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What I would kinda like to do is sort of start over on the health issue. My name is Dr. Cyrus Rangan. I'm with the LA County Public Health, with the Environmental Health Division. And I was actually involved with Sunshine Canyon Landfill activities in the community a number of years ago perhaps in 2003 - 2004, and at the time we did a community health assessment, and looked at a lot of health outcomes.

By health outcomes I mean that we looked at a lot of data that was available to us, mainly things like morbidity, mortality, low birth weights, premature births, records of cancer, and some other non-cancer diseases. And we did some surveys as well. And at the time you know, doing that kind of work, it can be very complicated, and you can get a lot of very interesting information. But looking at health outcomes, is a little bit different from looking at average health effects. And that's what I want to kind of clarify because I think that point has been brought out many, many times today. So I want to make sure I get everybody a good clarification about what we mean when the Public Health Department is talking about these kinds of things.

I think... I am very glad you invited me here today, because I think that our role that we can play in this situation would be a lot different than what it was before. When you look at health outcomes, by that I mean once health effects have occurred and people already have disease, and now you're are looking at consequences of that, it's a little bit different. Let me just give you an analogy. If we're the Health Department and we are doing an inspection of a restaurant, and let's suppose we find rats and cockroaches at the restaurant. We don't wait for people to get the plague, and the Hantavirus, and all those disease from the rats and the cockroaches (laughter), before we say to the restaurant you've got to something about this. OK, so we say immediately something needs to be done, because we want to prevent those things from happening. Health Departments are about disease prevention. We hate responding to disease. We like to prevent disease. So sometimes there are diseases occur that we have to respond but that's OK to, but prevention is what we are about here.

And so, when I hear about a situation like this, when we are talking and emphasizing this notion about odor complaints, that's where for me it's a big focus, and it really does actually cause adverse health effects, not necessarily outcomes, but have adverse health effects. So when I... (Pause) to be more specific. We've already talked..., you've already brought this up. When you are talking about something like odors; no I'm not saying you can't get cancer from smelling an odor. But what I can say is that, yeh, can it cause: eye irritation, nose irritation, mouth irritation, throat irritation (Yes from audience), nausea, light headiness, a feeling of ick? All those kinds of things. Yeh, of course you can. And do I as a physician consider those to be real health effects? Real physiological effects? Yes, because they are real.

So... I've seen that kind of statement before in lots of letters from lots of different kinds of industries and agencies, about you know, "our facility or this facility or that facility does not pose a threat to public health." You know those kinds of wordings... threat to public health. I've seen that kind of wording a lot. But, when it comes to something like live odors, and the kinds of complaints that you have voiced today. Well those are public health as far as I am concerned. They're not the kinds of things again where everybody's is going to get cancer or a neurologic disease or anything like that, but they are

persistent complaints that happen on a day-to-day basis. They may not be "continuous", meaning they might not be happening every moment or every second of every day, but they are "continual", meaning they are happening at regular intervals. Whether we use words like "occasionally", or "frequent", those are subjective words. I toss them out the window whenever I see them. I think it is more important to say whether or not we are responding to "x" number of complaints that happen in a month, because that is objective data, and how do we do our best to utilize that. That's really my goal. I think it's very, very simple. And, so I won't concentrate on a situation like this, by saying what are the actual chemical constituents or what are the actual compounds? Do I need to find specific evidence of disease? No, I don't. Because I already know, and Wayde you sort of already pointed this out. You know you've got your litany of complaints, and if AQMD is able to say that you know; either all of these, or maybe a lion's share, or a maybe a certain percentage of whatever these complaints are attributable to the landfill, well I'm eager to see all of the reports that they are planning to put out in the near future. Well for me that's enough evidence. I don't need to see specific health outcomes. I don't need to know necessarily how many people have been hospitalized. I would certainly like to find out that information for my own sake but I don't need to know that information, to know everything humanly possible should be done to minimize the odors. And why? Because, not just all those complaints that I listed before, eye irritation, nose irritation; all that can definitely occur. But if it's interfering with your quality of life, if it's interfering with your well-being, and ma'am you brought this up. Those are real issues too, and those to me are also public health issues.

And when you look at the way that conventional risk assessment is done. I shouldn't put it that.. of course it's real. Risk assessment is a real term, and it's a real thing that we do. And it's the gold standard by which we do, new developments around the country, with new industries, and placement of those industries et cetera. But risk assessment is primarily designed to look at a narrow scope of things. And by that I mean it looks at what are the risks of cancer from this facility if we design it or build it here, and point things in this direction and whatnot.., and certain other non-cancer diseases. But risk assessments primarily don't look at things like, what is the impact on quality of life? What is the impact of well-being, and those kinds of issues that we consider to be very important? ..And I can get this information to you a little bit later but....

The World Health Organization, and the CDC have been coming out recently with statements saying that things like odors and other things of that scale that affect people's daily quality of life or daily living are considered Public Health issues. So it's not just me talking, it's real big organizations that are saying the same thing. So we are agreeing with that we are in congruence with that. And I think of a long time ago, years ago our Health Department, we really weren't on that page. And I think we had a kind of paradigm shift and we are a little bit more on that page right now, talking about how.. yet you don't have to see bad health disease outcomes in order to say there is a health problem. To me this is a health problem if you have existing odors are attributable to a specific source. And again, you know I can't say that by tomorrow, you know there is a whole bunch of information for me to go through here, and I am going to going through it with some of my own staff, and as I said we are eager to see what the AQMD puts together as well in the coming reports, that they are putting together. But I can tell you we have worked with the AQMD many, many times in the past on many different kinds of projects. They have formidable experts there, very, very qualified people who know what they are doing. But at the same time they are very (unintelligible) to us, saying, hey if something about public health is not being addressed by the activity that you are doing, we can help influence those things. And if things are not

moving fast enough; if they are not adopting new rules or technologies fast enough to protect public health, they are willing to listen to us. So that is where I want to stick my foot in the door, and make sure that we are looking at these as public health issues first, and technological and economic issues and all that second.

So that's what I want to give in terms of my promise to you guys ... that yes, we get involved in all this stuff, in trying to formulate our own impressions, and like to get back to your future meetings, and give you our findings on what we think is going on here. And if we think other folks need to be involved, we'll try to get those folks involved. If more technical consultants need to be involved to try and figure out new and creative ways to limit these odors. Great! The bottom line is, that we would like see a situation like this that for operators and regulators and say "we have done 100 percent of everything we could possibly do, to minimize odors down to as far as we can get them". I don't see us all getting to zero odors. I don't think anybody here believes that we will get zero odors, but they should be minimized as much as we humanly possible can. And so that's my goal to make sure that that happens.

In response to Mr. Hunter's request and that of the SCL-CAC Committee that a Public Health official be in attendance, Dr. Ragan agreed to attend in the future and to be added to the email distribution. (Applause).

W. Hunter

3/30/15