



October 28, 2010

**Certified Mail No. 7008 1830 0002 5626 9276**  
**Return Receipt Requested**

Steve Thompson, Section Chief  
Air Enforcement Section  
United States Environmental Protection Agency  
Region 6  
1445 Ross Avenue, Suite 1200  
Dallas TX 75202-2733

**Re: Intel Corporation Scrubber Testing Proposal**

Dear Mr. Thompson:

Intel Corporation (Intel) has reviewed the Environmental Protection Agency's (EPA) National Enforcement Investigation Center (NEIC) report NEICVP0879E01, and the EPA Region 6 Inspection Report Addendum (the "Report") areas of concern. As was discussed in our October 7<sup>th</sup>, 2010 meeting with EPA and the New Mexico Environmental Department (NMED) Air Quality Bureau (AQB), Intel has provided a proposed scrubber testing plan to address the following areas of concern listed in the Report including A, B, C, I, J, K, L, M, N, and O. Intel will provide additional information in a future submittal regarding the other areas of concern.

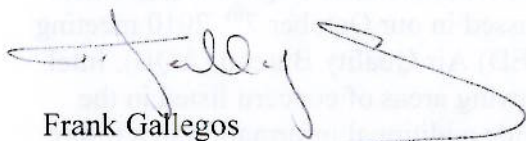
- Intel will perform stack outlet testing based on the methodologies described in the site's air permit for four F11X Fab acid gas scrubbers in Q1'11, using FTIR (EPA Method 320) for HF, HCl and EPA Method 26a for Cl<sub>2</sub>. The F11X Fab scrubbers were selected as a representative sample of the overall manufacturing operations for the site. The tools connected to these scrubbers represent a mix of manufacturing steps from different process areas (e.g. etch, thin films, lithography, etc.) and emit the mix of HAPs that are typical of Intel's emissions.
- Each stack outlet will be tested for a minimum of 8 hours.
- During each outlet test session, another FTIR will simultaneously run on the scrubber inlet for the entire 8 hour duration.
- There are hundreds of individual manufacturing tools that generate emissions, each of which essentially acts as a batch operation. Therefore, at any instant in time there is a large number of possible combinations of tools that may be emitting at that time. Intel believes that an 8 hr period (repeated on 4 different scrubbers) will be sufficient to capture all of the process steps that make up the manufacturing operation and will provide information on scrubber efficiency at various inlet conditions.
- In addition, Intel proposes to use an FTIR device to monitor various scrubber inlets around the site for a period of 3 weeks. This monitoring would be performed continuously over the 3 week period, but would monitor one scrubber inlet at a time and would regularly rotate among different scrubbers. We believe this information would be useful in characterizing the typical range of inlet conditions the scrubbers are expected to see.
- HCl and HF will be monitored by FTIR (EPA Method 320).

- Cl2 will be monitored by EPA Method 26a.
- Inlet and outlet flow rates will be measured using EPA Method 1.
- Intel will monitor and record pH and water recirculation rate for each scrubber during the testing period.
- After collection of the inlet and stack outlet data, HF, HCl and Cl2 removal efficiency of the total site scrubber system will be calculated by the following equation.
  - Overall site scrubber system efficiency =  $(1 - (\text{total lbs. out of all 4 stacks}) / (\text{total lbs. in to all 4 stacks})) \times 100$
- Upon agreement between NMED, EPA and Intel on this test plan and efficiency calculations, Intel will complete a NMED Universal Test Notification and Report Form.

Intel believes that the scrubber removal efficiencies currently used are conservative but agrees that current testing will help validate these removal efficiencies and other areas of concern noted in the Report. Intel would like to receive agreement from NMED and EPA on the proposed testing plan and efficiency calculation methodology prior to implementing the testing program. As we discussed in our recent meeting, Intel is very interested in working with EPA and NMED to develop a cooperative solution to resolve the various areas of concern.

Please contact me if you have any questions or need any additional information.

Sincerely,



Frank Gallegos  
NM Site Environmental Health & Safety Manager

cc: Mary Uhl, Air Quality Bureau Chief, NMED