

MEETING SUMMARY

Community Environmental Working Group

“Striving for Continuous Environmental Improvements at Intel”

Date: February 17, 2016
Time: 5:00–7:00 p.m.
Location: Corrales Senior Center

Members Attending

John Bartlit, NM Citizens for Clean Air &
Water
Mike Williams, NM Citizens for Clean Air
&
Water

Hugh Church, American Lung Assc. in NM
Sarah Chavez, Intel
Dennis O’Mara, Corrales Resident

Non-Members Attending

Natasha Martell Jackson, Intel

Facilitator

Shannon Beaucaire, Facilitator

CJ Ondek, Recorder

HANDOUTS

- CEWG Draft Agenda, February 17, 2016
- Draft Meeting Summary, January 2016
- Action-Item Progress Report, February 2016
- EHS Activity Report,
- 2014 Annual Report
- 2103 Topics Ranking and Action Goals and Current Topics Index

PROPOSED AGENDA

Welcome, Introductions,
Announcements and Brief Items
Discussion of New Ad Design
EHS Report and EPA 114 Update
Review Action Item Progress Report

Further Options for Understanding
Air Quality
Discussion on Modeling Project
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.

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Agenda—Revisions and Approval

No comment.

Meeting Summaries—Revisions and Approval

No comment.

ATSDR Update

None.

Regulatory Engineering Update

- John Bartlit said he and Mike Williams had a meeting today at Intel with Gabe Flores, the Intel Rio Rancho's Internet of Things representative. Mr. Bartlit said the Internet of Things had similarities with regulatory engineering. Intel's Frank Gallegos also attended the meeting, which lasted about an hour. Mr. Bartlit reported that Mr. Flores explained his work with the Internet of Things, which included talking to companies with interest in developing sensors and connecting these sensors to Intel's computer technology. Mr. Bartlit said that at the meeting he explained his work on regulatory engineering, which was to apply similar methodologies and technology in software to regulatory applications. Mr. Flores told Mr. Bartlit that the hardest part of what they did was to make the technology trustable, unhackable, and to prove to people it was all of those things. Mr. Bartlit said the same concerns are important in regulatory engineering. Mr. Bartlit also said he had learned that Intel had about 500 to 1000 people working on the Internet of Things, in Arizona, California, etc. The biggest benefit from the meeting was that each party learned more about what the other did, which could lead to further information sharing and collaboration down the road. Sarah Chavez clarified that Intel was not developing the monitors or sensors; their key focus was trying to connect the data and making this available through the Internet or cloud.
- John Bartlit said he had shipped 25 copies of his booklet and 50 copies of his last column to California Lutheran University, who was participating in a start-up fair in Ventura County, California, with particular emphasis on Internet of Things applications to healthcare and agriculture, and included competitions for best proposals. The School of Management dean said that the university was going to pursue ideas of regulatory engineering in their proposals submitted at the fair and would issue Mr. Bartlit's materials before and during the fair.

Other Announcements

Dennis O'Mara said that the new CEWG advertisement ran but had not yet borne fruit. John Bartlit said it was a good ad and thanked Carolyn O'Mara and Dennis O'Mara for their efforts.

Natasha Martell Jackson said the new ad was really well done, but they might have challenges getting the ad into the different newspapers because of sizing issues. Newspapers were able to easily adjust the size of the previous ad based on space availability, but with the new ad Intel did not have the software to adjust the size, and the size could potentially change each month. Dennis O'Mara said his wife would most likely prefer to change her own graphics work, and she would be willing to work with newspapers to adjust size at this point. If it became too onerous in the future, she might need to revisit the issue again. Ms. Martell Jackson said they would continue with the current process and thanked Carolyn O'Mara for all her edits.

Dennis O'Mara said he hadn't heard any reports from Oregon about Intel Oregon changing the bromoform in the cooling towers for salt (similar to Intel Rio Rancho).

Public Comment

None

EHS REPORT AND EPA 114 UPDATE

Sarah Chavez expanded on the EHS report. Intel had submitted the test protocol for the annual VOC/HAPs testing from March 9 to April 6. Any community member was welcome to observe the testing and needed to contact Sarah Chavez to make arrangements. Also, on Earth Day, Intel would hold a facility tour on Thursday, April 21.

Sarah Chavez reported that on February 15, at 1:30 pm an employee reported seeing something smoldering on the East slope area, south end of the site, near the walking trail. Intel phoned the fire department, who put out the smoke, which turned out to be a smoldering hay bale. She said she would add this incident to next month's EHS report. The fire department suspected kids were playing with matches.

REVIEW ACTION ITEM PROGRESS REPORT

John Bartlit suggested that on item 7, instead of sending a letter to Oregon about their goals, to send a letter about CEWG's goals, for example, to list the CEWG mission and state the CEWG's interests in reducing VOCs/HAPs further and the reasons for doing so, which include the imperfect regulatory structure and its history.

Sarah Chavez reported on item 6, preserving historical CEWG documents. She said that Stephen Littlejohn's newsletters had linked information/documents listed in that newsletter to their location in the CEWG Web site. Shannon Beaucaire learned how to do that as well for CEWG newsletters moving forward. Ms. Chavez said she was concerned about changing file names and destroying those links. She was working on a system to preserve the links, and that keeping the document name the same but changing the display name might be an alternative. She needed to test what might work.

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Sarah Chavez said item 11, the new ad, was completed. She reported on item 14, which concerned Intel's 2020 goals. She said that the 2020 goals were established in 2012, and represented a long-term road map for Intel as a company. Intel had been reporting on annual goals since 1994. Ms. Chavez passed around a handout that showed Intel's "Performance Summary and Goals," that looked at progress toward 2020 goals as of 2013 and 2014. The left side of the handout summarized progress details by topic. Icons such as "Achieved", "Partially Achieved or On Track," and "Not Met" were used to show progress on each goal. To link to the full report, go to:

www.intel.com/responsibility

Hugh Church asked what "per unit" meant on the handout. Sarah Chavez responded that it most likely referred to an individual chip or production unit.

Dennis O'Mara said there was nothing on the handout about HAPS and suggested this was a gap. Sarah Chavez responded that Intel had spent many years focusing on HAPs, and the goals in the handout were what Intel chose to focus on for 2020. Mr. O'Mara asked about the limits on HAPs in Intel's permit. Sarah Chavez said there were different individual limits based on chemicals with 10 or 12 individual chemicals with limits of 9 tons or less per year, the remaining chemicals with limits of 9 tons per year but the overall total was 24 tons per year.

Dennis O'Mara mentioned the book "Boiling Frogs," which was written 12 years ago and contained a list of 180 hazardous chemicals that influenced how regulations were written. Sarah Chavez said the limits had not changed since then and were still the same in Intel's current permit.

Mr. O'Mara suggested looking at pages 176-178 in *Boiling Frogs*, in which Fred March wrote a whole section about the relative toxicities of HAPS. CJ Ondek mentioned that Fred March's work was previously discussed in depth in past CEWG meetings. John Bartlit suggested pulling past Meeting Summaries to review previous discussions.

DISCUSSION OF CEWG ANNUAL REPORT 2015

The group discussed which topics to add to the 2015 CEWG Annual Report. Suggestions were: replacing bromoform/MIOX with salt, Mike Williams' work on monitoring other chemicals; Dennis O'Mara's participation in the Local Emergency Planning Committee; all work on regulatory engineering; and compiling the ATSDR Questions and Comments document.

John Bartlit said that in CEWG's preparation for the ATSDR release, they compiled a list of questions and comments that were not made public because the ATSDR report had not yet been made public. Now that the ATSDR report was made public, the CEWG could consider whether or not they would like to make it a public document. All CEWG

members agreed, and consensus was reached around making the ATSDR Questions and Comments document public.

The group agreed to assign certain individuals to write about the topics to include in the Annual Report. John Bartlit said he would write on regulatory engineering. Mike Williams said he would write about his monitoring work. Sarah Chavez said she would write on the bromoform/MIOX changes at Intel. Dennis O'Mara would write about his work with the Local Emergency Planning Committee and the ATSDR Questions and Comments document. All agreed to send their drafts to Shannon Beaucaire in two weeks (March 2), who would compile the text to share with members.

ACTION ITEMS: The following CEWG members will contribute to the 2015 Annual Report as follows: 1. John Bartlit will write on regulatory engineering; 2. Mike Williams will write on his monitoring work; 3. Sarah Chavez will write on Intel's exchanging salt for bromoform; 4. Dennis O'Mara will write on his participating with the Local Emergency Planning Committee and the ATSDR Questions and Comments document. 5. All will send drafts to Shannon Beaucaire by March 2.

ACTION ITEM: Shannon Beaucaire will compile the above drafts and send to CEWG members for comment. The goal is to have the Annual Report updated for the March meeting.

WHAT DOES CEWG WISH TO ACCOMPLISH IN 2016?

John Bartlit said that over the past couple years the CEWG began to work differently. Individual group members focused on different topics and pursued the work independently. For example, Mr. Bartlit focused on regulatory engineering, Mike Williams focused on monitoring, and Dennis O'Mara focused on emergency management issues. Mr. Bartlit said for 2016 he would continue to work on regulatory engineering and report his progress to the CEWG. He asked the group for their suggestions on what to work on for 2016. The group brainstormed the following items.

John Bartlit suggested that CEWG explore the question of ALS in the local area and suggested that collaboration with the ALS Association of New Mexico and the State Health Department might also be part of that initiative. Mr. O'Mara agreed to communicate with both organizations, gauge their interest in presenting at a future meeting, and report on their responses at the March meeting. The CEWG would discuss further at March meeting.

John Bartlit reminded about Mike William's presentation on "Interesting Questions." Now that there was a modeler working at the ATSDR, perhaps the CEWG technical discussions between Mike and him would produce ideas for better health assessments in the future. Dennis O'Mara cautioned that they should not limit themselves to only the ATSDR, and he was uncertain about whether they would get useful information from the

ATSDR. Sarah Chavez said they could make a request to several organizations and then evaluate what kind of information they received. The group agreed to review Mike Williams' "Interesting Questions" presentation and submit comments to Mr. Williams via email before the March meeting. Mr. Williams will compile comments to share at the next CEWG meeting.

ACTION ITEM: 1. The group will review Mike Williams' "Interesting Questions" presentation and submit comments to him via email before the March meeting. 2. Mike Williams will compile comments to share at the next CEWG meeting.

Dennis O'Mara suggested again that Intel should direct some of the intellectual capacity of their staff to come up with ideas on how to make environmental improvements. The last he knew about the issue was a class mentioned by Ms. Chavez which has not produced any results. He said the CEWG should continue to press Intel to encourage their employees to find ways to reduce emissions.

John Bartlit mentioned that years ago the CEWG crafted a different policy statement, and perhaps it was time to review the policy statement and revise, if necessary. They should look in Meeting Summaries from 2006 to find this information.

- Mike Williams suggested revisiting supercritical CO₂. Sarah Chavez said Intel found other ways to address the problems (limitations) that Mr. Taylor presented as the size of the computer chip became smaller. John Bartlit suggested looking at past Meeting Summaries that contained discussions on supercritical CO₂

Dennis O'Mara said he wanted to review the issue of relative toxicity as raised by Fred Marsh in *Boiling Frogs*. Also, the CEWG should explore complementary abatement technologies (e.g. condensation for pre-treatment). John Bartlit suggested writing a letter to Intel to express the CEWG's interests in reducing VOCs/HAPs further and the reasons for doing so, which included the imperfect regulatory structure and history.

John Bartlit said he wanted to add new members to the CEWG and suggested Barbara Rockwell as a member. He had tried to recruit her in 2004 but she turned him down. He proposed nominating Barbara Rockwell to join the CEWG and nominated Dennis O'Mara to make the offer to Ms. Rockwell, and to mention that John Bartlit had recommended her. Dennis O'Mara agreed.

ACTION ITEM: Dennis O'Mara will speak with Barbara Rockwell about joining the CEWG.

John Bartlit suggested having a discussion around language, and that his February column was also about language.

John Bartlit suggested the group review current CEWG Processes and Procedures and discuss if they were still applicable and the group was in agreement with them.

- Hugh Church said he would contact the City of Albuquerque/Bernalillo County specifically for aldehydes, CO, CO₂, and CO₃. The link is: www.cabq.gov/airquality/contact-us.

Natasha Martell Jackson said that Intel had sent a letter to the neighbors to let them know about the upcoming Earth Day tour and that included the updated ATSDR press release.

Sarah Chavez said the Explore Intel Web site reported emissions information every quarter, including HAPs, VOCs, water usage, etc. The Web site was a good resource to see where Intel was at over the last year, and anyone could go and look. It had real emissions information. The document section showed the semiannual report submitted to NMED. She instructed to go to exploreintel.com and click on “Rio Rancho” map to get information on the Rio Rancho site. The site also showed scrubber and thermal oxidizer abatement status.

Below is the compilation of points to discuss in 2016.

Finish 2015 Annual Report

Regulatory Engineering

Address Mike Williams “Interesting Questions” presentation.

Engage groups other than ATSDR on some of the issues raised

Further explore the extent of ALS adjacent/near to Intel plant and explore collaboration with ALS Association of NM

Invite NMDOH to a CEWG to address a topic of interest (ALS, etc.)

Group funds any specified requests for specified funds

CEWG Funding – CEWG will request to Intel if specific items arise

Update Web site information

Press Intel to encourage employees to find ways to reduce emissions.

Explore complementary abatement technologies (e.g. condensation for pre-treatment)

Review meeting summaries of super critical CO₂

Write a letter to Intel regarding CEWG’s interests in reducing VOC’s/HAP’s further and provide reasoning.

Attract new members to CEWG (Barbara Rockwell)

Discuss “language” use

Processes/Procedures

Discuss CEWG Process & Procedures to determine agreement and applicability.

NEXT MEETING: March 16, 2016, 5 to 7 pm, Corrales Senior Center.

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