

FINAL MEETING SUMMARY

Community Environmental Working Group

“Striving for Continuous Environmental Improvements at Intel”

Date: Sept 16, 2015
Time: 5:00–7:00 p.m.
Location: Corrales Senior Center

Members Attending

John Bartlit, NM Citizens for Clean Air &
Water
Hugh Church, American Lung Assc. in NM

Sarah Chavez, Intel
Dennis O’Mara, Corrales resident

Non-Members Attending

Lynne Kinis, Corrales resident
Ron Eppes, Intel

Facilitator

Mark Bennett, Facilitator

Sidni Lamb, Recorder

HANDOUTS

- CEWG Draft Agenda Sept. 16, 2015
- Draft Meeting Summary, August 19, 2015
- Action-Item Progress Report, September 2015
- EHS Activity Report September 2015

PROPOSED AGENDA

- | | |
|--|--|
| ▪ Welcome, Introductions,
Announcements and Brief Items | ▪ Next Steps for CEWG
Relevant to Items in ATSDR Report |
| ▪ EHS Report and EPA 114 Update | ▪ Update on Hiring of New Facilitator |
| ▪ Review Action Item Progress Report | ▪ New Business |
| | ▪ Adjourn |

WELCOME, INTRODUCTIONS, ANNOUNCEMENTS, AND BRIEF ITEMS

John Bartlit opened the meeting by stating the CEWG mission, which is to work towards continuous environmental improvements at Intel and improved community dialogue. Introductions were made.

Agenda—Revisions and Approval

No comments.

Filename: CEWG_Final Meeting_Summary_Sept 16 v2.doc. Approved: October meeting Prepared or presented by: Sidni Lamb & Mark Bennett Prepared for: CEWG Date prepared or presented: September 24, 2015

Meeting Summaries—Revisions and Approval

Hugh Church requested a correction to page 8 – second bullet. Item should read “National Jewish Health in Denver” instead of “National Jewish Hospital.”

ATSDR Update (Conversation with Peter Kowalski)

John Bartlit reported that it seemed ATSDR indicated in the report and at the public meeting that there was not enough data to draw certain conclusions. Mr. Bartlit extended an invitation to Mr. Kowalski or someone else from ATSDR to join the CEWG meeting. Meanwhile, in order to get initial feedback about the specific characteristics and type of data missing, Mr. Bartlit emailed him the following questions:

1. Are the data that are most lacking ambient air data, stack emissions data or some of each?
2. Would more continuous data gathered over longer time periods help?
3. Are significant difficulties caused by low concentrations of the chemicals in the air coupled with the detection limits of current instruments? Could the use of tracers help reduce this problem?
4. Do difficulties also exist with the quality of data on local health effects? If so, what is most lacking in the quality of these data?
5. Do other aspects restrict the value and use of available data for acid aerosols and VOCs in making more complete health assessments?

Bartlit said he could forward the questions.

Mr. Bartlit said that Mr. Kowalski replied he was not available to participate in this evening’s meeting and asked if he could forward the questions to the EPA semi-conductor Lead in Research Triangle Park.

- John Bartlit proposed that data gathering in the future be a public process similar to what CEWG did with the silica testing since those results seemed to be better than some of the other data. There was a task force, public input about concerns, peer reviews, a record of what was done, why it was done and a plan beforehand about how the data would be used.

Hugh Church asked if Mr. Kowalski had any comments on the modeling. Mr. Bartlit replied that Mr. Kowalski was aware of the modeling that Mr. Williams carried out but had no specific comments to it. Mr. Church said that using just the wind data at 10 meters above ground is likely inadequate because of the complex terrain situation near ground level flow over the east edge where people are. Mr. Williams has stated before that further refinements to the existing modeling effort would only be lost in the “noise” of calculation details.

Mr. Church stated that it was important to take into account the modeling noise, low level flow details and population dispersion over the eastern edge of the terrain.

- Mr. Bartlit agreed that those are the kinds of considerations needed.
- Dennis O'Mara said he had been under the mistaken impression that Peter Kowalski was an epidemiologist, and he learned at the meeting that instead he is an industrial hygienist. Mr. O'Mara expressed disappointment because the lack of the epidemiologist perspective meant that there was only one half of the skill set needed to respond to questions from the community.
- Lynne Kinis said she had commented in the past that the only source of information used in different studies came from Intel, so she considered the information flawed. In order for any studies to satisfy her, they would need to be carried out by an outside company. She asked if a study on aerosol exposure mentioned in the response given by Mr. Kowalski was as important as a study for ALS. Mr. Bartlit responded that they were very different studies. Ms. Kinis continued on to mention that Jan Northrup self disclosed at the public meeting that she, in addition to a few of her neighbors, have ALS and that her mother died of ALS. Lynne Kinis said that the National Institute for Health considers the prevalence of ALS to be 3.9 per 100,000 people, and that there was a cluster of 3 – 4 people in a neighborhood in Corrales. She wanted to know why Mr. Kowalski did not jump on that right away and asked why he turned down looking into the reported cases of ALS at the Intel facilities in Portland.
- John Bartlit reported that Mr. Kowalski said he was discussing the community's concerns about ALS and idiopathic pulmonary fibrosis (IPF) with another agency at ATSDR and the New Mexico Department of Health epidemiologist. In past years, ATSDR usually brought an epidemiologist to the meeting. Mr. Bartlit said he had pushed for a discussion of the epidemiology aspect, but it had not been well received at CEWG or at ATSDR because it was thought to be too confusing. Ms. Kinis asked if it was Mr. Kowalski who thought it would be too confusing. Mr. Bartlit answered that it was Dennis O'Mara. Mr. O'Mara clarified that his concern was that the discussion would get bogged down in methodology rather than a focus on the results and how they specifically related to IPF and ALS. He realized after the meeting that, unfortunately, because there was not an epidemiologist present, everyone left without answers to their questions.
- Lynne Kinis agreed with the questions emailed to Mr. Kowalski, but she would like to see them expanded and then answers demanded from him. Mr. Bartlit said that he sent the questions as a personal initiative to get a running start for what might still be needed for data collection. He agreed that they deserved answers but observed that they have gotten responses in the past without demanding and have had successes like the silica testing. He would like to wait to see if there was any response from the EPA lead for semi-conductor plants.

Regulatory Engineering Update

<p>Filename: CEWG_Final Meeting_Summary_Sept 16 v2.doc. Approved: [not approved] Prepared or presented by: Sidni Lamb & Mark Bennett Prepared for: CEWG Date prepared or presented: September 24, 2015</p>

Mr. Bartlit reported that he will bring his recently printed booklet on regulatory engineering to the next CEWG meeting. His trip to California Lutheran University was scheduled for the last week of October, during which time he hoped to also meet with Stanford and Intel. He added that it seemed that there had been some interest from his visit to New Mexico Tech, but nothing specific had yet developed.

EHS REPORT AND EPA 114 UPDATE

- Sara Chavez reported two items not included in the EHS report: 1) There was an air quality inspection on August 27 and 28; and 2) Intel received two more odor complaints from the previous caller of August 10 cited in the last EHS report. The new complaints were made on August 27 and September 9 and would be included in next month's report. The odor was described differently on each occasion: "burnt coffee chemical," "burnt coffee mildew," and "burnt metal chemical."
- Dennis O'Mara said a burnt smell should not be surprising when chemicals were burned at 1300 degrees F.
- John Bartlit said he looked at the EPA Web site link and found different descriptions of common odors from about 650 chemicals. Propionaldehyde was the only one he found with descriptive adjectives similar to the complaints often reported to Intel Rio Rancho. The EPA Web site also stated that odor alone could cause illness for some people and described symptoms like headaches, nausea and dizziness.
- Lynne Kinis said people described odors based on familiar experiences and reported what they knew in order to help the company put a finger on what was going on. The bigger concern was when things are bombarding the community and there was no odor.

REVIEW ACTION-ITEM PROGRESS REPORT

- Sarah Chavez reported that she expected to complete item # 6 regarding renaming and reorganization of historic documents on the CEWG Web site before the new facilitator started.
- Sarah Chavez informed that group that she, John Bartlit and Mark Bennett agreed it would be best to wait to discuss Action Item # 8 regarding the stack testing data when Mike Williams was in attendance at the CEWG meeting in October.
- Sarah Chavez reported on Action Item # 9 referring to production levels at Intel in the weeks before and after silica testing. Sarah Chavez clarified that she was not directly involved. It had been Thom Little who worked with the factory and the STTF. They came to an agreement about data collection, presentation and what could be seen. The STTF report addressed the issue of production levels.

- Sarah shared information from pages 176-178 of the 2010 STTF report. Pages 176-178 were about data and calculations about the use of chemicals. The study looked at the actual tool used for chemicals and quantified it during the time of the testing. STTF also looked at capacity and use. Ms. Chavez said that she was not aware of the data reviewed in order to determine capacity and noted that it is not mentioned in the report, possibly because of confidentiality issues. Production rate was a sensitive issue for Intel, though there had been site visits from the STTF to see production rates during the testing. Graph 1 from page 178 showed that the amount of chemical used during the stack testing from December 7 – 10 was a normal amount.
- Graph 2 represented monthly calculations from the thermal oxidizers and the calculations for the HMDS during the time of the test as well as before and after.
- Graph 3 represented the use of HDMS from a tracking standpoint. The assumption for conversion was that all of the HDMS has been emitted and then converted to silica. The conversion formula was *Chemical use (HDMS) x 7.45 = amount of particulates emitted*.
- Sarah Chavez explained that tracking, use and purchase were the same. Chemical purchases made on different dates were logged into the system, then added up to determine monthly usage. She said Just in Time delivery was twice/day depending on the particular chemical and limited onsite storage of extra chemicals. Graph 3 showed usage in December 2010 at the time of testing to be in the normal range compared to the rest of the year.
- Lynne Kinis asked for the meaning of “Temperature C” on the HMDS chart. Ms. Chavez explained that Temperature C was the vapor pressure of the chemical to calculate the usage. Chemical tracking for compliance purposes was not carried out on a daily basis for each tool. In order to provide the information requested by STTF, Thom Little had calculated the amount of chemical and the number of times needed for the tool for the 3-day period of testing. The information was reviewed by STTF.
- Lynne Kinis asked about the temperatures. Sarah Chavez answered the Munters burned at 1385 degrees F and the Durr units burned at 1350 degrees F. Both types of units were tested before Intel shut down the Durr units.
- Sarah Chavez reported that with regard to item # 11, there had been no Intel-Rio Rancho employees who self identified having arterial lateral sclerosis (ALS) at the Intel NM site. Also, there had been no employees alleging that their work in New Mexico had caused them to get ALS. Under the Toxic Substances Control Act (TSCA), if an employee alleges that they believe they contracted something associated with exposure from their work environment, staff was required to log that information. Lynne Kinis asked if Intel has been tracking employees with multiple sclerosis (MS). Sarah Chavez responded that

she did not know the answer but imagined that tracking cases of MS would be similar to the ALS medical confidentiality rules and TSCA reporting requirements.

- Mark Bennett said that his name was placed on Item # 7 as a place holder to bring up the topic at the meeting.
 - **ACTION ITEM:** Sara Chavez will review past minutes for clarification about action needed on AI #7 regarding material being introduced to the oxidizers and the effect on overall emissions.

NEXT STEPS FOR CEWG RELEVANT TO ITEMS IN ATSDR REPORT

Mark Bennett acknowledged the numerous efforts exerted by the CEWG towards the ATSDR report and asked the group to consider what might be the next steps, such as archiving documents, creating a media folder or other actionable items.

- John Bartlit proposed that press articles and letters to the editor be archived on the CEWG Web site so they were easily identifiable and available in one place. Sarah Chavez added that there was an ATSDR folder on the Web site and asked if press items should just be added to what was already there.
- Lynne Kinis commented that she considered this to be a very sensitive issue. She asked if the ATSDR press release and the follow-up articles would be included. She considered that information to be “lies” and did not want to put lies in the archives.
- John Bartlit responded that his proposal was for articles that already appeared in the press and putting them on the Web site would not vouch for the veracity of the content, only that it was a press item associated with the ATSDR report.
- Lynne Kinis replied that unless the article was dissected, posting it on the Web site was in essence an acknowledgement by the CEWG that the content was correct.
- John Bartlit suggested that the media folder might contain the first and second press releases, op-eds from Dennis O’Mara, any joint letters to the editors, possibly articles from the *Corrales Comment*, the letter to residents from Intel and a possible disclaimer that CEWG does not vouch for the accuracy of the information.
- Sarah Chavez offered for consideration the creation of a summary document outlining in chronological order what had been done, as well as the different perspectives along the way. The CEWG had benefited from similar documents in the past when Stephen Littlejohn prepared chronological histories for the silica testing task force, the water dossier, and stack heights.

- Mark Bennett acknowledged Ms. Kinis' concerns that she did not want to be a part of disseminating "lies" and asked if she would view having a document putting the press articles and different perspectives into context as a positive alternative.
- She responded that the only accurate articles she had ever seen about CEWG or Intel were those written by Jeff Radford, a journalist who won first place for his investigative reporting. She expressed little patience for the journalist Mr. Sanchez who reproduced verbatim the press release and Intel letter to residents. She noted that different press articles and actions had not clarified issues raised by Mr. Radford and even the CEWG continued to produce lies. She was opposed to putting a series of press articles in a folder on the Web site because it would be viewed that the CEWG supports the content.
- John Bartlit said one document that might be helpful if added to the folder could be the questions and concerns presented to Mr. Kowalski. Ms. Kinis asked if he had ever done anything with it. Mr. Bartlit replied that Mr. Kowalski answered at least two of the questions that he had posed on other occasions.
- Dennis O'Mara said he didn't remember receiving a response to any of his questions. He was aware of an article written by journalist Jeff Radford where Marcy Brandenburg was quoted saying that Mr. Kowalski told her the ATSDR did not change or revise the study based on CEWG questions. Mr. O'Mara continued to say that he reviewed the final report and did not see any CEWG concerns included. He commented that if some of the CEWG suggestions had been considered, the final report might have been more meaningful.
- John Bartlit observed that none of the CEWG members were qualified, certified commentators from EPA or DOH. CEWG presented comments and questions to ATSDR and hoped to get responses.
- Lynne Kinis said on Tuesday evening Mr. Kowalski was asked the same question twice by the same person and did not receive an answer. He was asked a third time by the same person on Wednesday evening and at the end he "danced." The question was in reference to what had been done with the health study carried out by Corrales Residents for Clean Air and Water (CRAW) with 600 people several years ago. Mark Bennett asked what was his response to a direct question. Sarah Chavez replied that she heard Mr. Kowalski say that he didn't get that particular study. Ms. Kinis said that when someone told her that they did not get a certain report, they did not do what they were hired to do. They were hired by the community to do something because people were dying and they did not do it.
- Mark Bennett noted the divergent opinions among the group about archiving documents into an ATSDR media folder on the CEWG Web site.

- Hugh Church said it is a bold issue to try to include everything without some indication of quality for selection and clarity about who would judge the quality.
- Mr. Bartlit responded there were already many items on the Web site including articles by Radford posted without any quality assessment.
- Dennis O'Mara proposed the idea of preparing a single document summary rather than posting individual documents in a media folder.
- John Bartlit said it would take a large number of hours to put together a summary document and did not think it would be worth the time needed.

Actionable Items Related to ATSDR

- Dennis O'Mara said there might be things to pursue with ATSDR, but ATSDR probably would not provide satisfactory responses to the things that could and should be done. He had some ideas for possibilities to pursue with CRCAW and would share them at a later date. On a personal level of action, he wrote a lengthy commentary for the next *Corrales Comment*. Intel unwittingly misled the community by sending out the ATSDR press release. In his commentary, he proposed that Intel send out a new Good Neighbor letter and a corrected press release. He also challenged Intel to formulate, publish and execute a short-term and long-term plan to reduce emissions. He said that if Intel has the capability to produce successively smaller chips, it also has the capacity to reduce its emissions.
- Mark Bennett commented that once the letter was published, perhaps there would be some actionable items for next CEWG agenda.
- Hugh Church suggested the possibility of a peer reviewed technical report.
- John Bartlit asked Mr. O'Mara if it was worth comparing the draft ATSDR report to the final report. He replied that he did not see anything significant in the change of content; most changes had been about format.
- John Bartlit asked if there was interest in having a conference call with Mr. Kowalski to follow up on the data questions he posed in his email.
- Dennis O'Mara expressed interest in the call. Lynne Kinis said that in 2009, Mr. Kowalski brought several medical personnel who took turns answering questions. This time, she had the impression that he did not want to deal with it.
- Sarah Chavez said she had several data-related questions around medical epidemiology. 1) How did they obtain medical data considering the confidentiality issues? 2) What type of medical data did they need in order to carry out a study? 3) Was it necessary to have medical records or a doctor's diagnosis for someone to qualify for a study? 4) And if the

medical data was not available, but there was other information about air quality concentration, was it possible to model it? In regard to the absence of a medical epidemiologist for the ATSDR report, if the data wasn't available, she wondered if the presence of a medical epidemiologist would have even helped .

- Dennis O'Mara said that there were two sides. One was related to the level of chemical concentration in the air and how that data compared to screening levels. The other was related to people who reported illnesses they believed were - caused by exposure to Intel emissions. There were 10 cases of ALS reported in a New Mexico Department of Health (NMDOH) study. -Yet no analysis of those cases was undertaken. He stated that prevalence rates should be calculated for those cases and compared to the national average of 3.9 per 100,000.
- John Bartlit said that Jonathan Samet, who years ago worked with the American Lung Association in New Mexico, reviewed the NMDOH report and said he would have used the same assumptions they used and done the study the same way they did.
- Sarah Chavez said Mr. Kowalski had responded that another ATSDR agency was contacting NMDOH about the community concerns for ALS and IPF because they did not have enough information from the 10 reported cases .
- Dennis O'Mara said that nationally there was no reporting requirement for anyone if they had ALS. However, some data on those 10 ALS cases was available. They had information about the general area where they lived. They could calculate the population in the census tracts of those 10 cases and look at their dates of diagnosis and/or death, and then, look at any cross over, find out the number of cases for each year against the population of the area to determine the prevalence, and compare it to the national average of 4/100,000. That did not happen and there was nothing else in between. If they had permission from the patients and families for the study, then they had everything they needed but still no prevalence data for these cases.

ACTION ITEM: John Bartlit will invite Kowalski to participate in a meeting with the CEWG to discuss the questions he emailed to him around health and air quality data. He will ask him to also invite someone who can discuss health-related concerns.

- Lynne Kinis suggested that since doctors provided abundant non-HEPA information for cancer studies, perhaps some of it could be used for ATSDR or NMDOH to produce cancer prevalence data. Dennis O'Mara noted that hospitals did not have prevalence data only hospitalization data. General prevalence data without specifics about each case was not helpful.

- John Bartlit reminded the CEWG that a decision about the dismantlement of the Silica Testing Task Force (STTF) had been carried over from the August meeting. Lynne Kinis asked if anyone had taken into consideration the impact of a lower amount of silica over the years. Mr. Bartlit replied that reducing emissions is part of the CEWG goal. Consensus was that there was no further need for STTF.

ACTION ITEM: John Bartlit will officially thank the crystalline Silica Testing Task Force (STTF) and let them know that their services are declared complete.

- Mark Bennett summarized possible future agenda items as: 1) discussion with Peter Kowalski around data; 2) possible follow up action related to Dennis O'Mara's article to be published in the *Corrales Comment*; 3) issues of ALS and IPF prevalence follow through.

UPDATE ON HIRING OF NEW FACILITATOR

Sarah Chavez updated the progress on hiring a new facilitator. Intel had scheduled interviews for the end of September and early October, and from that first cut CEWG members would conduct phone interviews. Ms. Chavez would coordinate the logistics for the phone interviews expected to take place after the October CEWG meeting. The goal was to hire by November so the new facilitator can attend the November and December meetings. Mr. Bennett said he would be travelling in January but clarified that he would be accessible to ensure a smooth transition.

NEW BUSINESS

No new business.

MEETING ADJOURNED

NEXT MEETING: October 21, 2015, 5 to 7 pm, Corrales Senior Center.