
14 proximity, there's always a higher likelihood that you're  
15 going to be exposed. So you have the physical impacts.  
16 But that's not the only impacts of living next to a  
17 hazardous waste facility.

18           You have the psychological impacts. That's  
19 without exposure. That's with you following everyone of  
20 your permit conditions. You have that feeling of loss of  
21 control. You have increased stress. You have increased  
22 anxiety, depression, suspicion, hyper-vigilance hostility,  
23 paranoia. These are all -- these are not things that I  
24 came up with. These are things that I -- you know, we did  
25 a literature review to figure out what are those impacts.

1 So if you want the citations, I have them.

2           You have the economic impacts. Again, without a  
3 single exposure, your property values will decrease,  
4 you'll have increased blight, you will be inviting other  
5 incompatible land uses in. Because once an area, you  
6 know, is zoned for hazardous waste, zoned for industrial  
7 activity, you're going to get multiple facilities.

8           You have loss of community. You know, that's a  
9 hard one to monetize, you know, but you're driving people  
10 out. You're splintering communities. But these things  
11 are real, and you can have all of these things with a  
12 completely compliant hazardous waste facility.

13           And in my experience, most hazardous waste  
14 facilities are not 100 percent compliant. So there are  
15 lots of impacts.

16                           --o0o--

17           MS. BROSTROM: I just wanted to quickly point out  
18 that we have SB 673, you know, but there are overarching  
19 civil rights statute that DTSC must also comply with. So  
20 I just quickly wanted to point out that when we're looking  
21 at how do we implement 673, we also make sure that we're  
22 compliant with California's civil rights laws, which,  
23 unlike the federal law which requires some kind of  
24 racially discriminatory intent, California's does not.

25           You really are looking solely at disproportionate

1 impact. And in California's hazardous waste permitting,  
2 there clearly is a disparate impact on people of color.

3           Some of the regulations specifically dictate that  
4 anyone receiving State funds cannot make or permit  
5 selections of sites or locations of facilities that have a  
6 disproportionate impact. So this really calls out  
7 permitting, you know, and figuring out where is a suitable  
8 location for certain facilities. So that is State law,  
9 and it has not been enforced to the degree it should be.  
10 But I just did want to point that out, that over arching  
11 framework.

12                           --o0o--

13           MS. BROSTROM: So this is what I actually talk a  
14 lot about with my students is that the issue of hazardous  
15 waste disposal and treatment in California is a bit  
16 intractable. So, I mean, I have very strong feelings  
17 about California's responsibility to protect low-income  
18 communities of color from toxics, but I also understand  
19 that it is not an easy task.

20           You know, you -- one issue that DTSC is going to  
21 have to rectify and be very intentional about is that its  
22 role with ensuring that there's sufficient capacity to  
23 take on our hazardous waste in California until we move to  
24 the just transition future, where we're seeing a lot less  
25 of it, its role in permitting facilities, and its role in

1 enforcing its laws.

2           You know, I think another dark mark on DTSC's  
3 history, again predating the current administration, you  
4 know, was a public statement made by a top DTSC, somebody  
5 in leadership -- I don't know who it was. It was an  
6 anonymous quote. But it was talking about DTSC's role  
7 as -- in enforcement, and the statement was made that  
8 DTSC's role is to make compliance easy and economic,  
9 because there -- the fear that - you know, reading  
10 behind -- between the lines - was that if -- if you put  
11 hazardous waste facilities out of business because you're  
12 going against -- going against them, you're levying all  
13 these fines, or shutting them down, there won't be  
14 sufficient capacity, and then there will be illegal  
15 disposal.

16           So that was wrong headed. That's wrong headed.  
17 I understand the concern, but DTSC's job is not to make  
18 compliance easy and economic to the hazardous waste  
19 industry. It is meant to -- meant to enforce and  
20 regulate.

21           So, you know, DTSC does, you know, have to figure  
22 out how -- how to ensure that it's not short-changing one  
23 of its programs to benefit the other. And I would even go  
24 so far as to say DTSC has a minimal -- a lesser role in  
25 ensuring capacity, and that we really, as a State, need to

1 do some statewide hazardous waste management planning to  
2 look at what we produce, and what we need, because until  
3 we do that analysis, we're flying blind.

4 Another really intractable issue is this idea of  
5 instate versus out-of-state disposal. This is related to  
6 the capacity issue. The question there is what is  
7 California's responsibility to dispose and manage its own  
8 waste? I mean, I think the knee-jerk reaction is of  
9 course. You know, it is unethical for us to ship our  
10 hazardous waste out of California boundaries.

11 That becomes even maybe more so when you realize  
12 that California has stricter hazardous waste  
13 characterization laws, whereby when you leave California  
14 borders, some of that waste becomes -- you know, we  
15 have -- we have California State waste classification that  
16 must go to a hazardous waste facility. Whereas, in  
17 Arizona or Nevada, it could go to a municipal landfill.  
18 That's concerning. That is concerning.

19 But when we talk about California managing its  
20 own waste, that's not true. California -- the residents  
21 of Kettleman City and the residents of Buttonwillow are --  
22 you know, are facing 100 percent of the burden of  
23 California's waste disposal -- hazardous waste disposal.  
24 We're putting the burden of the entire State on these two  
25 small low-income communities.

1           So, you know, it's not an argument that I think  
2 is a fair one. You know, if we had -- if we had everybody  
3 sharing in the burden of our lifestyles, of our usage of  
4 these materials, and our economic benefit as a State, you  
5 know, that's a fair argument. But to say that those two  
6 communities should bear the entire State's waste, so it  
7 doesn't go to Arizona and Nevada, I don't think that's  
8 true. There's got to be another solution. There's got to  
9 be another way.

10           The other intractable issue facing DTSC is I just  
11 talked about it. It's right now there are a few  
12 communities in California, some of the -- that are most  
13 overburdened by a lot of different polluting sources that  
14 are taking California's burden. Does that mean that we  
15 should open up new facilities? Does that mean that we  
16 should share the burden across -- across the State, and so  
17 that would necessitate us opening new hazardous waste  
18 facilities?

19           I don't have the answer to that. I know that's  
20 an issue. I know that's an issue.

21           And then finally the last intractable conflict is  
22 right now, over half -- I think, over 60 percent of  
23 California's hazardous waste is contaminated soil.  
24 Contaminated soil is coming from EJ communities that have  
25 dealt with the legacy of industrial pollution. These are

1 the communities that are contaminated living on top of  
2 hazardous waste sites, not facilities, sites, clean-up  
3 sites, remediation sites.

4           So this soil is contaminating communities. And  
5 it's being dug up from one vulnerable community and  
6 shipped to another vulnerable community in Kettleman City  
7 or Buttonwillow. So if we are to talk about, well, we --  
8 the answers, we need to, you know, just reduce the amount  
9 of hazardous waste we generate, which is one of DTSC's  
10 long -- I don't know, proposals, programs, goals,  
11 promises, 50 percent reduction of hazardous waste, how do  
12 we do that without overburdening the clean-up communities?

13           I don't know. I mean, I'm working on it on the  
14 Hazardous Waste Reduction Panel. We're work -- we're  
15 looking at that issue. So this is complex stuff. This is  
16 complex stuff, but we have an opportunity right now with  
17 SB 673 where we can recognize -- should I?

18                           --o0o--

19           MS. BROSTROM: Well, we can take on some of this.  
20 You know, we can take on what is California's role, what  
21 is DTSC's role in stopping this practice or preventing  
22 this practice of targeting the least, or the most  
23 vulnerable, among us from having to bear the entire burden  
24 of our hazardous waste management.

25           So these are just some general principles, you

1 know, that I would ask DTSC to consider when looking at  
2 what to do with 673, is to recognize that it has a duty to  
3 remedy the past processes that have led us to where we are  
4 today.

5           And these may -- these have resulted from racial  
6 animus in the past. You know, or over even if they  
7 didn't, even if it was just poor land-use planning, these  
8 things that happen in California's past are continuing to  
9 have a impact on our present and future communities, and  
10 we need to take strong action to rectify those.

11           Another, you know, kind of principle is just the  
12 recognition, you know, that local decision making bodies  
13 they are not experts on hazardous waste risk. And yet,  
14 we're allowing them to pick the locations of all of our  
15 hazardous waste facilities. That's what I'm told. That's  
16 what I'm told by DTSC is we're hands off when it comes to  
17 location. That's not appropriate, you know. This -- you  
18 know, the local -- the land use -- you know, the local  
19 planning commission they don't understand the risks, the  
20 assessments and what that entails?

21           You overlay that with these are political bodies  
22 being asked to make very decisions that impact health, and  
23 also recognize that there are conflicts of interest. You  
24 know, California has a law where your local county, if you  
25 host a hazardous waste landfill facility, you get 10

1 percent of those proceeds.

2           That's a huge economic incentive to approve  
3 hazardous waste landfills, despite any risks that they may  
4 pose to the community. So DTSC does have a role in  
5 looking at location, because it is a health and  
6 hazardous waste -- hazardous risk based decision, and is  
7 not appropriate for land-use deci -- land-use officials to  
8 be making those types of decisions.

9           And this is probably -- this is key. As a State,  
10 we need to recognize that there is a point, there is a  
11 point where the State must decide that it is not  
12 appropriate to site a hazardous waste facility in a  
13 certain location. There has to be a point.

14           And that -- you know, I think that will be easier  
15 for us to make that determination for new facilities  
16 coming in. It's easier to prevent a facility. But  
17 there's a reason why hazardous waste facilities need to  
18 renew their permit every 10 years. It's this recognition  
19 that this is a dangerous land use, that things change,  
20 that different land uses come in, there's moving --  
21 there's people moving in, and that we need to be making  
22 continual decisions to make sure that we're protecting  
23 public health.

24           And so even for existing facilities, there is a  
25 point where we have to say this is no longer an

1 appropriate land use in this location.

2           And I understand the economics of it. I  
3 understand that it's difficult to be that person to say  
4 that. But 673, there needs to be a mark, there needs to  
5 be a point at which this is no longer acceptable. And we  
6 have a benchmark in Exide. That was not a facility that  
7 should be located there. That facility should not have  
8 existed as long as it did. So we do know that there is a  
9 point.

10           So in addition to that point, you know, there's  
11 also -- there's a lot of other things that 673 can do, you  
12 know, in terms of additional mitigation, additional  
13 conditions, additional public processes. There are other  
14 things we can do to enhance those decisions, where perhaps  
15 a permit denial is not necessary. Permit suspensions  
16 should be used more. Permit conditions, extra  
17 enhancements for these communities also should be  
18 addressed in 673.

19           And finally, and this is to get back to Martha's  
20 point, and I mentioned it earlier on, is California was  
21 required in the 1990s to do a statewide hazardous waste  
22 management plan in conjunction with all of the counties of  
23 the State, and update that every three years. It has  
24 never been done. This is the place where we need to look  
25 at how much hazardous waste is being produced, what types,

1 what types of disposal, treatment, and storage facilities  
2 do we need and where should they be located? And it was  
3 never done. And it's not too late.

4 Without this analysis, we can't be making good  
5 decisions on permitting. So as a first step, we need to  
6 fix -- finish that document. We need to -- so we have  
7 better information upon which to judge this. And then we  
8 really need to move back to pollution prevention. You  
9 know, in the -- in 2012, DTSC discontinued its funding for  
10 pollution prevention. That was a huge mistake.

11 Without reducing the total amount of hazardous  
12 waste -- and I'm not talking about the contaminated soil.  
13 I'm talking about the other big chunk. You know, we will  
14 continue to have these intractable problems, so we need to  
15 move -- we need to move toward bigger picture thinking,  
16 reducing the total amount, we need to know how many  
17 facilities we need, and we need to make sure that we're  
18 protecting communities of color who have borne this burden  
19 for too long.

20 Thank you.

21 (Applause.)

22 MS. BROSTROM: Questions or...

23 DTSC DIRECTOR LEE: Are there any questions for  
24 Ingrid or Martha?

25 Thank you, both.

1           We're going to hear a different perspective now.  
2 We have Ms. Janet Whittick from the California Council for  
3 Environmental and Economic Balance. She is the Policy and  
4 Communications Director for CCEEB. And CCEEB is a  
5 non-partisan, nonprofit coalition founded in 1973 by the  
6 late Governor Pat Brown. And they represent perspectives  
7 of business, labor, and public leaders.

8           Janet currently focuses on cross-media and  
9 multi-media environmental impacts with a particular focus  
10 on air quality, climate change, and energy policies.  
11 She's worked with a diverse range of nonprofit and public  
12 interest organizations over the years, including the  
13 statewide Flex Your Power campaign, the California  
14 Environmental Dialogue, the business energy coalition,  
15 which is a cutting edge demand response program, and the  
16 University of California, San Francisco, and Hmong  
17 American Community Incorporated.

18           She's an honors graduate from UC San Diego, and  
19 serves on boards of the Multicultural Institute and Rivers  
20 for Change. And I will add that I've known Janet for many  
21 years working with her on a number of air quality and  
22 cumulative impacts and toxic risk related issues, when I  
23 was working in the air world. And I'm very happy to have  
24 her here today.

25           Janet.

1           (Thereupon an overhead presentation was  
2           Presented as follows.)

3           MS. WHITTICK: Thank you, Director Lee. And, you  
4 know, I really want to thank all of the speakers so far  
5 today. There's been almost everything that I've agreed  
6 with. And the challenges that were laid out, both  
7 earlier, but in particular with the last two speakers, you  
8 know, every time I listen to you guys speak, I always come  
9 away pretty overwhelmed with the challenges ahead of us.  
10 Grateful to have people who are bright and talented  
11 working on those issues, but again, pretty overwhelmed,  
12 and trying to think through then how does an organization  
13 like mine and the people I work with, what can we bring to  
14 the table, knowing, you know, that we are industry?

15           So just maybe as a little bit of background,  
16 CCEEB, the California Council for Environmental and  
17 Economic Balance, we're a non-partisan, nonprofit  
18 coalition of business, labor, and public leaders. But we  
19 do represent major sources of pollution. You know, it's  
20 the public and private utilities, the water agencies, the  
21 refineries, the railroads aerospace and other  
22 manufacturers, telecommunications, entertainment.

23           These are the facilities in California with very  
24 large industrial physical footprints. And they're also  
25 very much -- these are sectors responsible for a lot of



1 looking at a single source or a single piece of equipment.  
2 And there is no real method right now for cumulative risk  
3 assessment.

4           From a business perspective, we think about  
5 things like proportionality. We say that a lot. And so  
6 if I'm the cause of the problem, what is the effect that  
7 I'm causing, and what is my contribution? When we're  
8 talking about a cumulative problem, what does my one  
9 facility, or my one piece of equipment, what is the  
10 contribution to the overall effect? And how do I mitigate  
11 for the impacts I'm having, especially if I can't measure  
12 them, and a lot of the other drivers are outside of my  
13 direct control.

14           Business will also tell you about uncertainty.  
15 We don't like uncertainty, and that uncertainty will  
16 discourage projects and investments that could, in fact,  
17 modernize facilities, reduce exposures, and improve  
18 efficiencies. If you have a facility, and you're afraid  
19 to open up your permits because they're going to get  
20 opposed, you don't think you're actually going to get  
21 through a more robust regulatory process, do you, in fact,  
22 end up in a situation where you're going to run your  
23 equipment and your facility until the equipment fails and  
24 you can't go any further, when you've just foregone an  
25 opportunity to try to do something better, and to keep the

1 economic development or keep the jobs with your facility  
2 and improve your facility at the same time?

3           And kind of reflecting earlier too on the whole  
4 risk assessment issue. I think business, along with  
5 communities, have long been asking like give us a  
6 cumulative risk assessment, like if -- you know, give us  
7 the certainty, give us the method so we can run the  
8 numbers, because we like a bright clear line. Can we  
9 invest, can we not invest? Just let us figure out a --  
10 tell us what to do.

11           And I think when I first started this work,  
12 personally, I was one of the people asking come on, OEHHA,  
13 give me a cumulative risk assessment. And after having  
14 been in it now for, you know, more than a dozen years,  
15 I've finally stepped away and realized what a daunting  
16 task it was, and how naive in some ways it was to be  
17 asking for that bright clear line, so that we could just  
18 get on with our business models.

19           And if you can't quantify it then, what are the  
20 analytic tools everybody should be using to make these  
21 decisions? Because it's true, you can't just not make the  
22 decision, and you have to use the best science available.

23           So what will be the decision making tools that  
24 will protect communities and individuals while still  
25 giving businesses that investment certainly or clarity,

1 and also allowing the California economy to transform and  
2 rebuild critical infrastructure that we all know needs to  
3 happen?

4           So more and more lately I've been trying to think  
5 in terms of, if I can't measure it, how then can I think  
6 through what is a meaningful benefit that we can get out  
7 of the system and the decisions that we're making?

8           And I think as we saw with CalEnviroScreen too,  
9 there's now been this shift to start to look at indicators  
10 of vulnerability beyond environmental exposures, so that  
11 at least we're trying to grapple with new data and  
12 understanding of public health. But that's tricky too,  
13 because when we talk about vulnerability, we're not just  
14 talking about vulnerability to environmental exposures,  
15 we're talking about vulnerability to all health drivers.  
16 And so things like, you know, wealth and poverty, which we  
17 know really are some of the main drivers of health  
18 outcomes, access to health care, psychosocial stress, our  
19 built environment.

20           Not only are these indicators of vulnerability to  
21 environmental exposures, they are independent drivers of  
22 health outcomes in and of themselves. And also when we  
23 look at the vulnerability indicators, they don't  
24 necessarily tell us that a disproportionate environmental  
25 exposure has taken place, but it also doesn't mean that

1 one hasn't taken place. It's really hard to understand  
2 what to do with the new data.

3 --o0o--

4 MS. WHITTICK: So this is CalEnviroScreen and  
5 this is actually Version 2.0 that I drew on here. And we  
6 know that there's an association between asthma and PM2.5.  
7 But when we look at the data that we have, we don't see  
8 the correlation that one would expect. You know, we  
9 really don't see the picture as straightforward as we  
10 would think. And so we have to ask ourselves why? So  
11 first of all, we can see by these maps and by the data  
12 we're given, that you can't actually demonstrate a causal  
13 relationship just looking at these maps. And when we ask  
14 ourselves why, it's because the data we have doesn't give  
15 us that local scale granularity. It's not equivalent to a  
16 community risk assessment, or a project risk assessment.

17 And it doesn't either -- and but -- you know, I  
18 also want to be clear, because I've shown this slide once  
19 before and it was very provocative to people. This isn't  
20 meant to de-bunk those studies either that show the  
21 relationship between PM2.5 and asthma, it's just saying  
22 that sometimes our data sets right now are incomplete and  
23 we don't have the right -- we don't have all the tools  
24 that we need.

25 --o0o--

1 MS. WHITTICK: We start to look at the new data  
2 sets. So for cardiovascular disease, we see the same  
3 problem is we're not clearly seeing the correlations that  
4 one would expect with these data sets.

5 --o0o--

6 MS. WHITTICK: So now for industry too, we think  
7 a lot about exposure versus vulnerability. And we're  
8 being asked now to consider new complexities around  
9 vulnerability. We often sit back and say, well, what  
10 problem are we trying to solve, and what tools are we  
11 going to need to solve those problems?

12 So within vulnerability, I often think of this is  
13 the disadvantaged communities, regardless of there  
14 environmental burden. And then you also have other  
15 communities where you know that there are environmental  
16 burdens that are probably disproportionate.  
17 CalEnviroScreen is showing you that subset, where  
18 vulnerability and environmental burden are overlapping,  
19 and you want to prioritize those communities.

20 If we're just looking at the environmental  
21 toolkit though, we're talking about permits, controls on  
22 equipment and operations, on-site and off-site  
23 mitigations, fees, penalties, incentives. There's kind of  
24 a limit to how far you can go to address vulnerability  
25 using that toolkit.

1           And you also end up with as we improve  
2 environmental exposures, and environmental conditions, you  
3 kind of end up with diminishing rushes. So an example  
4 would be that with the gas tax, you know, rely on that for  
5 roads and for even a lot of our air quality programs. As  
6 we electrify the vehicle fleet, we run out of gas tax  
7 money. So we've done a great, job but now all of a sudden  
8 it's disrupted some of our financial structures.

9           With vulnerability and looking at trying to  
10 address what's happening in disadvantaged communities, you  
11 know, as industry, we want to do our fair share, and we  
12 want to do what's needed to be part of the solution, but  
13 also we want to see a bigger toolkit in play. We're  
14 talking about education, affordable housing, healthy  
15 foods, jobs and workforce development, transportation,  
16 land use, recreation, quality of life. These are all  
17 things -- these are all different levers that can be used  
18 to go after vulnerability, and to try to help drive both  
19 public and private investments into communities where we  
20 think they really do lack resources.

21                           --o0o--

22           MS. WHITTICK: So this will be probably another  
23 very provocative slide for people. This is -- again, this  
24 is based on CalEnviroScreen version 2.0. And this was  
25 analysis that OEHHA had done to kind of map out on -- you

1 have pollution burden scores on one axis, and population  
2 characteristic scores on the other axis.

3           So I kind of pulled out two different L.A. county  
4 census tracts. And let's say community A, it's kind of  
5 mid-level CalEnviroScreen total score. And what we see  
6 from a pollution burden score, it's pretty much one of the  
7 most polluted communities. From an environmental burden  
8 score point of view, it's in the 99.7 percentile. But  
9 from a population burden score, it's a wealthy white  
10 community, quite frankly. And so CalEnviroScreen just  
11 ranks it down kind of in the middle of the State.

12           We see another community in L.A. County where  
13 it's kind of, you know, you can say two-thirds of the  
14 State maybe has some higher pollution burden. But in  
15 terms of the socioeconomic and the population  
16 characteristics, it's pretty much at the top of the list.  
17 And it's coming up -- you know, it's going to score in the  
18 top 20 percent of CalEnviroScreen communities.

19           So then when we ask ourselves from a policy  
20 making point of view where would we want to site a new  
21 project? You know, if we want to distribute the burden of  
22 projects across California and not burden two communities  
23 in general or, you know, not pick on the disadvantaged  
24 communities all the time, if we look at it from an  
25 environmental lens, you know, community A is looking

1 pretty good, like let's site it there, but it has a really  
2 high environmental burden already.

3           If we look at it from an environmental burden  
4 point of view, well, then why don't we go to community B,  
5 but we know that doesn't make any sense, because they're  
6 very vulnerable.

7           And again, this is not -- I don't have a solution  
8 to this. I just point out that the policy questions are  
9 very challenging, and it calls upon all of us to kind of  
10 think through a little bit what is being asked.

11           And the other thing, does a no net increase  
12 policy should that apply to either of these communities,  
13 to both of the communities, and what will we get out of a  
14 policy like that?

15           You know, and for CCEEB, what we look at with  
16 CalEnviroScreen is that it alone and those scores alone  
17 should not be the sole basis for decision making, but we  
18 would agree wholeheartedly that these scores tell us we  
19 should be looking at these communities more closely, and  
20 that we do need the tools to investigate what's actually  
21 happening in the community. It's not about ranking  
22 anymore. We want those community level analytic tools or  
23 measurement tools, so that we can start to make the hard  
24 regulatory decisions, and the hard policy decisions, and  
25 that we can better understand the trade-offs.

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MS. WHITTICK: And so, yeah, I think probably my whole slide deck is maybe a little provocative and controversial. Where I know I struggle is that as industry, if you mention jobs, it's a buzz word. It's a trigger word. Martha went over that very, very well, and very eloquently. But it's hard for industry, who are the employers, to not be able to talk about jobs, to not care about the job's health connection, and to also recognize that, you know, I'm often in conversations where people are like, well, look at the unemployment rate. It's getting better. You now, we're employing more and more people, so there is no problem. You shouldn't be crying wolf.

And I've also had meetings with decision makers who's told us, point blank, we don't worry -- we don't want your jobs. Google is going to hire everybody. Google is going to take care of the problem. And that's a hard conversation to be a part of.

When we start looking at some of the data though, and we do want people to think more carefully about how unemployment data isn't the whole story. You have to look at the shifts among economic sectors, and how that's going to affect opportunities among different demographic groups and different communities.

1 I think a lot of this too reflects back on  
2 gentrification and displacement. I mean I live in Oakland  
3 and I'm a renter. And so I see it every day in my own  
4 life. We're also looking at new -- the lack of affordable  
5 housing causing people to have to move further and further  
6 away from job centers. And at a certain point, people are  
7 commuting longer and longer distances, what is that doing  
8 to your environmental goals, in terms of reducing vehicle  
9 miles traveled, in terms of greenhouse gases? Are you  
10 really going to reach those goals, if you're not thinking  
11 about the land use and transportation side of it?

12 Also, public financing systems. In the Bay Area,  
13 as we see wealth getting concentrated, and the cities are  
14 being revitalized, what does that do to the tax base? Are  
15 you moving all of the low income people away from where  
16 your tax centers are, and then further depriving them of  
17 public investment in services?

18 And then there's also just a lot of cultural  
19 changes happening. You know, again having lived in San  
20 Diego, San Francisco, and now Oakland, you can feel these  
21 communities changing almost on a daily basis. And so what  
22 does that mean to us as part of the community and our  
23 quality of life and how we look at it ourselves?

24 --o0o--

25 MS. WHITTICK: So this one -- this next one, I

1 have to actually apologize to Jack, because I didn't know  
2 he was going to be here or be presenting today. But I was  
3 at -- I was at a board hearing in the Bay Area at the Air  
4 District, and I was listening to a presentation from staff  
5 talking to their board members. And it was about, you  
6 know, a facility in the City of San Jose that is right  
7 next to the City of Milpitas. And this one is fun for me,  
8 because these are not CCEEB members, so I can pick on  
9 somebody, other than my own members. And it's also  
10 communities that, for all intents and purposes, really  
11 aren't, you know, EJ communities.

12 But they -- this example kind of hits along the  
13 same problems of legacy land use, jurisdictional  
14 conflicts, and computing mandates. So the situation is in  
15 San Jose, they have this large waste facility. It's solid  
16 waste landfill, sewage treatment plant, recycling and  
17 material recovery, composting, gas-to-energy facility, and  
18 it has solar and wind as well. So it's state of the art.  
19 It's everything that we need in California in order to  
20 start reaching our State goals of recycling, waste  
21 diversion, composting, bioenergy. It's all wholly sited  
22 within the City of San Jose, and Santa Clara County.

23 Again, it's right adjacent to the City of  
24 Milpitas, and Alameda County who don't have decision  
25 making authority over the facility. And we also know that

1 the nearby communities, there are thousands of complaints  
2 about this facility, and mainly around odor facilities.  
3 And all those complaints go to Jack and his staff, who  
4 again don't have the land-use authority.

5           And we're also looking at a legacy land use  
6 issue, in that I was doing a little research on this  
7 facility, because it was so striking to me hearing the  
8 discussion that I had to look into it.

9           The facility was opened in 1930. The City of  
10 Milpitas was incorporated almost a generation later in  
11 1954. So as in many cases, and many of the organizations  
12 I work with, the industrial facilities and sites were  
13 zoned and cited and built before the communities that were  
14 brought to them. And that's a hard problem to solve then.

15           So this is a familiar story. We have land use  
16 decisions that co-located, you know, people in industry,  
17 you know, chicken and the egg, which came first, but now  
18 they're together. And so this does go well beyond  
19 compliance and enforcement and rules and regulations. We  
20 also have competing environmental objectives where we're  
21 asking these industries and businesses to do a lot, and to  
22 transform and to built a new infrastructure for the State,  
23 but you're not really supposed to open up your permits,  
24 and you can't expand, and every time you do it becomes,  
25 very, very controversial.

1           And we see -- I don't want to just pick on a  
2 facility that I don't represent. We see this in a number  
3 of different areas and situations. One that CCEEB worked  
4 on for many, many years was with the State Water Board and  
5 the phase-out of the once-through cooling generation  
6 facilities along the coast.

7           And we did this to try to protect marine and  
8 aquatic life. There were impacts shown, and so Water  
9 Board came up with a very elaborate schedule to try to  
10 repower or retire these facilities.

11           Meanwhile, you know, decisions were made to close  
12 the State's two nuclear facilities. And we also want to  
13 have our renewable energy backed up with reliable power  
14 that still for the time being needs to be fossil fueled.

15           And so as these facilities are gearing up to  
16 repower, and they have to open up their facilities, and  
17 change their operations, local communities are like, no,  
18 we actually don't want you here anymore. We've had to  
19 take your impacts all along. And even if you are able to  
20 repower, you're actually trading some of your marine  
21 impacts for air quality impacts. So for Ian in South  
22 Coast, they're going to have to look at, can they really  
23 site these new cooling towers that are going to replace the  
24 once-through cooling facilities.

25           And so that's the problem then of competing

1 mandates and environmental goals all coming together, and  
2 then trying to balance the environmental and community  
3 interest with the business interest of I just kind of want  
4 to keep my business operating.

5           And that kind of got me to this, so do we invest  
6 in making these facilities cleaner and reducing exposures,  
7 or do we have to start to have the conversation about  
8 planned retreat. And if you know the facilities are  
9 getting cleaner, does that make sense to go down the  
10 conversation of planned retreat, and do we mean that the  
11 communities need to move or the facilities need to move?

12           And I think, you know, on each -- each of us in  
13 each situation may have a different thought. For me, I  
14 may have a different thought day-to-day on each situation.  
15 And is it really enough to transition or retire industries  
16 and businesses, if we aren't going to tackle the land-use  
17 transportation and jurisdictional issues that were driving  
18 some of these problems to begin with?

19   --o0o--

20           MS. WHITTICK: So for my closing thoughts, you  
21 know, the things that I've been trying to think through,  
22 we need clear problem identification. What problem are we  
23 trying to solve, and what is your toolkit for tackling  
24 that? We definitely want to see more analytic tools that  
25 can help us understand what's happening at that local or

1 project scale.

2           So beyond CalEnviroScreen, what happens when we  
3 need to make a permit decision or a siting decision. We  
4 need to recognize progress made. We have made incredible  
5 strides. And I -- I too, when I stumbled across the  
6 Cerrell report, it was -- it's a very hard read. And I'd  
7 like to think that since 1984 when it was -- I think  
8 that's the year it was published, that we are thinking  
9 differently and we are making progress, and that all of  
10 our hard work on air quality and other impacts that we are  
11 making progress.

12           As industry, it can be hard working on solutions,  
13 only to be told that's never good enough and we --  
14 actually, we don't want your jobs or your industry here  
15 anyways.

16           Sometimes it does help to recognize that we're  
17 people at the table too, and we need to go further, but it  
18 does sometimes help to stop and reflect where we've come  
19 from. We need to be honest about the competing goals that  
20 we're asking of industry and businesses. And just like  
21 we're trying to break down silos between the different  
22 media, you know, air, water, climate, waste, soil, we also  
23 need to think holistically about the regulatory  
24 approaches, and not have silos among the agencies asking  
25 for different things, and not coordinating among

1 themselves.

2           And we have to be really honest about the  
3 trade-offs that we're going to end up with. And that's  
4 both again among media, so water versus climate versus  
5 air, but also among the sectors, that as we're  
6 transitioning the economy at a statewide level, that there  
7 are going to be social, environmental, and economic  
8 trade-offs that we should be honest about.

9           And, you know, just maybe, as a personal closing,  
10 being the voice of industry on these topics is very, very  
11 hard, and just -- it's -- there's a lot of mistrust. A  
12 lot of that is very well placed and comes from a very  
13 important historical background, but we are trying to be  
14 there at the table. We think that collaboration can lead  
15 us to better solutions. And so as CCEEB, and as myself,  
16 we're going to keep trying and want to share perspectives.

17           I don't know how to get to consensus, but I want  
18 to keep trying. And if nothing else, I always learn more  
19 from all of these forums, and every time I attend. So  
20 again, thank you for your inviting me here today and for  
21 allowing me to be part of this conversation. I'm very  
22 excited about the work that DTSC is doing, and I'm hoping  
23 that you build us all the tools that we need.

24           Okay. Thank you.

25           (Applause.)

1 DTSC ASSISTANT DIRECTOR MASCAREÑAS: I thank  
2 everyone. We have the time set aside right before lunch  
3 for public comment. And we had a public comment come in  
4 earlier during the presentation, so we want to make sure  
5 and read and provide a response to. And then we'll see if  
6 there are other public comments from folks in the room, or  
7 others that have come in.

8 We can also provide public comment as we come  
9 back from lunch for folks who would prefer to submit their  
10 public comment at that time.

11 So, Allie, if you have it pulled up in front of  
12 you, if you could please read the public comment.

13 MS. HOSTLER: So this comment comes from LaDonna  
14 Williams. She asks, "How can South Vallejo and the EJ  
15 community use SB 673 and the CalEnviroScreen to prevent  
16 the Vallejo City Council from approving or allowing a  
17 toxic company, VMT, to put a cement plant being marketed as  
18 a clean slag producer less than a quarter of a mile from  
19 an elementary school, Grace Patterson Elementary. There's  
20 also the city's waste treatment plant, numerous auto  
21 dismantling and repairs and other polluters in this very  
22 vulnerable health compromised community".

23 It's a very detailed question. So do you want a  
24 copy of it?

25 DTSC ASSISTANT DIRECTOR MASCAREÑAS: Sure.

1           So thank you, LaDonna. And for any others who  
2 would like to submit a public comment on-line, the email  
3 address is permits\_hwm@DTSC.ca.gov. So thank you LaDonna  
4 for listening to the symposium today. We hope there are  
5 others listening who will submit comments as well.

6           From the presentations earlier, CalEnviroScreen  
7 is a tool that is open and accessible that can be used in  
8 all local decision making, State decision making, federal  
9 decision-making processes. It's information provided, and  
10 that we encourage communities across the State to use in  
11 their deliberation.

12           At any local decision making, the specific  
13 community experiences and the data presented will be very  
14 important to understand as well. I also just want to  
15 clarify that these important discussions are leading up to  
16 a package of potential rules and regulations to implement  
17 SB 673, so there will still be regulatory workshops before  
18 moving forward with any regulatory package on issuing new  
19 permit criteria for DTSC in particular.

20           So this is one step in building the conversation,  
21 and there's going to be more opportunities. So there's no  
22 new regulations being promulgated right now, but it's  
23 important with South Vallejo, and other communities that  
24 we understand that kinds of decisions that local  
25 decision-makers are facing, and how that relates to what

1 we're putting together as criteria for the State as well.  
2 So thank you for sharing that, LaDonna. I'll also offer  
3 Rizgar Ghazi is the Chief of Permitting sitting here. For  
4 any potentially related DTSC permits on that issue, we can  
5 follow up with you directly to see if we can offer  
6 information and guidance as well.

7 Thank you.

8 Are there any public comments in the -- for folks  
9 in the room. You have the option of sharing right now for  
10 your public comment, or also when we come back from lunch,  
11 because I know that we're pushing into the lunch hour.

12 I think -- I think folks are ready for lunch.

13 (Laughter.)

14 DTSC ASSISTANT DIRECTOR MASCAREÑAS: Thank you  
15 very much. We will come back at -- is it 1:15?

16 Great. We'll come back at 1:15 for lunch. Thank  
17 you, everyone, for our fantastic speakers today, this  
18 morning. And we'll look forward to the Panel a very  
19 interactive discussion this afternoon.

20 Thank you.

21 (Off record: 12:20 p.m.)

22 (Thereupon a lunch break was taken.)

23

24

25

1                   A F T E R N O O N   S E S S I O N

2                   (On record: 1:22 p.m.)

3                   DTSC DIRECTOR LEE: Welcome back from lunch,  
4 everyone. We're going to get started with the afternoon  
5 program. We have a brief overview of the DTSC's hazardous  
6 waste permitting program by Evelia Rodriguez again. And  
7 then we'll get into our afternoon panel session with  
8 policymakers to talk about future directions we may be  
9 able to go to make sure progress on addressing cumulative  
10 impacts in communities.

11                   So, Evelia, would you like to come up?

12                   DTSC SENIOR HAZARDOUS SUBSTANCES ENGINEER

13 RODRIGUEZ: Welcome back, everybody. I'm going to give  
14 everyone just a brief overview of what the permitting  
15 program that DTSC manages.

16                   (Thereupon an overhead presentation was  
17 Presented as follows.)

18                   DTSC SENIOR HAZARDOUS SUBSTANCES ENGINEER

19 RODRIGUEZ: So as to get a picture of how all these other  
20 factors and criteria that we need to evaluate may be  
21 in -- enveloped and enrolled into it.

22                   --o0o--

23                   DTSC SENIOR HAZARDOUS SUBSTANCES ENGINEER

24 RODRIGUEZ: Our mission statement is for the permitting  
25 division is that we protect Californians and the

1 environment from toxic harm by making timely enforceable  
2 and protective permit decisions for the operation of  
3 hazardous waste facilities in accordance with all  
4 applicable laws, and sound science.

5 --o0o--

6 DTSC SENIOR HAZARDOUS SUBSTANCES ENGINEER

7 RODRIGUEZ: Our core activities require that we review  
8 hazardous waste permit applications, both for new permits,  
9 for permit renewals, for modifications to existing  
10 permits, and emergency Permits. Then we make a permit  
11 decision, which is to approve or deny these applications,  
12 and then we move on to preparing an approved draft permit,  
13 or a draft permit, if we've decided to move forward with  
14 an approval.

15 --o0o--

16 DTSC SENIOR HAZARDOUS SUBSTANCES ENGINEER

17 RODRIGUEZ: This is a graphic representation of the  
18 process. And I know you can't read the little writing, so  
19 we've handed out flow charts. They were available out in  
20 front. But again, the administrative completeness is our  
21 first review, where we ensure that the applicant has  
22 submitted all the required elements of the permit  
23 application.

24 We then proceed to the technical review, which  
25 then ensures that every hazardous waste management unit

1 meet the applicable regulatory requirements. We also go  
2 through, and if any of those elements are missing data or  
3 do not describe the operations in a detail that is  
4 necessary, we typically will send them a Notice of  
5 Deficiency letter, which would outline to them what is  
6 deficient, what are the requirements that we're trying to  
7 assess, if they can meet or not, and then when is the  
8 response from them due.

9           The next thing we look at is their financial  
10 assurance. We want to ensure the financial solvency of  
11 all these facilities that are before us for a permit  
12 decision.

13           Once we've decided that we can make a decision,  
14 the two decisions are denial or approval. If we decide to  
15 approve it, then we proceed to a draft permit. And here,  
16 we draw up what we believe to be the controlling document  
17 that will ensure that the facility continues to operate in  
18 a manner that is protective of human health and the  
19 environment. We have these draft documents, reviewed by  
20 our Legal, by Compliance, and sometimes we have it  
21 reviewed by other outside agencies.

22           When we think we've addressed all the issues, we  
23 go into a public participation by law we're required to  
24 put out our draft permit for 45 days at least. We have  
25 been known to put them out for longer, especially if

1 they're more complex.

2           A copy of all the supporting documentations are  
3 put in a repository nearest to the community affected.  
4 And then we have a hearing, where we can again take  
5 additional comments. Now, as I lay this all out for you,  
6 this is kind of the big overview. We are in the process  
7 right now of, what we call, permitting enhancement  
8 efforts.

9           And so when you see some of this, we've layered  
10 in additional issues. For instance, we have a requirement  
11 now that facilities that are coming in for permits now  
12 have to go fee-for-service, as opposed to a flat fee. And  
13 as part of that, we then prepare a reimbursement agreement  
14 with the facility. So we explain to them all the elements  
15 that we're going to be responsible for completing, and  
16 there will be a cost estimate.

17           We also want to engage the community early. And  
18 as we've noted that as one of the elements that we have to  
19 bring in earlier, public participation. So we're thinking  
20 that the best early communication is to have a meeting  
21 with the community before the permit is fully even  
22 submitted to us. And again, we're going to try to assess  
23 the interests of the community and try to bring them in.

24           When all of these things are taken into account,  
25 we will then go to a -- an assessment of whether we go do

1 the final permit. And even before we go to a final  
2 permit, there's another opportunity for permit denial, if  
3 there is adequate concerns about the operation of a  
4 facility.

5 And then we go to final permit. And in here is  
6 our final supporting documentation, a statement of basis,  
7 as to why we feel this is the appropriate regulatory  
8 decision.

9 --o0o--

10 DTSC SENIOR HAZARDOUS SUBSTANCES ENGINEER

11 RODRIGUEZ: When we look at permitting, DTSC is only  
12 responsible for the top two tiers of the five hazardous  
13 waste permit tiers allowed in California. Full permit and  
14 standardized permits are issued by DTSC. And all the  
15 lower tiers are issued by our Certified Unified Program  
16 Agencies, which are the local environmental agencies like  
17 San Diego County, or some fire departments.

18 Now the difference between the two -- the two --  
19 the differences between a CUPA permit and a DTSC permit is  
20 that the CUPA permits tend to be more simple. They are  
21 all issued to the generators of the waste for on-site  
22 treatment. The minute hazardous waste is generated and  
23 sent off-site, it is elevated to either a standardized  
24 permit or a full permit. Standardized permits being  
25 typically the California or the non-RCRA waste, and the

1 full RCRA permits being what's comparable to a federal  
2 Permit.

3 --o0o--

4 DTSC SENIOR HAZARDOUS SUBSTANCES ENGINEER

5 RODRIGUEZ: Now, the types of permits we issue are  
6 operating permits, treatment and storage facilities.  
7 Post-closure permits. Those are for waste that are left  
8 in place, that we have to issue a permit to allow them to  
9 either treat on-site contamination or for monitoring to  
10 make sure that the waste is being contained.

11 We also do permit modifications, if they have a  
12 change of ownership, if they have new waste streams that  
13 they want to take on, or any other -- or even changing a  
14 monitoring well. Those require that DTSC review these  
15 modifications and make a permit issuance.

16 There's also emergency permits. Emergency  
17 permits are very short term. They're 30 days, and they  
18 tend to be exactly what the name implies. These are  
19 typically issued for like fire departments to deal with  
20 explosives or fire departments to issue -- to deal with  
21 unstable fireworks.

22 And the last type of permit is a closure. Now, a  
23 closure permit is issued to a facility that may have been  
24 operating and has decided not to proceed with an operating  
25 permit. So we just still need to close the facility.

1 They cannot just walk away. We need to ensure that  
2 everything is closed according to our requirements.

3 --o0o--

4 DTSC SENIOR HAZARDOUS SUBSTANCES ENGINEER

5 RODRIGUEZ: Now, requirements. We have a very broad set  
6 of requirements. So not only is it the State hazardous  
7 waste laws, which are more extensive than the federal  
8 laws, but it's the federal RCRA, the Resource Conservation  
9 and Recycling Act, the California Environmental Quality  
10 Act requires that every discretionary decision we make be  
11 subject to an environmental analysis of 18 resources.

12 Financial -- facility financial solvency. We  
13 want to make sure that these entities will be able to take  
14 care of any contaminants left behind, any closure  
15 requirements that they have, and so that the taxpayers of  
16 the State of California are not stuck with those costs.

17 Environmental justice issues, oversight of the  
18 facility, transparency with the community, and public  
19 participation requirements, protection of air and water  
20 quality and local land use are just some of the  
21 requirements that we look at when we review these permits.

22 --o0o--

23 DTSC SENIOR HAZARDOUS SUBSTANCES ENGINEER

24 RODRIGUEZ: So what is a permit? At the end of the day,  
25 what does this permit look like?

1 Well, it's permission for these hazardous waste  
2 facilities related to all their hazardous waste  
3 activities. It's an allowance to treat, store, transfer,  
4 and dispose of hazardous waste. Now, California, unlike  
5 the Feds, also regulate transfer. So if you transfer  
6 waste from a tank into a drum, or so forth, and these  
7 activities happen throughout a facility, it's just one of  
8 the ways we're different from the federal permit.

9 It's a very comprehensive description of those  
10 operations. We need to make sure that they meet -- that  
11 they're being done meeting operational constraints that  
12 are protective. When you look at our Title 22  
13 requirements, they are written to be protective of human  
14 health. And I see them as the minimum requirements for a  
15 facility to operate by.

16 Closure and financial information is included in  
17 the permits. And, in fact, if there's any corrective  
18 action, that is also outlined in these permits. They  
19 include enforceable terms and conditions. If there's  
20 anything special over and above what is required in regs,  
21 they're written into these requirements. And they're  
22 valid for up to 10 years, and they continue upon the  
23 timely submittal of a new application, which is typically  
24 six months before the pre -- before it expires.

25 --o0o--

1 DTSC SENIOR HAZARDOUS SUBSTANCES ENGINEER

2 RODRIGUEZ: Our universe of California permitted  
3 facilities include 113 facilities with 121 hazardous waste  
4 permits. Some of these facilities have two permits. You  
5 could have a post-closure facility with a treatment or a  
6 storage permit. You could have a standardized permit, a  
7 landfill that also has a treatment. So there's some  
8 double counting here, and that's why we split it out, 121  
9 permits, but only 113 facilities.

10 And that is the overview. Does anyone have any  
11 questions?

12 (Applause.)

13 DTSC DIRECTOR LEE: Thank you, Evelia for the  
14 Reader's Digest of federal -- of hazardous waste facility  
15 permitting.

16 I'm going to now ask my partner agencies to come  
17 up and join me as Corey is making sure we have all of the  
18 tent cards on the table.

19 So I'm going to start reading some bios. Please  
20 just make your way up. We have with us today Ms. Cynthia  
21 Marvin, she is Chief of the Transportation and Toxics  
22 Division at the California Air Resources Board. This  
23 division is currently leading the development of the  
24 California Sustainable Freight Initiative, implementing  
25 existing diesel rules and Prop 1B incentives for cleaner

1 ports and railyards, updating the State's air toxics  
2 program to characterize and reduce the health risk from  
3 stationary and mobile sources, and guiding multiple State  
4 agencies responsible for investing over \$2 billion  
5 annually in cap-and-trade auction proceeds in  
6 transportation, energy, and natural resources projects  
7 that reduce greenhouse gases and maximize co-benefits for  
8 disadvantaged communities.

9 Ms. Marvin's prior division assignment also  
10 included climate change policy and planning, low carbon  
11 fuels and energy issues. Her background includes 25 years  
12 of experience with the Air Resources Board managing  
13 California's State Implementation Plans, developing ARB's  
14 clean air strategy for mobile sources, fuels, and consumer  
15 products, and drafting air toxics regulations to protect  
16 public health.

17 I would also add that I have known Cynthia for  
18 probably all of her 25 years that she's been at ARB as  
19 we've worked on a number of air and air toxics issues.  
20 And I'm really happy to have her joining us.

21 We also have Mr. Brian Leahy. He was appointed  
22 as Director of the Department of Pesticide Regulation by  
23 Governor Brown on February 2nd of 2012. Before joining  
24 DPR, Mr. Leahy served as Assistant Director for the  
25 Division of Land Resource Protection in the California

1 Department of Conservation for five years. His focus was  
2 the potential for maximizing benefits from open space  
3 management, including farm land management to improve  
4 public health, transportation, biodiversity, climate  
5 change adaptation, and natural resources.

6 He has held many leadership roles in agriculture,  
7 and has a strong history of working collaboratively with  
8 environmental organizations, agricultural groups, trade  
9 associations, local government officials, and other  
10 stakeholders.

11 We also have with us on the panel John Faust, who  
12 gave us our demonstration of CalEnviroScreen earlier  
13 today.

14 Next to Mr. Faust, we have Ms. Shahla Farahnak.  
15 She's the Assistant Director for State Water Resources  
16 Control Board. As Chief of the Groundwater Branch, she is  
17 responsible for and oversees the groundwater protection,  
18 recycled water, underground storage tank, oil and gas  
19 monitoring, and site clean-up programs. So she has some  
20 overlap with the work that DTSC also does. And we do a  
21 lot to try to coordinate between DTSC's clean-up efforts  
22 and the Water Board's clean-up efforts.

23 Ms. Farahnak has been with the State Water Board  
24 for over 25 years working in various program areas,  
25 including the underground storage tank and funding

1 programs.

2           Throughout her career, she's been active in  
3 engaging, coordinating, and building partnerships with  
4 various local, State, and federal agencies, and diverse  
5 stakeholder groups for information and data sharing,  
6 developing technical standards, policies and permits, and  
7 funding criteria and recommendations.

8           She holds a Master's Degree in chemical  
9 engineering from the University of California, Davis, and  
10 is a Registered Professional Engineer.

11           Losing myself in my paperwork here.

12           From the federal government, we have Ms. Deldi  
13 Reyes. She's the Environmental Justice Coordinator for  
14 U.S. EPA Region 9. Deldi received her Bachelor's of  
15 Science degree in biology from Texas Wesleyan University,  
16 and her Master's of Science and Environmental Science from  
17 Oklahoma State University.

18           Her career with the U.S. EPA includes  
19 Environmental Justice Coordinator for Region 9, Manager in  
20 the Office of Chemical Safety and Pollution Prevention,  
21 Air Toxics Enforcement Coordinator, Environmental Justice  
22 Training Coordinator, and she also served as an inspector  
23 for the National -- NPDES -- and I'm blanking on what the  
24 acronym is for, but it has to do with stormwater runoff.

25           I did not give Jack Broadbent a fair introduction

1 earlier when I put him on the spot and asked him to pinch  
2 hit, so I'm going to -- going to go ahead and do that now.

3 Jack is the Chief Executive Officer and Air  
4 Pollution Control Officer for the Bay Area Air Quality  
5 Management District. Under his direction, the air  
6 district strives to protect healthy breathing environment  
7 for every resident in the nine county San Francisco Bay  
8 Area Region.

9 Jack joined the air district after serving as the  
10 Air Division Director at U.S. EPA Region 9, where he was  
11 responsible for overseeing implementation of the Clean Air  
12 Act, as well as Indoor Air Quality and Radiation Programs  
13 for the Pacific Southwest Region of the United States.

14 Before serving at U.S. EPA, Jack served as the  
15 Deputy Executive Officer for the South Coast Air Quality  
16 Management District, as well as their Director of  
17 Planning. While at the South Coast Air District, Jack  
18 directed the development of a number of landmark programs  
19 that contributed to significant improvements in air  
20 quality in the Los Angeles region.

21 During the 1980s, he also served as the corporate  
22 environmental programs manager for the largest private  
23 employer in California Hughes Aircraft Company. He holds  
24 a Master's Degree in Environmental Administration, and a  
25 Bachelor's of Science degree in Environmental Science both

1 from the University of California at Riverside.

2           And then rounding out our panel, we have Mr.  
3 Howard Levenson -- sorry, Dr. Howard Levenson. He's  
4 CalRecycle's Deputy Director for Materials Management and  
5 Local Assistance. He previously held the position of  
6 Assistant Director of the former California Integrated  
7 Waste Management Board, and then CalRecycle's Materials  
8 Management and Local Assistance Program.

9           For four years Dr. Levenson served as Deputy  
10 Director of the Board's Permitting and Enforcement  
11 Division, and prior to that position was supervisor of the  
12 Board's Organic Materials Management Section. From 1991  
13 to 1998, Dr. Levenson served as an advisor to the  
14 California Integrated Waste Management Board member Paul  
15 Relis.

16           Prior to his service at the Board, Dr. Levenson  
17 worked as a Senior Associate in the Environment Program of  
18 the Office of Technology Assessment, a non-partisan  
19 analytic support agency of the U.S. Congress. While  
20 there, he worked on a range of environmental issues,  
21 including marine pollution, groundwater pollution, climate  
22 change, and municipal and industrial solid waste  
23 management. He was the primary author of OTA's 1989  
24 assessment *Facing America's Trash: What's Next for*  
25 *Municipal Solid Waste*.

1 I am looking forward to having this discussion  
2 with our panel. Our goal this afternoon is to talk a  
3 little bit about what each of us are doing in our  
4 individual agencies, and what it is that we think we can  
5 do going forward to try to improve the tools that we have,  
6 and the decisions that we make around cumulative impacts  
7 and community vulnerability.

8 So I'd like to start off by posing a question to  
9 the group, and what I would like to start off with is what  
10 opportunities are there that we could explore to partner  
11 and better coordinate the data and analyses that we  
12 already have in our individual agencies, boards, and  
13 departments in order to improve our understanding of  
14 cumulative impacts?

15 Cynthia do you want to start us off.

16 ARB TRANSPORTATION & TOXICS DIVISION CHIEF

17 MARVIN: Thank you, Barbara. And I appreciate the long  
18 version of the introduction.

19 (Laughter.)

20 ARB TRANSPORTATION & TOXICS DIVISION CHIEF

21 MARVIN: I don't usually hear all that.

22 So it's my pleasure to be here today and talk a  
23 little bit about what ARB brings to the table. And I  
24 think many of you who know us understand that we primarily  
25 regulate on a statewide basis rather than a facility

1 specific basis. So cumulative impacts as it relates to a  
2 particular facility is a reasonably new challenge for us.  
3 It's something that the legislature has directed us to be  
4 more aware of, and to be more active on. It's certainly  
5 something that our Environmental Justice Advisory  
6 Committee encourages us very strongly to pay attention to.

7           So I would characterize ARB as being in the  
8 process of moving from very much a statewide perspective,  
9 not just to a regional, but to a local perspective, and  
10 considering individual facilities.

11           In terms of responding to Barbara's question  
12 about partnering, one of the main things that I think we  
13 can offer to DTSC is our EJSM model. It is similar to  
14 CalEnviroScreen, but it has a much longer list of  
15 indicators that capture the different types of air  
16 pollution facilities around the State. It also has more  
17 information on sensitive populations, and specifically  
18 schools, child care facilities, things like that, that  
19 might be a good reference as you're looking at individual  
20 facilities in the permitting process to calibrate what  
21 else is nearby in a fairly fast and easy fashion.

22           So I think that's probably the main data resource  
23 that we would bring. The other thing that I would offer  
24 is that as ARB is taking a fresh look at its own air  
25 toxics work, we recognize that there's a number of

1 hazardous waste problems in the State that were originally  
2 created by air emissions, for example, metals that have  
3 deposited. And so that is something that we need to be  
4 more aware of, and we need to make a higher priority on  
5 those sources that not only create ambient air quality --  
6 or ambient air pollution, but also create deposition that  
7 then becomes a problem for a long time in people's yards  
8 and in other sources, such that it becomes a waste to be  
9 cleaned up.

10           So I didn't say that very well, but it's  
11 basically recognizing that the best place to capture a  
12 problem is before it becomes a problem. And so we're  
13 trying to increase our focus on that angle.

14           DPR DIRECTOR LEAHY: Okay. So from the world of  
15 pesticide, we are a data rich institution. I think we  
16 start from -- created mega data as I think.

17           And so the use of that data is really important.  
18 You know, I mean CalEnviroScreen took a look at that, uses  
19 that a lot. We very much enjoy working with other  
20 departments. I think we have a history of working with  
21 you all, Lompoc and Kettleman City, Parlier. So -- and  
22 every time we do that, we learn. That's what's been  
23 really interesting.

24           I was looking at some of the history. And, you  
25 know, from what we learned trying to help you all, you

1 know, we have really got a much more robust air monitoring  
2 program. Many years ago -- it wasn't that long ago for  
3 some of us, the eighties, you know, there was a real  
4 problem with one of the pesticides used that was not  
5 breaking down and getting into groundwater, so it became  
6 your problem.

7           But our response was, with the help of the  
8 legislature, to create a basically a groundwater  
9 protection program. So now, anything that comes into the  
10 State is screened to figure out how to ensure that it  
11 basically breaks down, doesn't get beyond the root zone,  
12 so that prevention is really important. And, you know,  
13 that's -- that's the key is preventing things from moving  
14 off site. And so that's one of the ways we can help you.

15           But the biggest way is simply dialogue. You ask  
16 us, we sit down, we work together with our other sister  
17 departments, and, you know, we all learn from that. So  
18 that's our commitment.

19           DR. FAUST: All right. Thank you. So if it  
20 wasn't really clear from my presentation about the  
21 CalEnviroScreen earlier, you know, we rely on data that  
22 come to us from other entities. We don't collect data  
23 ourselves, but we essentially evaluate the data that come  
24 to us from other boards and departments, from the federal  
25 government, from the Department of Public Health.

1           So we have an active role in working with the  
2 boards and departments, and these other entities to  
3 understand the data, make sure we're getting it right, and  
4 are appropriately characterizing it. So, you know, while  
5 we don't have a specific schedule for the next version of  
6 CalEnviroScreen, we have been doing it every couple years,  
7 and we expect, you know, in the next few years to continue  
8 working with the boards and departments to continue to  
9 update and understand the data.

10           You know, we have had some very productive  
11 collaborations, you know, even U.S. EPA they've helped us  
12 to better understand air pollution issues along the  
13 U.S./Mexico border. And, you know, we've had a lot of  
14 opportunities to better understand conditions there.

15           I would also support Cynthia's comment about some  
16 of these additional data sources that are available. You  
17 know, to us, for example, the locations of sensitive  
18 receptors like schools and so forth, that might provide  
19 better information about local conditions. You know,  
20 CalEnviroScreen has made a choice to evaluate things at a  
21 census tract scale, which represents an area, and sort of  
22 is, as we're thinking about this cumulative impact issue,  
23 you know, around facilities, we're going to be needing to  
24 look a bit closer at sort of where these things are in  
25 location to these facilities, where census tract data

1 might not necessarily be the most -- most useful.

2           So I think actually with that, I might move it  
3 along.

4           SWRCB ASSISTANT DEPUTY DIRECTOR FARAHNAK: Good  
5 afternoon. I'd like to thank Barbara Lee first and her  
6 staff for inviting the Water Board to this symposium, and  
7 we look forward to partnering and collaborating with DTSC  
8 as you're moving forward with implementing both  
9 programmatic and data elements of SB 673.

10           The presentations today were very informative.  
11 I'd like to congratulate your staff for such a great  
12 agenda also informative speakers.

13           In terms of, you know, the cumulative impacts, I  
14 wanted to start just kind of continuing Water Board's  
15 commitment to stakeholder engagement and transparency.  
16 Obviously, as part of CEQA process, all our policies and  
17 permits were subject to CEQA.

18           So besides that analysis, we also have heavily  
19 focus on doing outreach to disadvantaged communities,  
20 tribal communities, and engaging and understanding the EJ  
21 issues and communities. And our Office of Public  
22 Participation's Director Gita Kapahi is lead for statewide  
23 efforts, and very often partners with U.S. EPA and other  
24 agencies in dealing with the statewide EJ issues. And I  
25 think some of the examples were mentioned this morning in

1 terms of like once-through cooling power systems.

2           With respect to data, you know, we are committed.  
3 And we understand that in order to be a transparent  
4 organization, you need to have transparent data. So we  
5 have many data systems. We have a groundwater quality,  
6 surface water quality data, drinking water data systems.  
7 We have our 303(d) listing data.

8           So all of our information we're in a fortunate  
9 position that we do share like EnviroScreen actually taps  
10 into our data systems and provides that information.

11           Also, we pull the information with other -- from  
12 other sources, like the information that DTSC gets from  
13 responsible parties for hazardous site clean-ups, that  
14 gets into our system.

15           So, on one example, I brought a few kind of  
16 handouts, is that we are -- we contribute data to  
17 California Environmental Data Exchange Network, where they  
18 actually have this portal, which you can go and say what's  
19 my water quality in my area. It's called water quality  
20 portal. And the reason I mentioned that as an example, is  
21 that as we're looking at our data systems and assessment  
22 tools, it's important to have the user in mind. We're  
23 looking at systems that an average person can get in and  
24 get the information.

25           And we're also looking at complex analysis that,

1 you know, systems like EnviroScreen needs to do that. So  
2 I think continued collaboration, training our staff to  
3 understand what each data system has, and how we can  
4 integrate our resources to better those data systems, is  
5 what I would recommend.

6           The other thing that maybe it's more specific,  
7 Barbara, is that while we pull the DTSC's site clean-up  
8 information, that information currently is in a PDF  
9 format. We're really striving for our systems to have  
10 live data. So if you're doing any analysis, you don't  
11 have live data, it's impossible to analyze it. So we're  
12 looking forward to see how we can help you overcome. We  
13 do have regulatory authority to require electronic  
14 submittal of the data. And many of the same laboratories  
15 submit data to DTSC for site clean-ups as well.

16           So I would offer our staff and our expertise and  
17 resources to continue working with you and OEHHA and other  
18 agencies to better our systems, so that we can have --  
19 avoid duplication, have automatic sharing and upload and  
20 download of the data to minimize staff resources.

21           US EPA REGION 9 EJ COORDINATOR REYES: Thank you,  
22 Director Lee and also thank you to Ana Mascareñas for  
23 inviting U.S. EPA to be part of this day and this panel.  
24 I appreciate it very much.

25           In terms of opportunities that I see as an

1 observer on this tissue that are -- could be relevant  
2 here, one thing that EPA could do, and actually has done  
3 at the national level from one of our offices in our  
4 Office of Land and Emergency Management is to look across  
5 the country at every State universe of hazard -- of  
6 permitted hazardous waste facilities. So again, the top  
7 two tier permits that Evelia talked about in her  
8 presentation, and to really compare each of the states in  
9 terms of the numbers of those types of facilities, the  
10 nature of the waste, the way that the waste is disposed  
11 of, also some information, of course, about the generators  
12 of the waste. So that could be something we could share,  
13 if that could be useful.

14           Then in terms of EJSCREEN, there's been all -- so  
15 much talk today about CalEnviroScreen. EJSCREEN is the  
16 federal version of a cumulative impact screening tool,  
17 even though EPA does not really refer to it as such. It  
18 is much more limited than CalEnviroScreen, in part because  
19 we had to find nationally available and nationally  
20 consistent data. And so that automatically limits the  
21 number of indicators you can put in it, and it also does  
22 not include health data.

23           But it's very interesting to see all of the great  
24 work that's happening with CalEnviroScreen. And much of  
25 which California is doing, we are actually attempting to

1 try to, you know, pursue similar types of improvement for  
2 EJSCREEN. As an example EJSCREEN right now only includes  
3 hazardous waste TSD facilities, and we are now trying to  
4 work to include the generators as well, because that's a  
5 big component of potential risk.

6 And then the other thing I would say about this  
7 question of data, these tools, you know, look at  
8 relatively objective data. But you as an agency, as DTSC,  
9 and -- also have at your disposal the experience that  
10 you've gained from some very, very challenging and  
11 long-term issues involving permitting of hazardous waste  
12 facilities. And so that -- how you sort of draw the  
13 experience, the lessons learned, the things you wish you  
14 could have done differently, you know, that's also an  
15 opportunity to mine those experiences.

16 And I'm thinking specifically the issue with Chem  
17 Waste Management and permitting of that silty in Kettleman  
18 City. That was an action that many, many agencies were  
19 involved in, in terms of coordinating, but it -- you know,  
20 of course, DTSC was the lead Permitting agency there.

21 So having some way of harnessing lessons learned  
22 from that experience, which continues to this day, I think  
23 could be useful in helping shape next steps for this --  
24 for this bill.

25 Oh, and the other thing I would say is there was

1 reference earlier to the use of the Health Impact  
2 Assessment. And this could be a really interesting  
3 approach to maybe perhaps pilot in some of the higher  
4 priority permitting actions that could again give a sense  
5 of the information that could be most useful, whether it's  
6 already in CalEnviroScreen or whether it's yet to be mined  
7 or determined in some other way.

8 BAY AREA AQMD AIR POLLUTION CONTROL OFFICER

9 BROADBENT: Well, good afternoon. I'm, I think, the  
10 designated local agency person up here.

11 But in terms of opportunities to explore and to  
12 partner and better coordinate data, the local air  
13 pollution control districts, of course, collect a  
14 considerable amount of information, not the least of which  
15 include emissions information from facilities, ambient air  
16 quality data. And the emissions data include source test  
17 information, which is where we actually take stock samples  
18 and things like that.

19 I mentioned ambient air quality information. So  
20 we have -- we all maintain a pretty extensive air  
21 monitoring network. And as Ian was mentioning earlier, we  
22 have also -- undertake a lot of special monitoring in and  
23 around communities. That information rests a lot with  
24 both the district as well as CARB.

25 And then I -- as Cynthia mentioned, there's --

1 there's the CARB EJ information that I think is in  
2 addition to the CalEnviroScreen. So, to me, I believe  
3 we're somewhat living in a very data rich time, and it's  
4 certainly, I would say, over the last 10 years really  
5 exploded in terms of information that I think could be  
6 very useful

7           What I think is needed now is the compilation of  
8 that information, making it useful, and to try to  
9 understand cumulative impacts, and to go along with that,  
10 to me I guess at a very local level, a process in which  
11 all voices, all concerns are provided the same  
12 information; and as was mentioned earlier, a dialogue,  
13 which is I think -- that's where DTSC I think should and  
14 could be focusing into the future is really facilitating  
15 that dialogue, so that this information can be pulled  
16 together in a meaningful way, and pulled together in a way  
17 that I think the person who hears all this information can  
18 understand.

19           I think the person that, in the community, hears  
20 air quality information, water quality information,  
21 hazardous waste information coming together and really, I  
22 think, some good minds pulling together to try to make  
23 sense of it all, what does it really mean to a person  
24 living in that community is really what's needed at this  
25 point?

1           Those are my two cents.

2           CalRECYCLE DEPUTY DIRECTOR LEVENSON: Thanks,  
3 Jack. And I also want to thank Director Lee and the DTSC  
4 staff for putting this symposium on and inviting us. And  
5 in the back I have our Chief for Permitting of Solid Waste  
6 Facilities - Sue, if you can just raise your hand - in  
7 case you have questions on that.

8           From a CalRecycle standpoint, you know, we do  
9 regulate facilities, but the solid waste facilities. So  
10 we kind of butt up to the hazardous waste world, and we  
11 intersect with DTSC on a number of different issues,  
12 particularly for things that are regulated as household  
13 hazardous wastes under the universal waste framework, so  
14 paint, used oil, covered electronic waste and things like  
15 that.

16           And one of the areas where I think we've done a  
17 good job with collaboratively between the two departments  
18 - certainly we can improve - is on trying to get  
19 information out about those programs when people have  
20 questions, and along with Jack was saying, when people in  
21 the community have questions about what is going on with  
22 one of those programs, we need to be more adept and  
23 flexible at responding to those and providing succinct  
24 regulatory interpretations that everyone can understand.  
25 So that's something that we've all been working on in the

1 past, and I think it's something we can continue in the  
2 future.

3           You know, we also have a lot of information that  
4 we do provide to both OEHHA for inclusion in the  
5 CalEnviroScreen, to DTSC in the form of information on our  
6 solid waste information system. It's got all the  
7 feedstocks, and CEQA documents, and enforcement actions  
8 related to the solid waste facilities. We have  
9 information that we get from local jurisdictions on the  
10 collection and disposition of the household hazardous  
11 waste, which is our form called Form 303 for those of you  
12 who are familiar with that.

13           So there's a lot of information that I think we  
14 can continue to provide, both in internally to the  
15 agencies, but also to make more transparent to  
16 stakeholders out in various communities.

17           One of the things that I think Shahla mentioned,  
18 and I know DTSC does as well, is kind of the public  
19 outreach. And we get a lot of feedback from community  
20 groups about how do they get involved early on in the  
21 planning and permitting process for a facility?

22           Often, they're getting good involved when CEQA  
23 comes along or when there's something at the Planning  
24 Commission, but many folks feel that that's too late. And  
25 so kind of an earlier -- I won't say warning system, but

1 an earlier communication system about what is the planning  
2 process, what is the permitting process, how do you get  
3 involved in an appropriate time I think is really critical  
4 for all of us who are working in this area.

5           And just as a couple of examples to that, speak  
6 to that, thanks to Cynthia and the Air Board, you know, we  
7 have some funds available from -- and the legislature, of  
8 course -- some funds available from the greenhouse gas  
9 reduction fund to provide grants for infrastructure  
10 development. And any time you put in a facility, that's  
11 obviously going to be of concern, whether it's a hazardous  
12 waste facility, or a solid waste facility, or anything of  
13 the like.

14           So we have built in, in our latest round of  
15 grants, new requirements for project applicants to be  
16 engaging with the community very early on, above and  
17 beyond CEQA, so that there's early engagement and  
18 continuing engagement of the community throughout that  
19 planning process, and then the subsequent project  
20 implementation process.

21           So I think those are -- that's less a data  
22 suggestion, but more of a process suggestion that I think  
23 we can all continue to work on.

24           DTSC DIRECTOR LEE: Thank all of you. Jack and  
25 Cynthia know that in my prior job working at a air

1 district, I worked at a fairly small one, and I became  
2 very adept at looking around the field and seeing who was  
3 doing something and had information or processes that I  
4 could steal, and I shamelessly did that in order to  
5 improve what I was able to do myself. And I have every  
6 intention of continuing that here, especially because DTSC  
7 is relatively late coming to this space, and so much good  
8 thinking is already underway.

9           And as I've said a couple of times today, what we  
10 really want to do is understand how we can be mindful of  
11 the good work that is already underway, and add our -- our  
12 contribution in such a way that it makes the whole  
13 greater. One example I can think of of something DTSC has  
14 done more recently related to sharing information and  
15 trying to make something synthetic in terms of making that  
16 information meaningful is some of the staff in our clean  
17 up program developed a spatial prioritization and  
18 information -- Spatial Prioritization Geographical  
19 Information Tool, which they refer to as SPGIT. And it's  
20 used to evaluate groundwater data that comes to us from  
21 the Water Board from their drinking water program, where  
22 they have information about contaminated drinking water  
23 wells.

24           We overlay that with spatial information from  
25 DTSC's known hazardous waste sites and known contaminated

1 sites, and we overlay that with information from  
2 CalEnviroScreen. And what we've been able to do using it  
3 in that way, this tool, essentially is an added  
4 visualization that looks like CalEnviroScreen, but gives  
5 us a little hexagons of space on the map that allow us to  
6 quickly zero in on where we have evidence of contaminated  
7 drinking water, and see where we nearby have potential  
8 sources of that contamination. And it has shaved time off  
9 of the analysis that usually goes into identifying  
10 contaminated sites for further characterization.

11 So I'm excited to hear about different wells of  
12 data and the commitment to work together to see how we can  
13 marry those different wells of data together, because I  
14 believe that in sifting through that information, we're  
15 most likely to find those nuggets of gold that allow us to  
16 move forward and create a stronger system for looking at  
17 impacts across all of the media that we regulate.

18 What I'd like to do is I'm going to throw another  
19 question out there and start at the other end of the table  
20 just to mix it up a little. I'm interested in hearing  
21 from folks. When you look at what you have done or are  
22 currently work on in your own agencies to assess impacts,  
23 and in particular to look at cumulative impacts, what do  
24 you think have been the most productive avenues of  
25 exploration?

1           CalRECYCLE DEPUTY DIRECTOR LEVENSON: I guess I  
2 get to go first.

3           (Laughter.)

4           CalRECYCLE DEPUTY DIRECTOR LEVENSON: I would say  
5 a couple things. One, clearly having a solid research  
6 foundation on what the potential impacts are that are  
7 coming from various operations or processes is critical.  
8 And we've -- at CalRecycle we've done a lot of research  
9 for example on emissions from composting and organics  
10 management. That's just an example.

11           But we need to have a much better understanding  
12 of what the various emissions are or impacts associated  
13 with different management practices. And I think  
14 that's -- overall, we're getting more and more information  
15 about that, but a lot of that's been conducted in silos.  
16 And I think we need to start working across agencies more  
17 and more to be conducting kind of multimedia impact  
18 assessments.

19           And along those lines, I think you have to  
20 consider both the impacts and the benefits. One of the  
21 issues that we are facing at CalRecycle is the ability to  
22 get facilities sited that may have some impacts on a  
23 community, but then have positive benefits elsewhere in  
24 the State in terms of carbon sequestration or health --  
25 soil health quality or things likes that. So how do we

1 balance cumulative impacts versus cumulative benefits that  
2 aren't necessarily part of the regulatory decision-making  
3 process?

4 BAY AREA AQMD AIR POLLUTION CONTROL OFFICER

5 BROADBENT: So, this morning, I spoke to some of the  
6 efforts that the Bay Area Air District is undertaking with  
7 regard to trying to understand cumulative impacts, how to  
8 weave it into our permitting and regulatory system. But I  
9 will tell you, Director Lee, one of the -- one of the  
10 aspects, frankly, that has been the most success to date  
11 has been taking our permitting program and just allowing  
12 more time.

13 I know these are some simple things and don't  
14 sound very complicated, but we just actually -- it's  
15 frustrating some of the folks that require permits from  
16 us, but we have agreed to lengthen the time for people to  
17 engage with us, and indeed review and make comments.  
18 That's been a big change.

19 Also, changing the way we notify communities of  
20 upcoming permitting actions has also been an important  
21 win-win frankly for everybody. And then -- but all of  
22 this comes about as a result of a dialogue and process  
23 that we put in place to really get the input from affected  
24 communities.

25 And so as -- from the District's standpoint, we

1 hired and really got people into positions that that's  
2 really all their job is to do is to sit down with  
3 community representatives, establish working groups,  
4 establish processes by which we can notify them of  
5 upcoming permitting actions, and then put the tools in  
6 place for people to comment.

7           That hasn't dealt with what is the cumulative  
8 impact in their communities. That's something that is  
9 really a tough nut as we've all been talking about all  
10 day. But we're confident that we have the good and right  
11 people around the table for us to ultimately, I think,  
12 come back with some potential ideas on this subject. But  
13 that's -- that's been some of the success story so far.

14           US EPA REGION 9 EJ COORDINATOR REYES: Well, at  
15 the national level, U.S. EPA is no stranger to the idea of  
16 cumulative impacts. As far as back as 1992, in our  
17 Reducing Risk for All Communities Report, we acknowledged,  
18 as an agency, that some communities were harder hit, that  
19 they had more than their share of hazardous waste sites,  
20 of pesticide exposure, of drinking water issues.

21           So what the challenge has been at EPA has been  
22 this distinction between traditional quantitative,  
23 cumulative risk assessment to support standard setting  
24 versus this seemingly nebulous idea of what -- what does  
25 it mean when we talk about cumulative impacts?

1           The fact that we now have a nationally consistent  
2 EJ screening tool has been incredible support, because it  
3 gave all of us, you know, one way to sort of think about  
4 it in a more objective way. Up until that time, 2014,  
5 every single of the 10 EPA regions had their own method  
6 for screening environmental and demographic information to  
7 try to lift up places, and it just wasn't very workable.  
8 So having a nationally consistent tool, you know, added a  
9 lot of consistency.

10           And one of the ways I've seen it be used more  
11 effectively has been actually in the compliance realm,  
12 where use of EJSCREEN information is very helpful in, as  
13 one element of many, in developing inspection plans for  
14 different universes of regulated facilities. It also, in  
15 terms -- when we're in settlement mode, if we have -- if  
16 we know we're dealing with a facility that's in a place  
17 that has -- ranks high on a number of EJSCREEN indices,  
18 we're going to work very hard to try to achieve a  
19 supplemental environmental project to help resolve those  
20 complaints that will have some way to impact health and  
21 environment in a positive way that's also connected to the  
22 violations.

23           On the permitting front, I think we have fewer  
24 success stories to offer. Much of what has been more  
25 successful than not comes not so much from the treatment

1 of what are considered to be cumulative impacts that would  
2 result in a more stringent permit condition, but more in  
3 procedural issues, particularly those where engagement can  
4 happen much, much earlier on in the process, like even to  
5 the point before an application is formally submitted.

6           If we know there's going to be a very  
7 controversial facility, whether an expansion or a brand  
8 new facility, if there is a way to work with the applicant  
9 and work with the community to have those conversations  
10 earlier, that's a lot better than, you know, waiting a  
11 year down the pike when your application has already been  
12 determined to administratively complete.

13           And frankly, on that side, what we need, and I  
14 think all of us need, are some companies that are willing  
15 to have those conversations with communities. And I'm  
16 looking at you Janet. Thank you for your remarks earlier  
17 today. It does put you in a hard spot, but we do need  
18 those companies to step up and be part of those early  
19 dialogues.

20           SWRCB ASSISTANT DEPUTY DIRECTOR FARAHNAK: So in  
21 response to your question, I think there's three key  
22 elements that I'd like to mention. One is really having  
23 that readily accessible data in order to be able to do  
24 assessments and make informative decisions. And that's  
25 the reason for my earlier remarks, emphasizing the

1 importance of electronic reporting for our compliance data  
2 monitoring.

3           The second thing is really having staff that are  
4 well trained and have a good understanding of the data,  
5 and the limitations, so the data is only as good as the  
6 user. So it's important to have that broader training and  
7 cross training of staff amongst different agencies to know  
8 what we have, what the limitations are, before we take  
9 data from one system and put it somewhere else.

10           And the third element is really feedback, loop,  
11 and mechanism. You know, the data is being used out there  
12 getting feedback on what the data gaps are and how you can  
13 improve it. And I'm going to take this opportunity to  
14 introduce my -- one of my managers John Borkovich that  
15 most of you know before he leaves, that John oversees our  
16 groundwater ambient monitoring program and they've been  
17 putting a lot of emphasis and reaching out to different  
18 agencies, looking at what information is there, and  
19 figuring out how we can directly link to that data, and  
20 also what other data system or assessment tools are out  
21 there that we can use. So ultimately, I think for us is  
22 having good data to help us make informed decisions.

23           DR. FAUST: All right. I think probably the  
24 thing that I'll mention is, as being particularly valuable  
25 or productive for us in developing the CalEnviroScreen

1 tool, is having a robust public process. You know, in  
2 some respects, you know, we're a small office with a big  
3 charge to understand all these environmental conditions  
4 across the State, and the different types of  
5 vulnerabilities that exist.

6 And, you know, California is a very large State,  
7 with a lot of different communities that face a lot of  
8 different types of burdens. And, you know, through the  
9 original, you know, concept of the tool, you know, and  
10 through the first diversions and second versions, you  
11 know, we've tried to incorporate public input in a  
12 meaningful way, you know, by holding workshops in  
13 communities that we sort of know face these burdens or are  
14 perceived to face burdens, you know, to try and understand  
15 conditions there.

16 You know, and we -- and we bring in the  
17 information that we think we know about a place, and you  
18 know, we basically ask the question is this -- is this  
19 right? Does this reflect what you think things are like  
20 here. And through that process, you know, we've learned a  
21 lot. We've, you know, been brought forward new things  
22 that we didn't know about places, and get a sense of  
23 what's on people's minds in these different communities.

24 So I would sort of hold that up as the thing  
25 that's probably been very -- most productive for us in

1 terms of the development of CalEnviroScreen.

2 DPR DIRECTOR LEAHY: For some reason when --  
3 turned it off. All right. For some reason, Barbara, you  
4 left out the fact that I was an organic pioneer.

5 So almost 40 years ago, I was doing about 900  
6 acres of organic land, when no one knew what you even  
7 meant by organic. It was pretty different.

8 But the reason why I did that was because the  
9 concerns about pesticides. I figured if we could grow  
10 without any, we could probably relook, reassess. And in  
11 40 years, society -- California has made remarkable  
12 progress in how we apply pesticides, especially around  
13 farms, but all of it. And there's been a number of  
14 reasons for that.

15 First and foremost, of course, is science, and  
16 the application of science, the requirement that any  
17 pesticide that comes into the market is reviewed very  
18 intensely. There's a number of -- quite a few number of  
19 studies that are required. There's very intense protocol,  
20 sort of a continuous improvement. You know, the  
21 pollinators are a good example.

22 The number of studies required to get a new  
23 pesticide in the marketplace for pollinators. You know,  
24 it's five times more studies than it was 10 years ago, and  
25 our knowledge of pollinators has just increased 10-fold in

1 the last decade or so. So we probably -- going into it,  
2 we know more about pesticides than just about any other  
3 thing in commerce easily.

4 So the science is really important. And then  
5 that's the -- our federal level. And then it comes to  
6 California, California has created a pesticide regulatory  
7 program that is almost as large as the federal government.  
8 We're approaching \$100 million a year. And we started  
9 hiring our scientists about 35 years ago. Our first one  
10 retired not that long ago, a medical toxicologist. And  
11 we've become a very science intense organization.

12 And we look at California specific conditions,  
13 because California is very different than the rest of the  
14 country. I mean, just an example, when I farmed in  
15 Nebraska, you could sit on a tractor to the curvature of  
16 the earth you'd see three tractors.

17 We have folks in Monterey County that are  
18 harvesting, planning, thinning, doing everything you can  
19 imagine all at the same time within a square mile, so it's  
20 very different. We have half a million ag workers out in  
21 the fields that we need to protect, and we have 400 crops.  
22 So we have built a very robust program to address  
23 California issues. And I have to remind you that most of  
24 the pesticides used in society are not on the ag side.  
25 They're on the other side, water being number one.

1           So we have intense science. We have very intense  
2 knowledge going in, but then we have to look at -- and we  
3 do a lot of data information. You know, every pesticide  
4 used on the ag side, we know where, when, why all of that.  
5 We've had that for decades. We also do air monitoring to  
6 see how good we're -- a job we're doing. We do water,  
7 surface water and groundwater monitoring. We look at  
8 food, so we do residues, testing for pesticides.

9           We review illness reports to make sure that we're  
10 capturing anyone that did get harmed by a pesticide. So  
11 we have a lot of data, but data is the easy part, because  
12 then what do you do with it. You have to figure out  
13 mitigations.

14           How do you continue to use something that  
15 provides a very essential service? You know, in our case,  
16 these -- our food supply, our public health, our resource  
17 management all rely on us keeping pests at a certain  
18 acceptable level.

19           So then how do we do that, but keep it on site,  
20 make sure it does its job, and move forward? And that's  
21 what mitigation is all about. We have medical  
22 toxicologists on staff. We have the people that -- the  
23 folks that look at workers protections and all that. I'll  
24 think of that name in a minute.

25           Harvard, what is he?

1           Okay. Industrial hygienists. Thank you very  
2 much.

3           So we really have to look at that. We have to do  
4 enforcement, so we put \$27 million a year into our local  
5 county ag commissioners to do enforcement. We also --  
6 it's probably our largest branch. We have regional  
7 offices. We have lawyers. So enforcement is really  
8 important. You have to have good revenue. So basically  
9 2.1 cent of every dollar for the first point you sell of a  
10 pesticide goes to fund our program and a few others.

11           And so it takes a lot to really make a  
12 difference. And the reality is you start -- you attack  
13 cumulative impacts at the source, making sure it doesn't  
14 move off target, or off site into the human body of the  
15 environment.

16           And so that has been the -- kind of the core of  
17 our program. Education works. So people handling  
18 material are educated. They have -- we have licenses for  
19 everything from the folks that do your right of way, you  
20 know, Caltrans all those people, to people using, you  
21 know, most intense ag pesticides. You know, when I was a  
22 kid, I was the life guard, and I would roll 55 gallon  
23 drums of chlorine, and do other things, and just -- and  
24 one alligator, two alligator, all that good stuff.

25           Those things -- education works, you know, so

1 licensing works, and enforcement works. So that's a lot  
2 of cumulative discussion there, so you can go with that.

3 ARB TRANSPORTATION & TOXICS DIVISION CHIEF

4 MARVIN: Thanks. Two thoughts on this point. In terms of  
5 what ARB is working on now, I'd like to go back to what  
6 several of my fellow panelists have mentioned in terms of  
7 a richness, a wealth of data, but the need to compile it,  
8 and the need for the data to be accessible.

9 So along those lines, ARB is spending a fair  
10 amount of time in responses to Assembly Bill 197, working  
11 on an emissions visualization tool that brings together  
12 the emissions from facilities around California, both from  
13 a climate perspective, a criteria air pollutant  
14 perspective, and a toxics perspective.

15 And the whole point was to link things up so that  
16 you can see what's happening at a neighborhood scale, zoom  
17 in, zoom out, and see the whole spectrum of air  
18 pollutants. So that's a -- that's a big effort now. And  
19 the prototypes are available to start taking a look at  
20 there.

21 In terms of Barbara's question about what have we  
22 found to be productive in the past, I'd like to go back to  
23 an example I was very involved with personally, and that  
24 was a community scale assessment of health impacts from  
25 diesel pollution. We started in the community of West

1 Oakland. And that's a case where we started out wanting  
2 to do a health risk assessment for the Port of Oakland,  
3 because of our regulatory work on ports.

4 We met with community folks with the Port, with  
5 the local railroads, and with other members of the  
6 community. And what we found is that it was good to be  
7 looking at the port, but that really didn't answer the  
8 community's questions and concerns. They wanted to know,  
9 from a community-wide perspective, what are all the  
10 sources of diesel pollution that are impacting their  
11 health, and providing grit on their window sills and their  
12 cars. And so we expanded the scope of the analysis from  
13 the ports to include the near dock railyards, to include  
14 the trucks on the nearby freeways. And then with much  
15 assistance from Jack Broadbent and his staff, to also  
16 include the stationary sources of diesel pollution in West  
17 Oakland.

18 And so what we were able to do was a pretty data  
19 and resource intensive look at all of the sources we were  
20 able to put our fingers on, that were contributing to high  
21 diesel exposure in West Oakland. What we got was a health  
22 risk assessment that was not only informed by the  
23 community's concerns and suggestions, but there was strong  
24 buy-in and there was strong trust in the outcome.

25 And so the message that I have, and potentially

1 an approach for DTSC to consider, if you have the  
2 resources and the time is that that kind of community  
3 scale on the ground assessment, the working with the  
4 community and the emitters or the polluters to frame the  
5 analysis getting an agreement on what that analysis should  
6 be, what's the scope, what's the depth, really gives you  
7 results that everybody is prepared to accept and embrace  
8 and then that provided the basis for us for future  
9 regulatory efforts, and there was a lot more community  
10 confidence, not just in the data, but in the actions we  
11 took after that.

12           The last thing I would say to wrap that up is  
13 that the relationships that we built with the community  
14 members in West Oakland through that process survive and  
15 thrive today, and they're a core part of that credibility  
16 and trust.

17           And I'm not suggesting that's true across every  
18 member of the West Oakland community, because I didn't get  
19 the opportunity to meet everybody, but there are a core  
20 number of leaders who are very comfortable calling us and  
21 saying, hey, we're having a problem with trucks idling in  
22 front of this apartment building, can you guys help? And  
23 in a lot of cases, we can. So I would encourage you to be  
24 considering a community perspective.

25           DTSC DIRECTOR LEE: That's all very helpful. And

1 I want to just give some context for my laughter. When  
2 Jack said take more time on issuing permits, DTSC has been  
3 under extraordinary pressure to take a lot less time  
4 issuing permits. But the point about the need to have  
5 robust and meaningful public engagement in the process of  
6 assessing, not just the facility and its performance, but  
7 also impacts in the community, whether they stem directly  
8 from that facility or from other activities around that  
9 facility to the point of understanding better cumulative  
10 impacts, and layering in community vulnerability.

11 I do agree that we need to allow a larger space  
12 for that to happen. And that's indeed why we're -- why  
13 we're moving down this path. And I think that there's  
14 quite a bit of experience out there that is going to  
15 provide some good signposts to us, not just overall the  
16 direction to go in, but also in the near term some things  
17 that we can do, either all together or in smaller groups  
18 to try to answer very specific questions and make more  
19 efficient use of the information we currently have.

20 In light of the time, what I'm going to do is  
21 just throw out the last two questions I was going to ask,  
22 but also give each of you the opportunity to sort of, you  
23 know, wrap-up and throw out any additional information you  
24 think is important for DTSC to have in its sites as we're  
25 taking these next steps.

1           So the two questions that I had sort of the  
2 converse of what we just discussed: Given your  
3 experience, what are the -- what do you see as the biggest  
4 challenges in front us looking at cumulative impact  
5 assessment, especially where it's being undertaken in the  
6 context of permit review, and what would you recommend  
7 DTSC focus on as we move forward into this space?

8           So I'll come right back to you Cynthia, and we  
9 can move down the table. And, you know, please feel free  
10 to just take -- take those questions. But if you have  
11 something that you think is really important that we  
12 consider and that everyone here today, feel free to just  
13 jump to that.

14           ARB TRANSPORTATION & TOXICS DIVISION CHIEF

15 MARVIN: I'm detecting a pattern here.

16           (Laughter.)

17           ARB TRANSPORTATION & TOXICS DIVISION CHIEF

18 MARVIN: So a few thoughts on that. I think in terms of  
19 challenges, as -- certainly as regulatory agencies, we  
20 have to base our decisions on rigorous peer-reviewed  
21 science. It has to be defensible. It has to be thorough.  
22 There's no question about that, but it also has to be  
23 accepted by the community. And I think that finding a way  
24 to get both of those -- satisfy both of those challenges  
25 is one of the biggest hurdles ahead. I personally don't

1 think it's a challenge in terms of community members being  
2 able to understand and improve on the scope of what we as  
3 regulators think is necessary. I think that's essential,  
4 but it is very much a time and a resource issue.

5           So that's a challenge that all agencies will  
6 face. The other thing that I might say is that there is  
7 always a challenge in trying to go from estimated  
8 information or derived information, like our emission  
9 inventories for example, to the extent that they're based  
10 on monitors that are placed on stacks like Jack Broadbent  
11 mentioned, great. That's pretty real data. We love  
12 ambient air quality monitors in communities, and being  
13 able to say here's what we think that people generally --  
14 here are the concentrations that people are generally  
15 breathing. That's real.

16           But trying to link that and attribute that back  
17 to specific sources is the other ongoing challenge, I  
18 would say, so that you -- you know what's in the air, or  
19 water, or other places, but attributing that to the source  
20 because the source is where you're going to take action,  
21 is the second big challenge.

22           DPR DIRECTOR LEAHY: Yeah. Barbara, you have a  
23 hard job. A couple of things. In the world of  
24 pesticides, we have something called Integrated Pest  
25 Management, IPM. What it is is how do you get the job

1 done, control that pest with the least toxic method  
2 possible.

3           In your world, society, especially us in this  
4 country, we haven't had that really hard debate about why  
5 do you put something in the marketplace that's going to  
6 create a disaster downstream? And we need to really start  
7 doing that.

8           You know, so a lot of toxics could be eliminated  
9 if we had a good understanding up front, you know, of the  
10 lifecycle. I think that's really important.

11           Land use. My -- I thought I had a huge challenge  
12 when I was running a department that had a third of all  
13 the private land in the State, as well as Strategic Growth  
14 Council grants and watersheds. And then I came to  
15 pesticides, found out that bad land use is my biggest  
16 nightmare. You know, we have the most productive farmland  
17 in the world, and we stick a school in the middle of it.

18           Until we start to figure out, and accept the  
19 fact, that we need a place to put our toxins as we use  
20 them, you know, when we're done with them, and figure out  
21 how we're going to site those, and create protective areas  
22 to site them, and figure out transportation and all of  
23 that, because I dealt with that in the Williamson Act,  
24 we're going to have a huge battle.

25           You know -- I grew up, my across-the-street

1 neighbor when I was a kid was the 10 Freeway. And that  
2 was when we still had level 3 smog alerts in Ontario, you  
3 know, and all that. You know, this environmental justice  
4 is really real, and people don't want to look out their  
5 window and see trucks full of toxins going by every day,  
6 so -- but we've got to figure that out, you know, and  
7 we've got to -- and it starts with figuring out what kind  
8 of places we're going to put these things. And that's  
9 hard in a state with 38 million plus.

10           So -- well, that's enough. Knowledge is also  
11 good. Science. I'm a firm believe -- science and good  
12 risk management, those two together are really core, and  
13 then process. You know, process -- no matter what you do,  
14 you've got to have good process that your customers  
15 understand and can work with.

16           How that's for a lecture?

17           (Laughter.)

18           DR. FAUST: All right. So, yeah, I guess -- I  
19 guess what I might add here sort of goes back to something  
20 that Dr. Zeise said in her introductory comment about sort  
21 of the limits of risk assessment and understanding  
22 cumulative impacts, sort of as we've -- as we've sort of  
23 laid it out, at least in CalEnviroScreen with respect to  
24 this, you know, multiplicity of things happening.

25           I mean, our office, OEHHA, you know, has a charge

1 to work both on specific chemicals. You know, we do  
2 health risk assessments for individual chemicals trying to  
3 understand what the nature of the concerns are from  
4 exposures at a very specific level. We set guidance  
5 levels. We establish cancer potencies and so forth.

6 You know, and then -- you know, on the other  
7 hand, we know in this real world that we have all these  
8 exposures that exist. And really, we frequently have very  
9 little information about what it means for all of us to be  
10 occurring together.

11 You know, so a tool like CalEnviroScreen helps,  
12 you know, bridge that gap between some of those individual  
13 chemical level knowledge with this idea that these  
14 multiple impacts exist. So, you know, I think, you know,  
15 it may be that a decision, you know, like a permit that  
16 needs to be thinking about this maybe falls somewhere in  
17 between, because it's a very specific facility and a  
18 specific location. And there's information to be known  
19 about the things that are happening there.

20 So, you know, I guess I'm sort of moving towards  
21 this idea that, you know, even -- you know, even though  
22 we're in a big world of additional information and large  
23 data sets, and having a lot of information at our  
24 disposal, sort of moving towards using in a way that's  
25 meaningful and helpful is sort of the biggest challenge, I

1 think, in terms of what you all face.

2 SWRCB ASSISTANT DEPUTY DIRECTOR FARAHNAK: So the  
3 biggest challenges I think are the disparate data systems  
4 that are not connected, and they don't communicate is the  
5 data quality, in terms of having a mechanism to have data  
6 quality assurance verified, and also kind of assessment  
7 tools.

8 I know that we do currently have some assessment  
9 tools. But in terms of how you select those indicators,  
10 how do you balance different environments with respect to  
11 water quality, air quality, but also eventually make the  
12 system not so complex that you can't use it ultimately.  
13 You need to be able to communicate that assessment  
14 decisions, and how you arrive to those.

15 And I -- my recommendation on how DTSC could  
16 focus on addressing those is really kind of a long-term  
17 vision of working with members of public, EJ communities,  
18 amongst the different agencies to create a workgroup -- an  
19 interagency workgroup that will kind of look at what we  
20 have, and how we can create the infrastructure at the  
21 multiple agency level to utilize what we have and create a  
22 better system and assessment tools looking at existing  
23 indicators, whether they need to be refined and  
24 assessments.

25 And while that long-term vision is happening, I

1 also think it's important to know that there are  
2 communities that are currently impacted that we need to  
3 deal with. So I'm glad that, Director Lee, you brought up  
4 the example of the groundwater convening workgroup, where,  
5 you know, Water Board, DTSC, EPA Region 4, and EJ  
6 communities are working together in a targeted area to  
7 look at what the impact water supply wells are, what the  
8 sources are to analyze -- look at the plumes, and help  
9 lead into expedited clean up.

10 So I think looking at around the states and  
11 identifying a few other areas to the extent we have  
12 resources to focus on as a targeted thing, while we  
13 rebuilding this long-term capacity, it would be important  
14 in our opinion.

15 And we're more than happy to help with those  
16 efforts. I'm looking forward. We're continuing working  
17 with DTSC and OEHHA and other agencies that were presented  
18 here to be able to achieve that goal.

19 US EPA REGION 9 EJ COORDINATOR REYES: So a few  
20 things to just wrap-up.

21 Ingrid did a really nice job early of talking  
22 about the tensions inherent in this challenge. And I  
23 would add to that one additional thought, which is  
24 anticipating trends within the hazardous waste sector,  
25 particularly for new facilities, to attempt to locate new

1 projects, perhaps in indian country where EPA is the  
2 permitting authority. So that, I think, is something  
3 that's going to need to be anticipated. And there -- a  
4 lot of coordination should be had around that.

5           And then on a more human element from the  
6 perspective of the actual permit engineer. Now, at EPA, I  
7 work with a lot of permit engineers. I've never had to  
8 write a permit myself, but I have had to enforce them.

9           And this permit world savior complex dynamic, if  
10 you were a permit engineer sitting here today and hearing  
11 everything that you heard about the scope of the issues  
12 that you're going to be expected to address through a  
13 permit -- a very complex permit decision, it can seem  
14 hugely overwhelming.

15           And one of the things I think is going to be  
16 necessary is to really think about implementation of this  
17 program from the agency level, because you don't want the  
18 permit person to feel that way. You want -- you want  
19 there to be a real team approach, not only in coordination  
20 across all the agencies, but within that agency, so that  
21 that issue is getting all of the resources it really needs  
22 and it's not left to just one -- one individual.

23           I don't know if that made any sense. But if  
24 you've been on the receiving end of these concerns, you  
25 might get that.

1           And then the other thing I would just suggest as  
2 an opportunity is SB 1000, and the focus on land use that  
3 we heard so much about today. Well, SB 1000 offers a  
4 great vehicle for planning at the local level that now is  
5 going to require for certain cities, municipalities an  
6 environmental justice element. And these things are going  
7 to supposedly also include things like siting or setbacks  
8 for these types of facilities for hazardous waste  
9 facilities. So that's another, I think, real opportunity  
10 for some coordination on a more macro level within the  
11 State.

12           And there are quite a few really promising  
13 geographic focused examples that we've heard about,  
14 primarily from our air districts here, South Coast and the  
15 Bay Area District.

16           There's another, the Minnesota Air Pollution  
17 Control Agency has a cumulative impacts law that was  
18 actually generated by community members and State  
19 legislators to carve out a specific neighborhood in  
20 Minneapolis that would be the subject of cumulative  
21 permitting conditions under their air program.

22           And then I think another example that's worth  
23 looking at from the -- that's more community driven is the  
24 clean-up green-up approach from the California  
25 Environmental Justice Alliance, and a lot of the work that

1 they've been trying to do in three neighborhoods in Los  
2 Angeles. So I think that would bear some focus.

3 Thank you.

4 BAY AREA AQMD AIR POLLUTION CONTROL OFFICER

5 BROADBENT: So from the local air pollution control agency  
6 perspective, I think the biggest challenge, and I think  
7 this would relate, Director Lee, over to DTSC is the  
8 really biggest challenge I think we have is the fact that  
9 when a source comes to us and they have met all the  
10 requirements, we, as an agency, are required to issue that  
11 permit actually.

12 And I think all of us living in a world where we  
13 want government agencies to follow the law, we basically  
14 want that, right? We don't want discretion being applied.

15 So the alternate side of that whole thing is we  
16 face a situation where we end up having to issue a permit  
17 to a facility, have it increase its emissions potentially  
18 in an already impacted community.

19 And it's something so that I think what we see is  
20 the biggest problem, frankly, in our minds is it's  
21 land-use issues. And we've talked about it, but we at the  
22 Bay Area have been struggling with this issue for some  
23 time, and have felt a really strong sting when it comes to  
24 this issue.

25 I'll just, as a aside note, give you a sense of

1 what I'm talking about. And this is the fact that back in  
2 2010, we amended our CEQA guidelines to essentially  
3 require that as a developer puts, say for example, a new  
4 development next to a freeway, they have to account for  
5 the impacts of the environment on that new development.

6 That all sounds very straightforward that when  
7 you prepare an EIR that you would understand what the  
8 environment by which that -- those people are going to be  
9 exposed.

10 Well, we were sued by BIA. We actually -- it's  
11 because CEQA has only a one-way look, so your supposed to  
12 look on the impacts of the development on the environment,  
13 not the environment on the development. And, indeed, the  
14 Supreme Court -- California Supreme Court agreed with the  
15 BIA and we ended up losing. We just settled that case  
16 actually last week.

17 So it's one in which land use is considered to be  
18 a sacred -- sacred something in this -- in this state, but  
19 it needs to be cracked, because I think along with --  
20 along with our best science, along with our best  
21 information we can, I think we're going to need to make  
22 sure that local communities take into account local  
23 exposures. If you look at the paper over the weekend, it  
24 was -- they announced the fact that 1.2 million people  
25 already live in high pollution areas or within 500 feet of

1 roads down in L.A. just to give you an idea.

2           That's a similar statistic you can have in the  
3 Bay Area, not so much 1.2 million, probably half a million  
4 people. So it's a problem, and it's just going to get  
5 worse as the State continues to grow. And as we try to  
6 get people into affordable houses, this is a problem that  
7 is going to need to be addressed. And I think DTSC is on  
8 the forefront of going down this path.

9           And so Director Lee we stand ready to help you.

10           (Laughter.)

11           BAY AREA AQMD AIR POLLUTION CONTROL OFFICER

12 BROADBENT: And good luck. And thanks for inviting me.

13           (Laughter.)

14           CalRECYCLE DEPUTY DIRECTOR LEVENSON: Thanks,  
15 Jack. It's hard to add on to what everybody has already  
16 said. And, you know, I concur with everything my  
17 colleagues have said. Sound like we're trying to get the  
18 unified theory of physics that's been working on for 100  
19 years --

20

21           (Laughter.)

22           CalRECYCLE DEPUTY DIRECTOR LEVENSON: -- and  
23 we've made a lot of progress in the last 20, so we've got  
24 to keep working on it.

25           I guess I would put myself -- try to add

1 something different -- put myself in the perspective of  
2 the community member or the regulated entity who's kind of  
3 getting all this information. I've been told at a number  
4 of different workshops, this one, I was at one a couple  
5 weeks ago in Fresno from CalEPA. I was at another one  
6 before that from CalRecycle. We all are presenting this  
7 enormous amount of information and posing various issues  
8 that are very difficult to everyone, the community  
9 members, and, you know, the regulated entities, how do  
10 they handle all that?

11 I think we need to have a much better process for  
12 making sure that folks are aware of all the different  
13 activities that are going on, and somehow how they are  
14 linked together and where there are cross-overs, and  
15 that's -- unifying that is very difficult.

16 But I would think it's pretty overwhelming right  
17 now to be on the outside and getting all this information  
18 from all of us on the regulatory side. So if we can maybe  
19 work on that angle a little bit, that might help.

20 One other thing I wanted add Barbara. I wanted  
21 piggyback on what Brian said about his history in organic  
22 farming and the amount of science that goes into, you  
23 know, labeling and registering a pesticide.

24 I think we need a lot more focus up front on  
25 product design, process design, things that DTSC is doing

1 already and others are doing. I don't think that gets  
2 enough attention.

3 DTSC DIRECTOR LEE: Well, thank you for that,  
4 Howard. I know that, you know, our Safer Consumer  
5 Products folks are really trying to change the paradigm  
6 with regard to identifying chemicals of concern, and the  
7 products that they are used to manufacture and then  
8 requiring the manufacturers to evaluate the entire  
9 lifecycle of that product to see if there is a way that it  
10 can be made safer.

11 And, you know, it's -- we're at the beginning of  
12 that journey, but -- and that's -- that's a hopeful  
13 forward look to, you know, a stepping stone towards the  
14 future that Ingrid and Martha were talking about where we  
15 are able to avoid some of the impacts before they're even  
16 created. And I certainly have taken that to heart as an  
17 important tenet.

18 Just from the time that I worked in air quality,  
19 it's always easier to prevent something from happening  
20 than it is to fix it after it's happened. And - I do very  
21 much agree with that.

22 I've heard some important areas where I think  
23 we -- we have work that we can do together  
24 collaboratively. I heard discussion about opportunities  
25 to better use the vast amounts of data we as individual

1 government agencies all possess, and to try to look at  
2 some new -- look at those data through new eyes or with  
3 new tools, and perhaps even to collaborate on the  
4 development of those new tools.

5           And certainly there are challenges in marrying up  
6 disparate data sets, but I think that it is -- it's an  
7 important effort to try. I think we're going to probably  
8 focusing our next symposium on tools and data, and  
9 advances that have occurred and opportunities that are in  
10 front of us, particularly, in light of the rapidly  
11 expanding field of personal scale data, not just  
12 environmental sensor data, which I think all of us at the  
13 table are aware of, but also fitness tracking and health  
14 monitoring.

15           And there are whole fields of commerce now that  
16 are generating vast quantities of data that if we can  
17 figure out a way to harness that information, could  
18 potentially provide us a lot of useful decision-making  
19 tools.

20           So we will be looking at -- our next symposium in  
21 Southern California at the South Coast Air Quality  
22 Management District in their auditorium probably in the  
23 June time frame, and they actually have an institute,  
24 their AQ-SPEC Institute, that actually evaluates some of  
25 these sensor tools that are available. And I look forward

1 to continuing our conversation there.

2 I also have heard reference to land use --  
3 land-use decision making, compatible and incompatible land  
4 uses as presenting both challenges and opportunities. And  
5 I also heard Jack Broadbent offer that the Bay Area would  
6 be happy to partner with us on a future symposium or  
7 meeting.

8 And since you have so much very valuable  
9 expertise now in trying to find ways to address that land  
10 use question, perhaps that's something that we can  
11 collaborate on for later in the summer.

12 And then I would say the third thing that I heard  
13 is really expanding ways to engage communities in the  
14 decision making and provide them early information not  
15 just about what we're looking at, and what we think is  
16 important, but a whole host of things that are perhaps  
17 related or occurring contemporarily in their communities,  
18 and -- so that communities have more tools to engage with  
19 us on the things that are important to them and advance  
20 issues that they need resolved.

21 And that's something that Ana Mascareñas is  
22 working on for us in her capacity as heading up our  
23 Environmental Justice and Tribal Affairs Program. But I  
24 think that there is potentially a nexus also for us to  
25 better collaborate on the sharing of information.

1           And perhaps one of the things DTSC can explore is  
2 how we can do that as we approach permit decision time we  
3 have a small universe of facilities, so it -- and  
4 they -- those permits are renewed, as Evelia said, over a  
5 10-year time period. And so we have opportunities in that  
6 time frame perhaps to collect and make available broader  
7 amounts of information about the communities and the  
8 exposures around those facilities to help them understand  
9 what they're presented with in terms of cumulative impacts  
10 and engage with us in our decision-making process. So  
11 these are some of the things I've taken way, and I think  
12 it's really helpful.

13           What I'd like to do now is open it up for  
14 questions for a little bit. And we'll start here in the  
15 audience and then we'll collect questions from our on-line  
16 participants and see where we get to.

17           Ingrid, we're going to bring you a microphone so  
18 it can be captured by our court reporter.

19           MS. BROSTROM: Ingrid Brostrom With CRPE.

20           I think it's really great to have such a host of  
21 BDOs represented today. And one of the structural issues  
22 I've grappled with, when looking at a lot of these  
23 environmental justice issues, is the proper role of  
24 CalEPA. I think initially when the structure was  
25 developed, the idea was having everyone in the same

1 building by having this umbrella group, we would build in  
2 this natural cooperation and collaboration. I don't think  
3 that's been borne out in history.

4           So are there roles for CalEPA, especially around  
5 cumulative impacts and environmental justice, that your  
6 agencies see would be an important step to move forward?

7           And then I have two other comments, but I'll wait  
8 until later.

9           ARB TRANSPORTATION & TOXICS DIVISION CHIEF

10 MARVIN: I'm curious to see how many people are leaping  
11 for the microphone here.

12           (Laughter.)

13           ARB TRANSPORTATION & TOXICS DIVISION CHIEF

14 MARVIN: So what I wanted to do actually was just mention  
15 an effort that CalEPA leads that I think works, and I  
16 think it does fulfill those objectives, and that is the  
17 multi-media enforcement effort, the strike teams, that  
18 look at multiple communities, impacted communities around  
19 the State, bring in inspectors from all of the different  
20 media and all the different boards and departments so that  
21 we can try to address all the concerns.

22           I know that there's that work going on in  
23 couple -- at least a couple handfuls of communities around  
24 California now. I would like to see that expand. I think  
25 that's something that is productive, both for the agencies

1 and is certainly productive in terms of understanding for  
2 a particular community what are they concerned about, and  
3 then who can solve the problem.

4           And the interesting thing is that, at least at  
5 the Air Resources Board, we found a lot of times the  
6 answer is no one at this table can solve the problem.  
7 It's city code enforcement officers or it's other folks.  
8 But the important thing is to identify the problems,  
9 figure out who can solve them, and then take action to  
10 make that happen. So I think that's maybe an effort we  
11 could build on.

12           DPR DIRECTOR LEAHY: My wife happens to be a an  
13 attorney in the Water Board. Sometimes we ride in tandem  
14 into work. And that's really the only time you're going  
15 to get two State Departments going in the same direction  
16 at the same time.

17           (Laughter.)

18           DPR DIRECTOR LEAHY: That being said, we do -- I  
19 think there's a lot of collaboration in this State  
20 building. You know, we work with the Water Board when we  
21 have an issue, and they have an overlapping issue.  
22 Pesticides are an issue for everyone, so we have water  
23 quality issues. And we're really learning to work  
24 together with that. We have air quality issues, we work  
25 closely with the Air Board on things.

1           And so they tend to be issue specific. You have  
2 to remember we each have a different statute. We have a  
3 different world view, different culture, different science  
4 base. So we are really individuals. You know, it's like  
5 a family. We all love each other, but it's intense  
6 sometimes.

7           But we do -- I think there's been a real  
8 collaborative, you know, in this administration, and --  
9 but you have to remember, we really are different  
10 organizations. You know our -- what our -- what our  
11 statute tells us to do, you know, drives my friend here  
12 nuts, you know, and vice versa, because we just -- we see  
13 the world differently. And by law, we're supposed to see  
14 it differently but we do -- I think we really do do a good  
15 job of working together.

16           And that's -- you know, we all bring different  
17 things to the table, so...

18           DTSC DIRECTOR LEE: I would -- I would actually  
19 echo both of the comments. I do think that there are --  
20 there are focused areas where we collaborate. You know,  
21 the SPGIT tool, I mentioned, is one where we're working  
22 very closely with the Water Board with -- and with U.S.  
23 EPA, as well as NGOs to use the data we have, and use the  
24 tool creatively to try to make things happen faster.

25           As Cynthia mentioned, the coordinated

1 environmental justice enforcement program that CalEPA  
2 heads up, that's also a good example of all of us working  
3 together under that umbrella. CalEPA was an important  
4 driver in the development of the CalEnviroScreen tool with  
5 OEHHA. They really took a leadership role there, and  
6 we're talking with them now, as well as with our sister  
7 agencies about what opportunities there are either to  
8 enhance the CalEnviroScreen tool or to develop a companion  
9 tool looking at additional pieces of information that will  
10 help inform cumulative impacts decision making.

11           So we're going to helpfully be moving out with  
12 some sort of a contract to do some research and support  
13 that work in the near future. And that's a convening  
14 function that CalEPA plays.

15           So while the creation of CalEPA has not resulted  
16 in a complete alignment or pulling all of the boards,  
17 departments, and offices into a single path, I think  
18 Brian's point is well taken that that it -- we do have  
19 very, very different statutes, and none of those statutes  
20 was changed when CalEPA was created, so we have -- we have  
21 specific missions, specific authorities, specific  
22 processes that are dictated in law. And our job as  
23 administrators of these programs and the Secretary's job  
24 as the head of this Agency, is to help us respect what we  
25 are required to do, and try to leverage each other's

1 strengths, so that we can do the work that we do better.

2           And I would expand that outside of CalEPA. You  
3 know, DTSC works with the CUPAs. ARB works with the air  
4 districts. I am very interested in trying to build more  
5 collaboration with local governments, with the air  
6 districts, with local land use planning authorities, so  
7 that we can -- we can achieve a better outcome for the  
8 people that we serve.

9           If there are others who want to jump in on this,  
10 please do?

11           SWRCB ASSISTANT DEPUTY DIRECTOR FARAHNAK: Yeah,  
12 I was just going to kind of add a specific example. As  
13 was mentioned before, you know CalEPA's leadership in  
14 terms of how they get involved in making sure we talk and  
15 coordinate and play well. Some of them are not  
16 necessarily transparent outside the organization, in terms  
17 of, you know, the workgroups, and teams, and efforts we do  
18 that I think you heard some examples.

19           But also as opportunities has allowed, they  
20 actually have implemented programmatic changes. One of  
21 them is the CUPA program, this Certified Unified Program  
22 Agencies. Prior to CalEPA, each agency issued permits,  
23 and we had the same facility being permitted and inspected  
24 by multiple local agencies and State agencies. So through  
25 extensive effort, that has been consolidated, and the

1 program has consolidated. The data system has been  
2 consolidated.

3           So CUPA program is one of the examples that was  
4 opportunity for CalEPA to look at how the permit program  
5 could be consolidated. And there's some examples, like  
6 the Healthy Soils Initiative that different agencies, as  
7 well as the Department of Food and Ag are involved. With  
8 respect to oil and gas monitoring, there's coordinations,  
9 but we haven't had specific legislation of programmatic  
10 changes. It's more internal.

11           And in terms of data, I think the discussion has  
12 started, but it seems like we may be looking at expanding  
13 to the symposium, which I think is a great idea.

14           DTSC DIRECTOR LEE: Do we have other questions  
15 here in the audience?

16           MS. BROSTROM: Ingrid Brostrom.

17           So one thing I heard a lot of you talk about was  
18 the importance of science and data, but I also heard  
19 something that we're familiar with, which is the  
20 difficulty -- especially in the toxic world of having  
21 enough information to establish causation or find a  
22 source. And something that was really important in the --  
23 you know, the late 1990s, and it has always been very  
24 important in the environmental justice world is the use of  
25 the precautionary principle. And I did not hear anybody

1 talk about that.

2           So I was wondering what is the role of the  
3 precautionary principle now, and especially as it relates  
4 to cumulative impacts, and the difficult with an imperfect  
5 data set, and absence of scientific certainty, especially  
6 in the toxics field?

7           DTSC DIRECTOR LEE: So I will start by saying  
8 even though I didn't call it out specifically, and Cynthia  
9 didn't call it out specifically, you did hear us, and I  
10 think others as well, talking about the importance of  
11 preventing the problems before they arise, and I'm a big  
12 believer in that.

13           The challenge we have, and the opportunity we  
14 have, is figuring out how to more explicitly embed that  
15 premise in the decision making that we are required to  
16 undertake with the statutes that we have.

17           So at DTSC certainly our Safer Consumer Products  
18 Program is an example of the precautionary principle being  
19 more fully embodied in a regulatory structure. And it's  
20 still in its youth. It hasn't -- it hasn't, you know,  
21 grown up into a full and well seasoned program yet, but we  
22 are definitely moving it forward.

23           We are moving into this question of cumulative  
24 impacts, and community vulnerability, and how can  
25 information about that better inform our processes for

1 permitting decision making, and specifically with the idea  
2 of identifying the outcomes that we are trying to achieve.  
3 And I think that's the suite spot, where a greater  
4 emphasis on precaution is appropriate.

5           That said, we do, as Jack pointed out, have  
6 certain obligations under the law to take actions when  
7 certain conditions are met with regard to issuing permits.

8           And so what we're doing now is trying to  
9 understand where there is room to move forward, just as  
10 you were pointing out earlier, on land use, it isn't  
11 exclusively a local land use decision. Although, our  
12 constitution would say that land-use decision making is  
13 exclusively a local issue, because there are some  
14 competing statutes that you pointed to regarding civil  
15 rights, and that others have pointed out to us. And we  
16 are in the position now of having to understand how to  
17 balance those competing directives that we have.

18           And again, it's the challenge, but it's also  
19 where the opportunity lies. And I think we can better  
20 clarify what those opportunities are, we can make  
21 progress. I am not expecting that in the next year or so,  
22 we're going to have the unified field theory answer to  
23 this question, but I do think that we will be able to find  
24 ways to get closer, and to make better decisions that are  
25 more protective of communities and better acknowledge the

1 realities that they face, so that we can achieve better  
2 outcomes for them.

3           And if anybody else wants to jump on the  
4 precautionary principle question, you are welcome.

5           DPR DIRECTOR LEAHY: You know, in the world of  
6 risk assessment, if you -- you have what you feel fairly  
7 confident. It's kind of the sort of known. I'm learning  
8 sort of not, but then there's always questions. So when a  
9 question is raised when there's uncertainty, then you take  
10 that data set that you know, and then you add additional  
11 risk factors. So maybe you think you could be exposed to  
12 one part per billion, but you have some tests or some  
13 studies that are a little inconclusive or they're done on  
14 a different species than humans, and then you add those  
15 additional factors in there.

16           So it's sort of a acknowledgement that we  
17 don't -- you know, our science takes us so far, and then  
18 we have to build in this -- these other factors. And you  
19 have to also remember that we're in a -- we're in a  
20 balancing game. You know, if we're putting something in  
21 to control Zika or, you know, Ebola or something like  
22 that, I mean, there's supposed to be a benefit to the use  
23 of that compound.

24           And so not -- not that we -- I mean so, you know,  
25 you sort of know going into it, what you're -- what you're

1 introducing into the environment. And you're trying to  
2 manage that to, you know, acceptable levels with the  
3 benefit that you're hoping to gain, which is food supply  
4 or risk -- you know, or public health resource management,  
5 things like that, water purification.

6 So that's kind of how we deal with it.

7 DTSC DIRECTOR LEE: All right. Are there other  
8 questions from the audience? Do we have any -- we have  
9 one more here, and then I don't know, do we have any  
10 on-line?

11 Have we gotten any?

12 No, Okay.

13 MR. SHIRAI: Have the -- you know, besides  
14 pesticides, have they looked at like biological methods of  
15 containing pests that -- you know, on crops? You know,  
16 as -- you know, they've been thinking about doing that for  
17 all mosquitos, you know, to stir all the mosquitos, so  
18 that these, what they call those -- but it doesn't seem  
19 like the State of California is looking much into that.

20 DPR DIRECTOR LEAHY: There's -- pest management  
21 and the world of agriculture is very broad. There's a lot  
22 of biologicals -- what we call, biologicals, so that  
23 people are putting out beneficial insects to control the  
24 ones that -- you know, that control the ones that threaten  
25 their crop. The new science is pretty amazing.

1 They're -- just a couple days ago, I listened to some  
2 folks that technology that a plant -- sort of inherent in  
3 every plant is this ability to push away nematodes that  
4 are -- do damage to the root system.

5           And they're figuring out how to sort of stimulate  
6 that, so that it's active before the nematode comes in.  
7 You know, so the world is changing. It's really  
8 different, but IPM practices, as we call it, the  
9 biological, that has become pretty mainstream in  
10 California agriculture.

11           We were here a few weeks ago. The cotton folks  
12 had figured out how to release millions and millions of  
13 bugs that come in and eat the -- you know, the Lygus bug.  
14 So I would say that's become pretty mainstream.

15           DTSC DIRECTOR LEE: Shankar, it looks like you  
16 have a question.

17           DR. PRASAD: It's not a question. It's more a  
18 comment. Looking back history-wise, we -- I mean, you may  
19 recall. You were part of the team who wrote the  
20 cumulative impacts definition. And cumulative impacts  
21 definition essentially moved intentionally away from the  
22 concept of risk, because we could not characterize the  
23 risk of the health impact. It is multi-factorial.  
24 Proportionality is difficult to establish, and whereas, an  
25 emission or an exposure is a reasonable way to move.

1           So it is good to see after 15 years that this  
2 cumulative impact is now really entering into the area of  
3 permitting. That is where we want it to go then.

4           Having said that, how do we move? I'm glad to  
5 hear that you mentioned that you have a relatively small  
6 world of 120 pockets of facilities. So in one way or the  
7 other, the tool that you want to -- you have in mind could  
8 move in that direction taking from EJSM, CalEnviroScreen,  
9 and other data sets. So we are at the right stage to move  
10 in that correction, and your leadership will be very  
11 helpful.

12           DTSC DIRECTOR LEE: Thank you, Shankar.

13           Are there any other last questions or thoughts.  
14 Ingrid, you said you had a couple of other comments. Is  
15 there anything you want to add in?

16           MS. BROSTROM: Yeah. My last comment was about  
17 this benefit versus cost that a couple of people spoke  
18 about. And couple of the agencies I think this would be  
19 more applicable to the CalRecycle, DPR, DOGGR, who's not  
20 here DTSC, where there are these larger societal benefits,  
21 but there's burdens placed on a few number of people and  
22 are very hybrid.

23           And so my comment is for the agencies that are in  
24 charge of regulating these various industries, I think  
25 it's very important to try to take out this idea of

1 needing to promote a certain interest. And I talk about  
2 it in my presentation about the comments about compliance  
3 being easy and economic, because we need these hazardous  
4 waste facilities. And I've always thought it was  
5 inappropriate for DTSC to be in that role of making those  
6 decisions, or even considering that, as its predominant  
7 role is to protect public health.

8           So I just wanted to note that I think -- I think  
9 there's conflicts inherent in lot of these agencies up  
10 here. And so what -- you know, really to be intentional  
11 about what the agency role is versus, you know, what  
12 either the State has a larger role to play or the industry  
13 or consumer groups or whatever, but trying to really  
14 divorce promoting that public good.

15           So that was my comment.

16           DTSC DIRECTOR LEE: Well, thank you for that. I  
17 will say on the subject of compliance, while I don't think  
18 it would be the role of a regulatory agency to make  
19 compliance quote easy and economic in the sense of  
20 lowering hurdles, so there is less to comply with, I do  
21 think that it is incumbent on us to make it very clear  
22 what we mean by compliance, so that there isn't ambiguity  
23 about what's involved in coming into compliance.

24           And to that end, it does make it easier for a  
25 facility to comply, if they know what it is that they have

1 to do. And certainly it has been said that in the past  
2 perhaps DTSC didn't do a very good job in making it clear  
3 what was expected in terms of compliance.

4 And in terms of the economics of it, I think it  
5 is also incumbent on us to make sure that we don't  
6 inadvertently incentivize noncompliance. And there are a  
7 lot of tools that agencies have to make sure we aren't  
8 doing that. And that's something that DTSC is also  
9 looking at.

10 So I would not disagree with your comment about  
11 what our role ought to be, but I would offer that there  
12 are other ways to think about what it means to make  
13 compliance easy, in that it certainly shouldn't be hard to  
14 figure out what it is you have to do in order to comply,  
15 and it shouldn't be clearly more beneficial not to comply.

16 So we've had a really interesting day together.  
17 I've enjoyed very much hearing the thoughts of all of the  
18 speakers and of the folks who generously gave their time  
19 to this panel as well. It's given us some good  
20 information to think about in terms of, you know, planning  
21 our next symposium, but also in how to layout the path, so  
22 that we make real progress on addressing -- identifying  
23 and addressing cumulative impacts and community  
24 vulnerability as part of our permitting process.

25 I want to -- so I want to thank everybody who

1 presented, and just thank you very much.

2 (Applause.)

3 DTSC DIRECTOR LEE: I also want to thank DTSC  
4 staff who were instrumental in setting this up from our  
5 Hazardous Waste Management Program, Corey Yep, Evelia  
6 Rodriguez, and Linda Oxley. In our EJ and Tribal Affairs  
7 program, Allie Hostler, and Abraham Zhan. And then in our  
8 Communications office, we have Adam Calvillo-Cain who is  
9 filming this whole thing, and has been moving his camera  
10 around to make sure he catches everyone in the best  
11 possible light.

12 So thank you to everyone for your participation,  
13 and I look forward to continuing to move forward on this.

14 (Thereupon the California Department of Toxic  
15 Substances Control Symposium adjourned at  
16 3:16 p.m.)

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C E R T I F I C A T E O F R E P O R T E R

I, JAMES F. PETERS, a Certified Shorthand Reporter of the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing California Department of Toxic Substances Control Symposium was reported in shorthand by me, James F. Peters, a Certified Shorthand Reporter of the State of California.

That the said proceedings was taken before me, in shorthand writing, and was thereafter transcribed, under my direction, by computer-assisted transcription.

I further certify that I am not of counsel or attorney for any of the parties to said symposium nor in any way interested in the outcome of said symposium.

IN WITNESS WHEREOF, I have hereunto set my hand this 3rd day of April, 2017.



JAMES F. PETERS, CSR  
Certified Shorthand Reporter  
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