October 14, 2013

Mr. George Davis, Permit Writer  
State of Oregon  
Department of Environmental Quality  
Northwest Region Air Quality Program  
2020 SW 4th Avenue, Suite 400  
Portland, Oregon 97201

Testimony

RE: Proposed Air Quality Permit for Intel’s Semiconductor Manufacturing Plants in Aloha and Hillsboro

Save Helvetia is a 501(c)(4) advocacy organization that advances policies, leaders and actions that protect Helvetia’s treasured agriculture and natural and cultural resources for our region’s present and future generations.

The Greater Helvetia area is approximately 3 to 7 miles north of Intel’s Ronler Acres Fab site. We are approximately 5 miles wide, from N.W. Jackson School Road on the west to N.W. Cornelius Pass Road on the east.

The prevailing winds in this area are south to north from October through April. This puts us clearly in the plume dispersal area of Ronler Acres Fab for the majority of the year. Prevailing winds at the Portland-Hillsboro Airport are available at http://www.wrcc.dri.edu/htmlfiles/westwinddir.html. See NOTE below about prevailing winds studied for odor issue.

Storm weather rains up against the Tualatin Mountains and drains south into our ground water, recharging our aquifer, re-supplying our well water and sub-irrigating our crops. All residents, farms, West Union Elementary School and most businesses are dependent on wells.
We have a range of agricultural operations that produce consumable produce, diary products, world-class grains, seeds and nuts, wines, and farm animals that are consumed locally, nationally, and globally due to the perception of our high quality food products. If our produce and products are contaminated by toxic emissions, they can become dangerous, and/or the perception of them being contaminated could be ruinous to the local and regional agri-business.

We have an elementary school and its grounds are used for physical education as well as extra-curricular sport activities for many children and families across the region. Many cyclists and runners come to Helvetia and use our beautiful rural roads, but these exertions might be dangerous with high levels of air toxics. Due to the nature of our rural area, our residents and workers are typically outdoors, working physically. Our/their health is put at risk by increased air toxics.

To our knowledge, no efforts have been undertaken in our area to provide emergency preparedness in the event of an air toxic calamity. We are aware of no effort to provide preventative education to our community related to the historic emissions emanating from Intel’s Hillsboro Fabs or other fabs. We are aware of no initiation of any good neighbor agreement to assist this community in managing the risks to which we are subjected.

We are dismayed that our state DEQ lacks authority and mission to actively protect our health and the agricultural and natural resources of Helvetia. We are dismayed to hear from DEQ that our federal Environmental Protection Agency is likewise disempowered and industry driven. We are dismayed that the City of Hillsboro pursues an aggressive industrial expansion business plan whose cumulative impact becomes exponentially deleterious to the health and well being of surrounding communities, particularly those “downwind”. Washington County supports this non-sustainable growth plan at the expense of affected communities in the unincorporated areas. While many benefit from the funds that flow from this business model, it clearly conflicts with governments’ primary missions to assure health and safety to respective residents and communities.

For these reasons and in this context, we implore DEQ to condition this proposed permit to maximize our health and safety, to require the latest and most effective technologies and best practices, to require the highest standards and regulations, to require emergency preparedness and prevention education to affected communities, and to require Intel and other emitting corporations to avail themselves of good neighbor agreement negotiations.

We seek an enforceable good neighbor agreement that ties to a Type V permit, which has all the sub-permits within, making it easier to comprehend, monitor and be
transparent to the public. Specifically, we seek Intel’s voluntary compliance to collaborate with the community and DEQ to accomplish the following goals:

1. **Monitor emissions coming directly from the plants’ smokestacks**
   - As noted in the September 22, 2013, Hillsboro Tribune editorial, “the best (and earliest) place to catch the problem is at the source, rather than in a nearby neighborhood where people could be impacted.”
   - Do not perform stack testing when the stack is not operational
   - Stack heights should be 130 feet tall (40 meters) to assist emissions higher into the air and less likely coming to ground

2. **Perform continuous air monitoring of emissions**
   - This will enable early detection of an unusual chemical release
   - Use non-toxic “markers” to better enable periodic, remote monitoring of the plume dispersal. Markers should be varied in their “weight” and tied to the weight of emissions/vocs (volatile organic compounds) so that the plume dispersal modeling embraces both lighter and heavier emissions

3. **Use the most advanced scrubber/oxidizer technologies**
   - The goal is to reduce harmful discharges into the air to as low a level as possible
   - Utilize “Maximum Achievable Control Technology” standards
   - Cease operation/emissions if/when scrubbers and/or oxidizers are “down”

4. **Develop and apply short-term limits on emissions**
   - DEQ needs to put into place short-time limits to prevent a year’s release of emissions in a compressed time, such as a day

5. **Monitoring and testing**
   - It is important for Intel and DEQ to build credibility with the community in this very important effort. Proactively monitoring and testing is an essential step in transparency.
   - DEQ needs to monitor and test the level of emissions from Intel (and other semiconductor fabs in the area) in order to obtain baseline data from which to measure the effects to our community.
   - We seek an independent dispersal modeling that is specific to the geography and meteorological variables that take into account the prevailing winds in the western Tualatin Valley and speaks to variables of air inversions and day versus night emissions
   - We seek a mechanism for independent auditing of the monitoring processes and results
   - We seek a mechanism for odor reporting and testing to help evolve the dispersal model while assuring our freedom from chemical odors.
   - We seek Intel’s collaboration with community-based monitoring efforts, such as the bucket brigade and/or new mothers’ breast milk toxicology project. See www.bucketbrigade.net.
6. Communication

- It is highly important that DEQ and Intel keep the community informed about the processes of testing, monitoring and results of the emissions from Intel’s plants.
- We recommend that Intel create a website with which to communicate ongoing monitoring results to the public
- We recommend that DEQ and Intel collaborate on an assessment of the history of the fluoride omission - with both DEQ and Intel agreeing to release to the public in a timely manner: How did it occur? How was it not caught? What lessons learned? How to prevent it from happening again?
- We recommend that during good neighbor negotiations there be in attendance DEQ permit writers and Intel corporate compliance staff in order to ensure an authentic process.

We look forward to a time when DEQ and other parts of our government and industry collaborate with citizens in communities to assure the publics’ health and safety.

For Save Helvetia,

Robert Bailey
Board of Directors
Save Helvetia

NOTE - about prevailing winds
Following a history of community complaints about odors emanating from the Nature’s Needs composting facility east of North Plains, Washington County purchased a third party, independent assessment of the facility’s odor emissions. The contract and scope of work are available at www.tinyurl.com/NNodormonitoring. The work was performed on March 13 and 14 of 2013. The assessment is available at: http://www.co.washington.or.us/HHS/SWR/Facilities/upload/Sampling-Report-1-Final.pdf
This assessment included an analysis of prevailing winds and the odor dispersal plume with respect to the geography, also identifying other possible sources of odor emissions. While these odors are certainly offensive to our livability, they do not threaten our health and safety as much as the range, type, and quantity of toxic emissions requested under Intel’s permit application. It is, therefore, a notable omission that the City of Hillsboro, Washington County, Intel and the State DEQ have so far declined to request any assessment of the dispersal plume of toxic emissions using local prevailing winds vis-a-vis the geography of the Tualatin Valley.
cc:
Senator Wyden
Senator Merkley
Congresswoman Bonamici
State Representative Gallegos
State Representative Unger
State Senator Johnson
State Senator Starr
City of Hillsboro Mayor Willey
Washington County Commissioners
Oregon Environmental Quality Commission Chair Blosser
Governor Kitzhaber
Hillsboro Chamber of Commerce
Intel