

## MEETING SUMMARY

### Community Environmental Working Group

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

**Date:** July 20, 2016  
**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, Corrales Residents for Clean Air and Water

#### **Non-Members Attending**

Lynne Kinis, Corrales resident, Corrales Residents for Clean Air and Water

Liz Shipley, Intel  
 Mindy Koch, Intel

#### **Facilitator**

Shannon Beaucaire, Facilitator

CJ Ondek, Recorder

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#### **HANDOUTS**

- CEWG Draft Agenda, July 20, 2016
- Draft Meeting Summary, June 2016
- Action-Item Progress Report, July 2016
- EHS Activity Report—June
- Thank you to Steve Dickens
- Mission Statement

#### **PROPOSED AGENDA**

- Welcome, Introductions, Announcements and Brief Items
- EHS Report & EPA114
- Action Item Progress Report
- Intel Corporate Social Responsibility
- Discussion of Multiple Chemical Sensitivity
- Adjourn

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**WELCOME, INTRODUCTIONS, ANNOUNCEMENTS, AND BRIEF ITEMS**

John Bartlit opened the meeting by referring to the CEWG mission, which was to make environmental improvements at Intel, reduce chemical emissions at Intel, and improve community dialogue. Introductions were made.

Agenda—Revisions and Approval

No comment.

Meeting Summaries—Revisions and Approval

No comment.

Regulatory Engineering Update

No update.

Other Announcements

- Dennis O’Mara gave an update on events surrounding Intel in Oregon. He said the main thing they were working on was a hearing before a judge on July 29 regarding a petition to reopen the Intel permit that was issued in January. The goal was to bring the permit to court to be examined more intently. Mr. O’Mara said the irony was that the defendant was the Department of Environmental Quality, who was being defended with taxpayer dollars by the state’s Department of Justice. It was ironic because after a controversy in Portland involving arsenic, cadmium and chromium, the governor had fired the head of the Department of Environmental Quality and then ordered the department to devise a new permitting process that took into account health effects. Mr. O’Mara said it puzzled him that the governor would allow the state Department of Justice to defend a flawed permitting process. Mr. O’Mara quoted a note from Fred Marsh about the issue as follows:

“This was another example of what we repeatedly faced in New Mexico, when we were challenged and blocked by tax-supported lawyers and forced to scrape up the funds to hire our own lawyer. When we found a lawyer to successfully represent us in a good neighbor agreement, NMED hired our lawyer to work against us.”

- Mr. O’Mara said he had no new update on UNM’s cancer study.

Public Comment

- Dennis O’Mara quoted the following from his profile on the CEWG Web site:  
“In general, O’Mara’s position as a CEWG member is that Intel must find ways to eliminate its discharge of harmful pollutants altogether by collecting the chemicals after they are used in production and relocating them elsewhere so they

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can be recycled or rendered harmless.”

- He said the reason he quoted that paragraph was because he saw an article in the *Corrales Comment* about Senator Tom Udall’s chemical safety bill. There was a quote in this article that summarized his thoughts better than he could express himself.
 

“The New York Times reported on a new coalition of top doctors and scientists who urge aggressive regulation to prevent toxic chemical exposures. One of those, Jeanne Conroy, past president of the American College of Obstetricians and Gynecologists, is quoted as asking, “Before we can prescribe medication we have to prove it’s safe. So how come with the chemical industry we assume everything is safe, and have to prove there’s harm?”

### **EHS REPORT AND EPA 114, JULY**

- Sarah Chavez said there was an item about police training that was cancelled. Also, there was an email odor complaint about tar and diesel exhaust, and Ms. Chavez said she let the caller know that the City of Albuquerque and NMDOT was actually doing roadwork nearby between 8 pm and 6 am nightly.
- John Bartlit proposed removing the EPA114 from this item, as the issue had been on the table for 6 years and nothing happened. He said he didn’t think anything would ever happen with regards to EPA 114, most likely because priorities and budgets changed, such as bad water in Flint or abandoned mine waste in the Animus River. His point was that new pressing issues arose and took priority. Sarah Chavez said the last conversation she had with the EPA on 114 was about 5 years ago. They had said they would be in touch, and Intel never heard from them again. The EPA found about a dozen areas of concern and requested certain action from Intel, which Intel addressed in permit changes or emission calculation changes. This was part of Intel’s initial comments in the ATSDR report. John Bartlit said the EPA never commented on Intel’s scrubber testing plan. Ms. Chavez said Intel was testing the scrubbers anyway.
- Lynne Kinis said she recalled that Intel tested just before emissions left the stacks. Ms. Chavez confirmed that Intel currently did this, and the EPA wanted Intel to test the removal efficiency, since they were concerned about emissions calculations. In response Intel then changed the emissions calculation to base it on data coming out of stacks, which rendered removal efficiency irrelevant.
- Lynne Kinis said that as a member of the community, she felt this was still a concern. She didn’t want to close the door on the EPA 114 report because it then gave Intel permission to brush it aside. Mr. Bartlit clarified that he did not suggest to close the door on the EPA 114 report, but rather to remove it as a monthly agenda item. Ms. Kinis

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proposed that the CEWG make a statement to Intel that they were still interested in learning about any communication they received on EPA 114. Ms Chavez said that if the EPA sent any communication, Intel would have to respond, and this would be noted in the EHS report, which reports on any regulatory communication.

### **ACTION ITEM PROGRESS REPORT**

- John Bartlit said he completed item #13, which was on this evening's agenda, as was #8 the mission statement revision.
- Liz Shipley reported on #10, ad approval process. Ms. Shipley said that over the last few months Intel corporate changed their process for approving ads that they paid for. The approval process was now longer because it had to go through corporate headquarters, and that changed the process for the CEWG ad. Ms. Shipley said that for customized ads, they had to add two to three months to the approval process from meeting date to publication. That period would include the CEWG's deciding the content, sending it to Ms. Shipley, who in turn sent it to corporate headquarters for approval. This was also driven in part by the *Corrales Comment* ad submission deadline, which was 16 days prior to meeting. She said they needed to plan accordingly. The other option was to create a more standardized ad that drove viewers to the CEWG Web site for more detailed information. This ad, in which only the date was changed, got blanket approval and did not require the longer approval process.
- John Bartlit said this new approval process made it almost impossible to advertise a special speaker. He asked how Intel could approve an ad in any meaningful way in Oregon, since they didn't know anything about New Mexico.
- Dennis O'Mara suggested not to lose too much sleep because the enhanced ad did not seem to drive new people to meetings anyway.
- Shannon Beaucaire said that, in her experience, the two months in advance time frame seemed to be the ideal time needed to coordinate a speaking event, so organizing a speaker wouldn't necessarily be delayed by the new approval time. She also said the ad could drive more traffic to the Web Site.
- Sarah Chavez suggested asking Carolyn O'Mara to change the ad to a standardized version that emphasized the Web site, and then to use the customized version if they needed to. Lynne Kinis asked if Ms. Chavez's suggestion was the reason for the change on the part of Intel. Liz Shipley said this decision had nothing to do with New Mexico, but rather Intel's branding that was handled in corporate. Ms. Shipley suggested having

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both ads at the ready to fall back on. The group agreed to ask Carolyn O'Mara to prepare a standardized ad that emphasized the Web site but didn't lose the strong graphics.

**ACTION ITEM:** Shannon Beaucaire will contact Carolyn O'Mara to create a standard ad that emphasized the Web site and to use this version in August.

- Sarah Chavez reported on item #14. She said she may have found the Darko Koracin report and wanted to confirm it before she printed it out.
- Sarah Chavez gave an update on item #11. She said that HEE, a listed vendor, actually worked with the NM Intel site and with the Intel Oregon site, and had signed a nondisclosure agreement with Intel, so correspondence between HEE and the CEWG to request information would have to go through Intel. Shannon Beaucaire would make the request via a letter to Sarah Chavez, and then Intel would tell HEE to provide Mike Williams information on Intel scrubbers.

**ACTION ITEM:** Shannon Beaucaire will write a letter to Sarah Chavez on behalf of the CEWG requesting Intel to authorize HEE to provide Mike Williams information on Intel scrubbers.

- John Bartlit updated item #12, the draft thank you note to Steve Dickens from the CEWG for his presentation. He revised the wording to agree with a suggestion by Mr. O'Mara. Both the original draft and Mr. O'Mara's suggested change were language used by Mr. Dickens in his presentation. Everyone agreed to the revised language, and the thank you letter was approved to send

**ACTION ITEM:** Shannon Beaucaire will send the revised thank you note to Mr. Dickens.

- John Bartlit discussed item #8, the CEWG mission statement revision. The new statement clearly showed that the CEWG had no control over Intel. The group made a few other grammatical revisions and approved a final version of the mission statement.

**ACTION ITEM:** Shannon Beaucaire will put the revised mission statement on the CEWG Web site.

- Dennis O'Mara said he was trying to coordinate a meeting between the ALS Society and the NMDOH, and a few days before the meeting was scheduled Mr. O'Mara became ill. So he needed to reschedule the meeting. John Bartlit asked if he could attend the meeting, and Mr. O'Mara said "probably." The meeting would most likely be in Santa Fe.

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## INTEL CORPORATE SOCIAL RESPONSIBILITY

Mindy Koch, Intel Rio Rancho site manager, presented on the 2015 Intel Corporate Social Responsibility Report and Environmental Goals. The long report was just published and available online at: [http://csrreportbuilder.intel.com/PDFfiles/CSR-2015\\_Full-Report.pdf](http://csrreportbuilder.intel.com/PDFfiles/CSR-2015_Full-Report.pdf)

Ms. Koch said this was an Intel corporate document, and tonight she would speak to points that were relevant locally. Her presentation included slides with excerpts from the report, which are included in this Meeting Summary.

### Slide 1: Goals for 2016 and Beyond

Ms. Koch said the report had been reorganized from last year, and this slide showed how it was reorganized. For example, the green chemistry screening was now included under product stewardship rather than in the environmental sustainability section. Ms. Koch said she would talk in more detail about green chemistry screening and environmental sustainability goals, which were issues more pertinent to the CEWG.

Report Section	Goal
<a href="#">Product Stewardship</a>	<ul style="list-style-type: none"> <li>Increase the energy efficiency of notebook computers and data center products 25x by 2020 from 2010 levels.<sup>1</sup></li> <li>Implement an enhanced green chemistry screening and selection process for 100% of new chemicals and gases by 2020.</li> </ul>
<a href="#">Our People</a>	<ul style="list-style-type: none"> <li>Achieve full representation<sup>2</sup> of women and underrepresented minorities at Intel in the United States by 2020.</li> </ul>
<a href="#">Environmental Sustainability</a>	<ul style="list-style-type: none"> <li>Reduce direct greenhouse gas (GHG) emissions by 10% on a per unit basis by 2020 from 2010 levels.</li> <li>Grow the installation and use of on-site alternative energy to three times our 2015 levels by 2020.</li> <li>Continue 100% green power in our U.S. operations and increase alternative energy use for our international operations from 2015 to 2020.</li> <li>Reduce water use on a per unit basis below 2010 level by 2020.</li> <li>Achieve cumulative energy savings of 4 billion kWh from 2012 to 2020.</li> <li>Achieve zero hazardous waste to landfill by 2020.</li> <li>Achieve 90% non-hazardous waste recycle rate by 2020.</li> <li>Design all new buildings to a minimum LEED<sup>®</sup> Gold certification between 2015 and 2020.</li> </ul>
<a href="#">Supply Chain Responsibility</a>	<ul style="list-style-type: none"> <li>Complete or review an on-site audit for each of our Top 75 suppliers by the end of 2016.</li> <li>Establish an 85% "green" Intel ground transportation fleet by 2016.</li> <li>Validate our broader product base as conflict-free in 2016.<sup>3</sup></li> <li>Increase our annual spending with certified diverse-owned suppliers to \$1 billion by 2020.</li> </ul>
<a href="#">Social Impact</a>	<ul style="list-style-type: none"> <li>Through the Intel She Will Connect program, reach 5 million women in Sub-Saharan Africa by 2020.</li> </ul>

### Slide 2: A Closer Look at Relevant Goals

Ms. Koch said that under each goal on the slide was commentary with metric indicator and details on progress. The long report included more in-depth details, indicators and progress made toward each goal. All goals had a 2020 target date. The goals listed here were corporate goals, and the ones that had yellow stars meant that the New Mexico site could contribute to that goal.

*Goal 1: Increase the energy efficiency of notebook computers and data center products 25x by 2020 from 2010 levels.*

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- Ms. Koch said the first goal in product stewardship was about product efficiency. Having energy efficient technology was a positive and good for the environment. She said that Intel New Mexico was not actually engaging specifically in this goal, but she wanted to share this information anyway.

*Goal 2: Implement an enhanced green chemistry screening and selection process for 100% of new chemicals and gases by 2020.*

- Ms. Koch said there was work industry-wide on this issue, with a focus to put strategies in place on the screening mechanism. The next step for Intel was to select and pilot a screening tool. Intel New Mexico did not select which chemicals to use in the manufacturing process. That selection was made at corporate headquarters.
- Green chemistry screening was having the ability to decide which chemicals were more “green” to use versus others. Ms. Koch said she did not have that criteria available, but they were looking for a tool that could compare chemicals and point to which would be effective to use in the manufacturing process and have the better outcome for environmental sustainability. The unit of measure in the report was a computer chip. Ms. Koch said suppliers would need to be engaged because they often have proprietary information about the chemicals. Intel worked in partnership with suppliers, who owned the intellectual property.
- John Bartlit asked to what extent green chemistry screening looked at HAPs and VOCs. Ms. Koch said, in terms of screening, it looked at all chemicals and not just specific families of chemicals.

*Goal 3: Reduce direct greenhouse gas (GHG) emissions by 10% on a per unit basis by 2020 from 2010 levels.\**

- Ms. Koch said greenhouse gas emissions tied into what kind of energy was being used at the site, and if a site was using Renewable Energy Credit (RECs). The New Mexico site purchased RECs from PNM, and paid a premium for it, which helped fund PNM’s renewable energy portfolio. Also, the site looked at the efficient operation of their combustion equipment.

*Goal 4: Achieve cumulative energy savings of 4 billion kWh from 2012 to 2020.\**

- Ms. Koch said since 2012 Intel had saved 1.6 billion kilowatt hours (kWh) across the corporation. Intel had done numerous energy savings projects, including in New Mexico. She said that if they could save one kWh per day, they would get 365 kWh in savings per

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year. Most of these savings occurred in buildings. A project example in Intel New Mexico was taking large compressors and capturing waste heat to introduce heat into hot water loops used for heating purposes, rather than generating steam. Another example was converting fluorescent lights to smart LED lights, which resulted in significant energy savings because of 24/7 operations. The smart lights went dark when no one was present.

- Ms. Koch said Intel New Mexico did not have green roofs on their buildings as a way to harvest energy. Their roofs were rubber layer roofs with rock tops. Dennis O'Mara said he had a silicon roof on his house that reflected away sunlight, which kept the house cooler. He asked if Intel New Mexico had given any thought to that method. Ms. Koch said right now she did not have the funding to replace the roofs but they have looked into it, and this silicon option was a good choice. Mr. O'Mara said he used a company called Fix My Flat Roof, and they did larger jobs, such as at the Inn of the Mountain Gods and common buildings at La Companas. Apparently they had a good reputation, he said.

**Goal:** Increase the energy efficiency of notebook computers and data center products 25x by 2020 from 2010 levels.

**Progress:** On track (data center products), at risk (notebook computers)

**Commentary:** Intel continues to lead the industry in maximizing the productivity and energy efficiency of data center products. Our data center products are on track to meeting our 2020 energy efficiency targets, and are currently 15x more efficient than 2010 volume servers. The client computing market, however, has changed, which impacts our ability to meet this goal. Due to a decrease in demand for 7-10" display devices, and steady demand for high resolution 14-15" display devices, we are at risk of missing our 2020 energy efficiency target for notebook computers.

**Goal:** Implement an enhanced green chemistry screening and selection process for 100% of new chemicals and gases by 2020.

**Progress:** On track

**Commentary:** In 2015, we completed a green chemistry benchmarking effort, and developed the scope of pilot studies aimed at determining effective strategies for implementing green chemistry with our suppliers. Engagement with our suppliers focused on increasing awareness of how green chemistry concepts can be integrated into their businesses. Our next step will be to select and pilot a green chemistry screening tool.

**Goal:** Reduce direct greenhouse gas (GHG) emissions by 10% on a per unit basis by 2020 from 2010 levels. ★

**Progress:** On track

**Commentary:** In 2015, we began using the GHG Protocol market-based method for calculating our Scope 2 emissions. Taking into account our purchase of RECs, our 2015 absolute Scope 1 and Scope 2 emissions basis decreased 22% compared to 2014. Since 2010, decreased 25%, and emissions on a per unit our absolute emissions decreased 34% and decreased 43% on a normalized per unit basis. As a part of our 2015 Climate Change Pledge, we committed to two new goals—to continue our support of green power purchasing, and triple our use of on-site alternative energy by 2020. We plan to report on our progress towards these goals in our next

**Goal:** Achieve cumulative energy savings of 4 billion kWh from 2012 to 2020. ★

**Progress:** On track

**Commentary:** Since 2012, we have achieved cumulative energy savings of 1.6B kWh and remain on track to hit our 2020 energy goal. Our 2015 absolute energy use increased 10% compared to 2014, and our 2015 normalized energy use increased 13% from 2014 through 2015 as we ramped up new factories.

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**Slide 3: A Closer Look at Relevant Goals (cont.)**

*Goal 5: Reduce water use on a per unit basis below 2010 level by 2020.\**

- Ms. Koch said company-wide meeting this goal was a challenge because newer technology used more water, which is reflected in the commentary, although they still believed they could meet this goal company-wide in 2020. However, this did not apply to the New Mexico site, which conserved over 12 million gallons of water in 2015.

*Goal 6: Achieve zero hazardous waste to landfill by 2020.\**

- Ms. Koch said Intel New Mexico's waste went to the Rio Rancho landfill. The New Mexico site did not put their hazardous waste into landfills, but there were some hazardous wastes that could legally be placed in landfills. Intel's goal was to not landfill any hazardous waste. Ms. Koch said Intel New Mexico sent a report to the state annually that described their waste submissions and the associated fees to ensure the state had the infrastructure to manage the generated waste. Intel New Mexico's wastewater discharge went to the Albuquerque Bernalillo County Water Authority.

*Goal 7: Achieve 90% nonhazardous waste recycle rate by 2020.\**

- Ms. Koch said the Intel New Mexico site usually recycled certain nonhazardous waste with a cement plant in Tijeras, because the material was a benefit in the cement manufacturing process, but the cement plant made changes to their process and stopped taking the materials. Therefore, Intel New Mexico had to send this waste to landfills and was well below this goal this year, at around 50%. However, earlier this year, the cement company was back up and running and accepting the recycled waste from Intel New Mexico again.

*Goal 8: Design all new buildings to a minimum LEED\* Gold certification between 2015 and 2020.*

- Ms. Koch said this goal was pertinent to constructing new buildings. Intel New Mexico was not slated to construct any new buildings. Last year, Intel's goal corporate-wide was Silver certification, which they met, so they decided to increase the goal to Gold.

*Goal 9: Establish an 85% "green" Intel ground transportation fleet by 2016.\**

- Ms. Koch said Intel New Mexico didn't have a ground transportation fleet, but they did have security patrol vehicles, which they recently converted from big pickup trucks to hybrid Priuses. They also had a lot of walking patrols.

<p><b>Goal:</b> Reduce water use on a per unit basis below 2010 level by 2020.</p> <p><b>Progress:</b> On track</p> <p><b>Commentary:</b> In 2015, our absolute water withdrawals increased by 7%, while our normalized water withdrawals remained flat. While our normalized water use is 8% lower than our 2010 baseline figure, as our manufacturing processes continue to evolve, we expect them to become more water-intensive, and our water withdrawals may increase. To address this issue, we have put a team of internal experts in place to investigate and develop a comprehensive plan to address our growing water use.</p>	★
<p><b>Goal:</b> Achieve zero hazardous waste to landfill by 2020.</p> <p><b>Progress:</b> On track</p> <p><b>Commentary:</b> In 2015, we sent just 2% of our hazardous waste to landfill, and we are on track to achieve our 2020 goal. From 2014 to 2015, our absolute and normalized hazardous waste generated increased 25% and 50% respectively, primarily due to new manufacturing processes that are more chemical-intensive. However, we were able to find novel recycle, reuse, and treatment technologies to keep these chemicals out of the landfill.</p>	★
<p><b>Goal:</b> Achieve 90% non-hazardous waste recycle rate by 2020.</p> <p><b>Progress:</b> On track</p> <p><b>Commentary:</b> We recycled 82% of our nonhazardous waste in 2015, and are on track to reach our 2020 goal. We generated 15% less non-hazardous waste in 2015 compared to 2014, primarily due to the completion of construction projects. Our normalized non-hazardous waste generated also decreased by 23%.</p>	★
<p><b>Goal:</b> Design all new buildings to a minimum LEED Gold certification between 2015 and 2020.</p> <p><b>Progress:</b> On track</p> <p><b>Commentary:</b> We have achieved LEED certification for over 14.5 million square feet of space in 45 buildings around the world (approximately 25% of our total building space), and are on track to achieve our goal.</p>	
<p><b>Goal:</b> Establish an 85% "green" Intel ground transportation fleet by 2016.</p> <p><b>Progress:</b> On track</p> <p><b>Commentary:</b> In 2015, we worked with our suppliers to increase the number of hybrid vehicles and vehicles with a higher mile-per-gallon rating available to our employees. Approximately 80% of our ground transportation fleet meets our definition for "green" and we are on track to meet our 2016 goal.</p>	★

#### Slide 4: A Sampling of 2015 NM Projects

Ms. Koch said that with this slide she wanted to show the things Intel New Mexico was doing to advance Intel's corporate environmental goals.

1. *Converted fluorescent Lights to LED*
  - Ms. Koch said she had discussed this previously, and it was a significant savings.
2. *Replaced air-water atomizing humidification to air washer (like a swamp cooler) in air handlers*

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- Ms. Koch said that Intel New Mexico had equipment called an “air handler,” which brought fresh air into large commercial buildings. Intel had to condition that air in office buildings and inside the fab clean rooms, and it had to have a certain humidity level. Intel New Mexico changed the process to be more efficient and use less water to get same level of humidification.
3. *Increased reclaim from Ultra Pure Water processing*
    - Ms. Koch said that Intel New Mexico used a process called “ultrapure water,” in which they took water pumped from wells and removed impurities. Over her 26 years at Intel, they continued to make improvements to get more ultrapure water out of the starting water. Improving this process reduced total water demand and the amount of wastewater.
  4. *Adjusted P-trap primer to reduce water consumption*
    - Ms. Koch said the P-trap primer was located under sink that needed to be kept wet to reduce odors. Intel New Mexico used a primer to adjust the water to just the right amount, which allowed them to save water.
  5. *Shutdown excess Chilled Water System capacity*
    - Ms. Koch said they were able to take systems offline and not running it saved energy and water.
  6. *Adjusted water feed to CUB scrubbers*
    - Ms. Koch said similar to the P-trap primer scrubbers had a water feed, which they set appropriately and adjusted seasonally to create the optimal amount of water usage, which reduced water consumption. Some of the adjustments were automated and others were manual.
  7. *Shut-down some and resized other water pumps to reduce power consumption*
    - Ms. Koch said they resized water pumps for different levels of operation.
  8. *Reduced Ultra Pure Water flows to conserve water*
    - Ms. Koch said ultra pure water must flow in a constant loop to the fab. If a tool was not using the water, then the water must go into the reclaim loop, otherwise it would develop bacteria that would harm the product from sitting stagnant. Again, Intel New Mexico made changes in the system to have the necessary yet efficient flow rate.
  9. *Reduced pressure on a utility nitrogen system to reduce compressor energy consumption*  
*HPN2*

- Ms. Koch said they made changes to the system to reduce energy consumption. Another significant energy savings that was not on this slide because it happened in 2016 was that Intel New Mexico shut down a utility plant because having one plant met all their demands instead of two.

### **Slide 5: Additional Information on Potential Emissions Reductions for 2020 Goals**

Ms. Koch said that this was the same slide from last year that correlated topics of interest. For example, some greenhouse gases were VOCs, so a reduction in one could mean a reduction in the other. This slide showed how the local connected with the corporate.

- GHG Emissions Reductions
  - GHG are also reported as VOCs and therefore VOC emissions will also be reduced
  - GHGs from the manufacturing process are routed to scrubber stacks
- Energy Conservation
  - Some energy reduction projects results in less on site fuel use and therefore less emissions – NOx, CO, VOCs, SO2, Particulates, GHG and HAPs
- Green Chemistry Screening and Selection
  - “Green chemistry” involves designing chemical products and processes in ways that avoid the creation of toxics and waste.
  - Intel is co-leading a project through the International Electronics Manufacturing Initiative (INEMI) to evaluate chemical alternative assessment frameworks, methodologies, and tools in the electronics and semiconductor industries.

### **DISCUSSION OF MULTIPLE CHEMICAL SENSITIVITY**

John Bartlit said he called Dr. Ann Campbell, and she was willing to speak with the CEWG anytime about Multiple Chemical Sensitivities (MCS). He also conducted Internet research on the historical dilemmas around the MCS issues and reported on what he had found. These dilemmas represented the status of where things stood on this issue. He said he wanted to lay out the parameters and issues they would run into as the CEWG further delved into MCS. He shared what he learned next.

1. With the current state of knowledge and research, MCS was not recognized as a disease by noted national and global health organizations, such as the Centers for Disease Control (CDC), which included ATSDR, the American Medical Association (AMA) and the World Health Organization (WHO). In pursuit of the CEWG’s mission to improve community dialogue, it was important to gain better understanding of the current status of MCS.

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2. People on all sides of the MCS controversy had economic interests in the outcome. It was neither possible nor useful to limit information to sources that had no economic interests in the issue.
  - a. Manufacturers and industrial users of chemicals involved had economic interests in commercial sales and uses. They also had economic interests in lawsuits related to their sales and use.
  - b. Sufferers of MCS symptoms had economic interests related to the effects their symptoms had on medical expenses, medical insurance, as well as job and housing opportunities. For example, if MCS was not recognized medically, there was no code, which made it difficult for medical insurance. Sufferers of MCS symptoms, along with others, had economic interests related to the costs and payments of Social Security benefits and in actions of the US Department of Housing and Urban Development (HUD) and Americans with Disabilities Act. Social Security recognized some elements of MCS as a potentially disabling disease on a case-by-case basis. Typically, MCS was recognized with housing-related things such as detergent, perfumes, cosmetics, new furniture, etc., so HUD was affected by it. The Americans with Disabilities Act also took in to account some elements of MCS. Of course, all sides had economic interest in the outcome of lawsuits.

Mr. Bartlit said he also noted from his research was that the MCS community had a national foundation, a task force in New Mexico, which involved the NM Department of Health and New Mexico Environment Department.

3. Most of the political history of MCS had occurred in the decades after Intel was in New Mexico and was unrelated to it. The notion existed before this period, but the politics happened at the same time.

Mr. Bartlit said this was just a snapshot of the information on the Internet, which appeared to be endless and included voluminous reports. With the politics at work, it appeared difficult to get MCS recognized as a disease state.

- Mr. Bartlit suggested the following actions, in pursuit of the CEWG's mission to improve community dialogue. If the CEWG was interested in exploring the current status of MCS and to understand more fully what MCS was, he offered these possible next steps:
  1. Contact Peter Kowalski to ask what he and/or the ATSDR (CDC) knew about the current medical and legal standing of MCS and where we might learn more. He said Mr. Kowalski was willing to continue speaking with the CEWG, so they could learn what he knew, and perhaps he could recommend experts to speak with.

2. Gather information from the Internet and other sources such as Ann McCampbell's 24-page booklet and WHO about the current status of MCS. For example, both Ann McCampbell's booklet and WHO address questions such as:
    - i. What is MCS?
    - ii. What causes MCS?
    - iii. How is MCS diagnosed?
    - iv. What is the history of MCS?
- Mr. Bartlit suggested getting and distributing Ann McCampbell's booklet, which had to be paid for, to come up with questions for her presentation. Dr. McCampbell welcomed questions and they would help her to focus her presentation. He also suggested that other members research the Internet to learn more about MCS, since there was an enormous amount of information out there, and the CEWG was just touching the surface of it. Mr. Bartlit asked the group if they wanted to proceed and how.
  - Dennis O'Mara suggested to just have Dr. McCampbell come to speak and not worry about ad approval, especially since having enhanced ads hadn't worked to bring in new participants. Mr. Bartlit clarified to get the booklets first, and soon, and then to prepare questions for her. He said that Dr. McCampbell welcomed this process, and that she could speak in August or September, depending on how fast they got the booklets.
  - John Bartlit said that Dr. McCampbell, because of having MCS, didn't want to come to Corrales because of "spraying," and she suggested having the meeting in Santa Fe, which Mr. Bartlit said would not work for the CEWG. So, they discussed having a meeting by phone or Skype. Mr. Bartlit's suggestion was to read the booklet first, and then to send questions to her that she could address in her presentation.
  - Sarah Chavez suggested learning more about different positions on MCS, especially since medical organizations did not recognize it as a disease state. She thought it would be valuable to understand these different positions first, before the presentation, to be well prepared. She suggested checking in with Peter Kowalski on his views on the issues. She said that CEWG members could research MCS online and then discuss what they learned at CEWG meetings and share the information resources. She said Mr. Kowalski might even recommend other experts to invite to speak. John Bartlit added Dr. McCampbell seemed not to be aware of the ATSDR report.
  - Shannon Beaucaire said there was a proposal to get more information on MCS, share it between meetings, get Dr. McCampbell's booklet, and then discuss what they learned at the next meeting and devise a plan from there. John Bartlit said he could order the booklets and talk to Peter Kowalski "tomorrow," if that's the way the group wanted to go. They would have to figure out how to pay the booklet fee, where to have them

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Prepared for: CEWG

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mailed, and then how to distribute the booklets. Liz Shipley said Intel would pay for the booklets and order 10 booklets at \$4 each.

**ACTION ITEMS:**

- CEWG members will research MCS and share what they learned with the group between meetings by sending to it to Shannon Beaucaire, and then discuss it at the next meeting.
- Sarah Chavez or Shannon Beaucaire would share the information in hard copies with Lynne Kinis.
- John Bartlit will call Peter Kowalski to see what he learned about MCS.
- John Bartlit will send the booklet information to Liz Shipley at Intel to order 10 booklets at \$4 each.

**ADJOURN**

**NEXT MEETING:** August 17, 2016, 5 to 7 pm, Corrales Senior Center.

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