

## FINAL MEETING SUMMARY

### Community Environmental Working Group

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#### *“Striving for Continuous Environmental Improvements at Intel”*

**Date:** May 20, 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**

Ron Eppes, Intel

Liz Shipley, Intel

#### **Facilitator**

Mark Bennett, Facilitator

CJ Ondek, Recorder

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#### **HANDOUTS**

- CEWG Draft Agenda
- Draft Meeting Summary, April 2015
- Action-Item Progress Report, May 2015
- EHS Activity Reports

#### **PROPOSED AGENDA**

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| <ul style="list-style-type: none"> <li>▪ Welcome, Introductions, Announcements and Brief Items</li> <li>▪ EHS Report and EPA 114 Update</li> <li>▪ Review Action Item Progress Report</li> </ul> | <ul style="list-style-type: none"> <li>▪ Proposed Permit Revision</li> <li>▪ Stack Testing Credibility: What Can Be Done</li> <li>▪ Adjourn</li> </ul> |
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#### **WELCOME, INTRODUCTIONS, ANNOUNCEMENTS, AND BRIEF ITEMS**

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

Filename: CEWG\_Final Meeting\_Summary\_May 5-20-15 v3.doc. Approved: June Meeting  
 Prepared or presented by: CJ Ondek & Mark Bennett  
 Prepared for: CEWG  
 Date prepared or presented: May 25, 2015

Agenda—Revisions and Approval

No comments.

Meeting Summaries—Revisions and Approval

No changes or corrections.

ATSDR Update

- John Bartlit said he spoke with Peter Kowalski on May 15. Mr. Kowalski reported to him that peer review comments were returned to the ATSDR, which the ATSDR needed to address. These comments were not major. The revised final report needed to be submitted to the Office of Science in the Office of the Director for clearance. This requirement made it unlikely that the final report would be available in June. July or August was likely, though.
- John Bartlit said that Mr. Kowalski liked the CEWG's invitation to participate in the May meeting by telephone. He received the CEWG document about a week after the April CEWG meeting and appreciated that the CEWG wanted to engage him in conversation around the information contained in the document, and it would help him with creating his presentation to the CEWG. While Mr. Kowalski's boss approved, he also had to get approval from the division manager, which did not come soon enough to participate in the May meeting. If the final report was not out by June, then Mr. Kowalski should have approval to participate in the CEWG's June meeting.
- John Bartlit said plans for release of the final report were in the works. Whether or not he would have an initial local meeting with the petitioners was not yet known, but they would certainly be offered the opportunity. Mr. Kowalski's general presentation plan at the CEWG meeting would include: the findings in the final report, Q&A on the findings, a discussion of epidemiology as used in ATSDR methodology, and Q&A on this methodology. If questions and interest require more than one two-hour meeting, then Mr. Kowalski would be available the next day for a second public meeting. This would be announced at the start of the CEWG meeting to inform attendees about the situation. Mr. Kowalski's presentation must be approved through ATSDR channels.
- Dennis O'Mara expressed concern about a discussion on epidemiology and that it would be esoteric for the majority of people. John Bartlit said that may be so but the ATSDR used a specific protocol methodology to reach their conclusions, and this was important for people to know. Mr. O'Mara said he had sat through many epidemiology presentations in the past that included a fairly lengthy discussion about methods, which co-opted time dedicated to discussion of findings that were more interesting to attendees. Mr. Bartlit responded that Mr. Kowalski organized his presentation into four sections so

the methodology discussion did not push out the findings discussion. Mr. O'Mara requested that Mr. Kowalski devote one two-hour meeting to the findings so as to take full advantage of his presence.

- Sarah Chavez said to keep in mind that in looking to educate the general public, there was value in spending some time going through the entire process that spoke to limitations in conjunction with the results. She reminded that many members of the public might not know anything about health studies.
- John Bartlit said he would email Mr. Kowalski to request having one two-hour meeting dedicated to results and another two-hour meeting dedicated to methodology. He continued that it was a danger that a lengthy discussion on methodology would eat up the time, but it was also a danger to only talk about the findings since some of the questions would naturally be connected to the methods used to achieve the results. He did not know what the correct balance was. Mark Bennett suggested asking Peter Kowalski his advice around finding the correct balance, since this he was experienced with making these kinds of presentations.

**ACTION ITEM:** John Bartlit will email Peter Kowalski about his presentation organization around methodology and findings and ask his advice about the best way to organize his time to assure all questions were answered.

- Dennis O'Mara asked if the petitioner meeting would be closed. John Bartlit said that the petitioner meeting was by invitation only, with the petitioner making the invitations.

#### Regulatory Engineering

- Sarah Chavez said she presented to NMED for about an hour. John Bartlit attended, as did 20 NMED staff members. She said she gave an overview of Intel and its facility and walked them through the Explore Intel Web site, pointing out the real time data, document repository, etc. She also showed the CEWG website and the book "Boiling Frogs." John Bartlit said Ralph Gruebel, new NMED head of compliance attended. They were interested in using the Web site as an example for other organizations.
- Sarah Chavez said she had an opportunity to visit New Mexico Tech to spend time with the Chair of the Environmental Engineering Department, who was her former professor, to get an academic perspective on regulatory engineering. She said he understood the regulatory engineering process and opined that if they were looking to change regulations, they would have to engage community and industry regulators first because of the current rules around data collecting, and it would most likely be a long and

cumbersome logistical process. They also discussed that the state level was limited by federal regulations and rules.

- John Bartlit added that his idea was to start with schools rather than in the political arena. He said he had the chance to talk with universities about regulatory engineering, which would build momentum prior to engaging the political arena. Ms. Chavez added that even if they started in schools, they would still have to account for process that existed today in order to change regulations in the future.

#### Announcements

- Sarah Chavez said Intel would hold a joint fire drill between Intel and the Rio Rancho Fire Department on Sunday, July 19. She said Intel invited CEWG members to attend. The drill would be held at three different times: 3 am, 8 or 9 am, and in the afternoon. The drill would simulate a fire in the parking garage, with sprinklers going off to test response. Ms. Chavez said she would provide more details closer to the date, including the parking garage floor number.
- Mark Bennett suggested making CEWG meetings available to Lynne Kinis to participate by phone. Dennis O'Mara said he would ask her if she would like to participate. Mr. Bennett said he would also, and that it was a good idea for both of them to reach out to Ms. Kinis.

**ACTION ITEM:** Mark Bennett and Dennis O'Mara will both ask Lynne Kinis if she would like to participate in CEWG meetings by phone.

#### Public Comment

None

#### **EHS REPORT AND EPA 114 UPDATE**

- Sarah Chavez reported that May was a quiet month for regulatory submittals. A neighbor in Zone 1 emailed Intel requesting information on east slope maintenance and signage work. Intel responded by providing information on maintenance activity and replacing signs. Neighbors had concerns about parking in this area, so they were installing "no parking" signs near entrances to the walking path on that side. The signs discouraged people from parking there because a curve posed some danger. Also, they replaced a sign in a dead end cul de sac. Intel had a contractor look at the area to maintain drainage on the east slope as well as erosion on the walking path. This work would start possibly next week, Ms. Chavez said.

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- Sarah Chavez said Intel did not yet hear from the EPA. She reiterated the history around this issue. In 2009 Intel got a 114 request from the EPA that asked for 20 years of information. In December 2009, the EPA did an onsite investigation of Intel for about one week. In October 2010 the EPA came out with their 114 report, which listed areas of concern at Intel. Most of the areas of concern related to scrubber removal efficiency. Intel met with them again at the end of 2010 early 2011. Intel agreed to submit a test protocol called a “QAPP” and retest the scrubbers for removal efficiency. Meanwhile, Intel changed their emission calculations to no longer use the removal efficiencies, which was why the concerns were no longer relevant.

### **ACTION ITEM PROGRESS REPORT**

- Sarah Chavez closed out Item #6, which was to bring information on the biocide pilot and results. She reminded that the biocide pilot began in 2013 and concerned removing algae growth in the cooling tower water. She said Intel had been using a combination of sodium hypochlorite and sodium bromide as a biocide. They found a new product from a company called MIOX, which took table salt and water to generate a new biocide compound made up of hypochlorous acid and hypochlorite ions. Intel’s “previous” biocide which contained sodium bromide, formed bromoforms—a hazardous air pollutant (HAP). In 2013, of Intel’s 5.5 tons of HAP emissions, and 1.9 tons was bromoform. By changing to the new biocide from Miox Intel would eliminate almost two tons of hazardous pollutants. The decision to make this change was driven primarily by cost, although she was unsure of the details. Intel piloted the new biocide on one system in 2014, and because that was so successful they continued to install it in all cooling towers.
- Dennis O’Mara asked Ms. Chavez to write up a brief summary on this issue. Ms. Chavez said the Meeting Summary should include all the relevant information.

**ACTION ITEM:** Sarah Chavez will check the Meeting Summary to ensure the information on the new biocide was accurate and sufficient. This will be complete once above changes are made

- John Bartlit asked if Intel New Mexico would share information on the new biocide with other Intel sites. Sarah Chavez reminded that Intel followed a “white paper process” to make changes at Intel. The engineer in charge of the project wrote a white paper to explore if the product could be used at other sites.
- Dennis O’Mara said it was unfortunate that Intel made the decision to use the new biocide based on cost rather than the principle of further reducing emissions. John Bartlit said the CEWG needed to find this out for sure. Sarah Chavez said that cost was important to Intel and in this case reducing emissions was an added benefit. Mr. O’Mara said emissions reductions could have been a co-driver. These were called “win-win” if

done right. He asked how to prompt Intel to take the lead in reducing emissions. John Bartlit said the CEWG should learn more about Intel's motivation to change the product. He asked if the CEWG could invite the engineer to the June meeting to discuss.

**ACTION ITEM:** Sarah Chavez will bring back information on the reasons for the change to the new biocide.

- Dennis O'Mara commented that Intel lost an opportunity to promote positive public relations by not reporting to the public about making these changes that cut a significant amount of emissions. Sarah Chavez said Intel's avenue to share information with the public was through the CEWG. She did not know what else Intel could do. Mr. O'Mara responded that he was mainly concerned about how to get Intel to think more about reducing emissions and having a more prominent place in the equation.
- Dennis O'Mara said items 1, 3 and 5 were interconnected, and Sarah Chavez had provided him with a hard copy of ERM's summary of VOC control technologies (#5), which he was having reviewed by outside experts. He said he would share this independent view with the CEWG. *(Sarah requests that you also provide the reviewing experts with the testing data on the thermal oxidizers that was also provided to the CEWG. This contains the inlet emissions levels to the thermal oxidizer which is important for the outside expert to understand as they evaluate the VOC control technologies that may be viable to Intel's specific airstream)*

## PROPOSED PERMIT REVISION

- Sarah Chavez said she met recently with Intel's NMED permit writer Daren Zigich to discuss changes to Intel's air permit. These changes related to language clarifications Intel made when they had the Title V permit that were never transferred to the NSR permit. Examples of changes were: Adding a footnote to a table; defining the monitoring period for piece of equipment; removing two boilers from permit that Intel was removing from the North Energy Center; and updating serial numbers listed in a table.
- Dennis O'Mara asked what the boilers did. Ms. Chavez said they were used for temperature and humidity control in the factory, and these two boilers had not been used for 8 to 10 years. Intel would decommission and most likely sell the equipment and physically remove them from the site. Ms. Chavez noted that it would most likely be a routine technical revision to the permit and there would not be any changes to the emissions. Ms. Chavez will inform the group when the revision would occur. She added that for technical revisions, Intel was required to place a "public notice" in the newspaper and send letters to municipalities: tribes, Albuquerque, Rio Rancho, Corrales, etc.

## STACK TEST CREDIBILITY: WHAT CAN BE DONE

- Sarah Chavez said last month the CEWG had discussed lack of trust around Intel's emissions data. Intel had a permit requirement to do emissions testing on their stacks once a year. This annual testing would occur in the summer, and Intel would have a contractor onsite for about a month to do testing. Ms. Chavez asked if anyone was interested in looking at opportunities to increase trust in data collected from stack testing, knowing that Intel could not change the contractor, the test methods, nor the fact that Intel was paying for the testing.
- John Bartlit said he was one of the observers of crystalline silica testing, and he had asked the testing technician what test procedures he was following. The technician responded immediately with an EPA procedure number and opened his EPA testing manual to that procedure number, which demonstrated to Mr. Bartlit that the technician knew what he was doing and it was an EPA procedure. So, Mr. Bartlit concluded that CEWG members could ask similar questions.
- Dennis O'Mara asked what role NMED played in the stack testing. Sarah Chavez said Intel had to submit a protocol form on testing and methods to NMED, and then NMED either approved or disapproved the protocol. She added that NMED was welcome to observe the testing. Years ago they routinely observed the testing but have not done it in a long time. After the testing was completed, another form was submitted to NMED with the testing information.
- Mark Bennett asked if the group could look at the assurance part of testing to check validity. Dennis O'Mara said there appeared to be three elements: Collecting samples, testing samples, and, at front end, what was happening in factory. If these elements were not observed then how could there be clarity on the results?
- John Bartlit said the third element, what was happening in the factory, was part of regulatory engineering that could be addressed on the Explore Intel Web site. Intel had suggested putting power usage and water usage over time on the Web site, which were indicators that the plant was running normally. Sarah Chavez said that water data was available to monitor, but they still had to figure out the best way to capture electricity data. However, they may be able to figure out how to show that the plant was operating normally during the test period using these methods.
- Sarah Chavez asked if there was interest, and that she could bring back more information at the June meeting. Testing included an eight-hour test on each piece of equipment, and

there were seven thermal oxidizers and 23 scrubbers, so it physically took a long time. Some equipment might be tested simultaneously.

Hugh Church asked what happened when the City sewage treatment plant lost power for 36 hours about a month ago. People in Los Lunas most likely did not like that. Sarah Chavez said she did not hear anything about this incident. John Bartlit asked if Intel received a notice call from the City. Because there were many unanswered questions about this incident, Sarah Chavez and Hugh Church agreed to investigate further. *(Hugh Church commented on the May 20 Meeting Summary, page 7, last bullet, and the issue of “if there might have been a problem on disposal.” He said he had contacted Amy Miller at PNM, who said “No power surge, spikes or outage. All the trouble was on the customer side of the meter.” Mr. Church reminded that the press had said PNM had a big surge, but that wasn’t true. He asked that this be revised in the May Meeting Summary.)*

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**ACTION ITEM:** Sarah Chavez will check with Intel to see what information they had about the incident. Hugh Church will look at the sewage treatment facility Web site to see if any information was posted.

- Mark Bennett asked the group what action they would like to take on the upcoming testing at Intel. Dennis O’Mara said he would like to represent the interest of the Corrales community. John Bartlit said he was interested as well. Mark Bennett asked how they could look at all the different parts involved, including that the testing was robust. Mr. Bartlit said this should include indicators that the plant was running at typical capacity.
- Dennis O’Mara said although the plant was running at typical capacity, there was the possibility that during testing Intel could be using certain chemicals that were not as much of an issue. Sarah Chavez said the manufacturing process was complex, and multiple activities were happening simultaneously and constantly. So, the process was too complex for only one chemical to get used at one time. This was difficult to track, so they had to figure out some way to show overall operations which is why water usage and power usage had previously been suggested as indicators of normal operation. Mr. Bartlit added that the plant did not run exactly the same every day. Dennis O’Mara asked if Intel was making multiple kinds of chips or one single chip. Ms. Chavez responded that Intel made multiple kinds of chips.

**ACTION ITEM:**

**MEETING ADJOURNED**

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**NEXT MEETING:** June 17, 2015, 5 to 7 pm, Corrales Senior Center.

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