Introduction

This is the 2011 Second Quarter Progress Report for the Intel Ocotillo Environmental Excellence Program. The Stakeholder Team consists of representatives from Intel, the U.S. Environmental Protection Agency, the Arizona Department of Environmental Quality, Maricopa County Air Quality Department, the City of Chandler, the Gila River Indian Community, and Community Members.

Q2/’11 Performance Summary

Three items were noted in the Exceptions/Inspection section of this report. Environmental indicators reflect performance better than target goals and air emissions were below plant site emission limits. Additional details can be found in this report.

Contact / Report Information

If you have any questions about this report, please call: Len Drago (480) 715-0132, e-mail: leonard.c.drago@intel.com or Sean Aldrich, (480) 715-6528, e-mail: sean.d.aldrich@intel.com. Additional information about Intel’s Environmental Leadership results is listed on Intel’s world wide web:

http://www.intel.com/intel/other/ehs/projectxl/index.htm

First time readers may wish to refer to the Glossary of Terms and respective acronyms located at the end of the report.

- The data presented in this report shows Q2/’11’s progress toward the goals. The recycling percentage goal attainment is calculated using amount of materials recycled for the year divided by the amount of material generated for the year multiplied by 100 percent. Plant Site Emissions Limits (PSELs) are calculated over a rolling 12-month period (i.e., any consecutive 12 months of emissions must be below the PSEL).
• Volatile Organic Compounds (VOCs), Organic Hazardous Air Pollutants (HAPs), and Inorganic Hazardous Air Pollutants (HAPs) emissions correlate with the level of equipment installation and production activities.

• Nitrogen Oxide (NOx), Carbon Monoxide (CO), Sulfur Dioxide (SO₂), and Particulate (PM10) emissions are from sources of combustion (boilers, emergency generators) and correlate to building size and climatic conditions.

• Intel’s quarterly reports are designed to promote environmental awareness and provide real-time information to the public about Intel’s progress toward meeting the environmental goals.

• Written comments for the data graphs may be found at the end of this report under COMMITMENTS.
SOLID WASTE RECYCLED

Reporting period: April 1 - June 30, 2011

Percent recycled for quarter: 91%
Percent recycled year-to-date (YTD) 89%

4,265 TOTAL TONS SOLID WASTE RECYCLED IN Q2 2011
TOTAL CHEMICAL WASTE RECYCLED

Reporting period: April 1 - June 30, 2011

Percent recycled for quarter: 98%
Percent recycled year-to-date (YTD): 98%

1,904 TOTAL TONS
TOTAL CHEMICAL WASTE RECYCLED IN Q2 2011

SITE WIDE WATER CONSERVATION

Reporting period: April 1 - June 30, 2011

Percent water conserved for quarter: 57%
Percent conserved year-to-date (YTD): 54%

Water Flow Details:
- Water Recycled Internally 1.12 MGD
- Reclaimed Wastewater Used 2.88 MGD
- Water Sent to Chandler RO for Groundwater Recharge 1.09 MGD
- Incoming City Water 4.98 MGD

MGD = Million Gallons Per Day (averaged over the quarter)

Water Recycled + Reused + Recharged
All Water Used

\[
\frac{1.12 + 2.88 + 1.09}{1.12 + 2.88 + 4.98} = \frac{5.09}{8.98} = 0.57 \times 100\% = 57\%
\]
**VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS**

Reporting period: April 1 - June 30, 2011

VOCs in tons for quarter: 7.0

VOCs in tons (12-month rolling summation): 23.3

Note: The sum of the quarterly data may not add to 100 percent of the annual total due to rounding.

**TOTAL HAZARDOUS AIR POLLUTANTS (HAPs) EMISSIONS**

Reporting period: April 1 - June 30, 2011

Total HAPs in tons for quarter: 1.0

Total HAPs in tons (12-month rolling summation): 3.3

Note: The sum of the quarterly data may not add to 100 percent of the annual total due to rounding.
NITROGEN OXIDE (NOx) EMISSIONS

Reporting period: April 1 - June 30, 2011

NOx emissions in tons for quarter: 6.0

NOx emissions in tons (12-month rolling summation): 29.9

Note: The sum of the quarterly data may not add to 100 percent of the annual total due to rounding.

CARBON MONOXIDE (CO) EMISSIONS

Reporting period: April 1 - June 30, 2011

CO emissions in tons for quarter: 7.9

CO emissions in tons (12-month rolling summation): 29.3

Note: The sum of the quarterly data may not add to 100 percent of the annual total due to rounding.
PARTICULATE (PM10) EMISSIONS

Reporting period: April 1 - June 30, 2011

PM10 emissions in tons for quarter: 1.0

PM10 emissions in tons (12-month rolling summation): 3.4

Note: The sum of the quarterly data may not add to 100 percent of the annual total due to rounding.

SULFUR DIOXIDE (SO₂) EMISSIONS

Reporting period: April 1 - June 30, 2011

PM10 emissions in tons for quarter: 0.05

PM10 emissions in tons (12-month rolling summation): 0.3

Note: The sum of the quarterly data may not add to 100 percent of the annual total due to rounding.
SARA TITLE III (FORM R) SUMMARY FOR INTEL OCOTILLO SITE (OC)
Reporting period: January 1 – December 31, 2010

2010 OC SARA Title III (Form R) Summary

- Releases (2.5 Tons)
- Recycled (Offsite) 10.54%
- Treated (Onsite) 24.97%
- Treated (Offsite) 24.86%
- Energy Recovery (Offsite) 39.25%
- Release to the Environment 0.38%

2010 OC Releases vs. Transfers Total Tons

- Transfers (667 Tons)
- Releases (2.5 Tons)
EXCEPTION / INSPECTION REPORTING

1. Agency inspection(s) this quarter.
   Yes [ X ]   No [ ]
   If yes, date and agency performing the inspection:

   Agency: Maricopa County Air Quality Department
   Date: April 27, 2011
   Type of inspection: County inspector arrived onsite to conduct a dust control inspection with no issues.

   Agency: City of Chandler
   Date: June 2, 2011
   Type of inspection: City inspected the Fab 42 project regarding erosion and sediment control requirements with no issues.

   Agency: Arizona Department of Environmental Quality
   Date: June 8, 2011
   Type of inspection: ADEQ inspected the Fab 22 solvent room flash fire incident, resulting in no agency findings.

   Agency: Maricopa County Air Quality Department
   Date: June 10 & 15, 2011
   Type of inspection: County inspector arrived onsite to conduct an air quality permit compliance inspection with no issues.

2. Reportable quantities released this quarter.

   Agency: National Response Center, Arizona Department of Environmental Quality, Arizona Emergency Response Commission, and Local Emergency Planning Committee
   Date: 6/7/11 (Fab 22 Solvent Room)
   Chemical spilled: Reported a potential release of hazardous waste to air due to a flash fire in a waste container as required by RCRA. Through the investigation, it was determined that approximately 15 pounds were released to the air which was below the reportable quantity of 100 pounds.

3. Has a shutdown or change in type of a pollution control device occurred this quarter?
   Yes [ X ]   No [ ]
   If yes, provide the following information:

   Date: 6/22/11
   Nature of shutdown: Fab 32 Acid Fume Scrubber Malfunction
   Maximum estimated emissions: 0.55 pounds (0.000275 tons)

   The Fab 32 Acid Fume Scrubber #3 experienced a loss of water flow across the scrubber due to low water levels in the scrubber sump. This occurred because the scrubber went into blowdown, and the level transmitter in the sump failed. Therefore the make up valve never opened to add water to the sump, and the
blowdown valve didn’t close. This resulted in 1 hour and 37 minutes of unabated emissions of 0.55 pounds (0.000275 tons) from the scrubber. The Plant Site Emissions Limit is 22 tons of Hazardous Air Pollutants (HAPs) per year, therefore an exceedance did not occur during this event. A notification and follow-up emission report was provided to Maricopa County Air Quality Department (MCAQD) on June 23, 2011 regarding this event.

Date: May 5th 2011
Nature of shutdown: Loss of Power to Fab 12 RCTOs
Maximum estimated emissions: 27.07 pounds (0.0135 tons)

Fab 12 experienced a loss of power to its three Rotary Concentrator Thermal Oxidizers (RCTOs) which abate Volatile Organic Compound (VOC) emissions. The power loss was due to a bird landing on a transformer in the switchyard which caused an electrical fault and shut down the power to the Fab inclusive of the RCTOs for Fab 12. This resulted in 86 minutes and 27.07 pounds (0.0135 tons) of unabated VOC emissions from the abatement devices. The Plant Site Emissions Limit for VOC emissions is 90 tons per year, therefore an exceedance did not occur during this event. A notification and follow-up emission report was provided to Maricopa County Air Quality Department (MCAQD) on May 5, 2011 regarding this event.
OTHER ACTIVITIES THAT BENEFIT THE ENVIRONMENT

Trip Reduction Program

In 2011, Intel employees completed 15th annual trip reduction electronic survey for the Ocotillo campus and has submitted the plan to Maricopa County. 60% of the Ocotillo employees completed the survey which is used by the county to track alternate commute mode users. The results for the Single Occupancy Vehicle (SOV) Trip Rate were 69.96% and the Single Occupancy Vehicle Miles Traveled Rate was 64.31%. Options under the Rideshare program include compressed workweeks, telecommuting, car pooling and driving alternate fuel vehicles all of which help to reduce the single occupancy vehicle rate. Intel reimburses employees for up to $30.00 per month for van pool and bus use. Emergency ride homes are subsidized at 100% for employees who use rideshare programs. Preferential parking is provided for car pool usage.

Audubon Arizona’s annual Migration Celebration at the Rio Salado Audubon Center

On April 9, 2011 Intel Ocotillo employees volunteered their time at Audubon Arizona’s annual Migration Celebration at the Rio Salado Audubon Center. The event was geared at families and encouraged children to explore their surroundings and gain a greater understanding and appreciation for Arizona’s native flora and fauna. There were arts and crafts, live animals, interactive displays, and presentations. The event took place on a rainy, spring day but a great time was still had by all!
GLOSSARY OF TERMS

CARBON MONOXIDE (CO) - CO is defined in Section 302, Subsection W of the United States Clean Air Act, as carbon monoxide. This is a combustion emission produced when fossil fuel is burned (oxidized) incompletely.

ANNUAL REPORT - This is a summary of progress for the previous calendar year and is published on April 30.

QUARTERLY PROGRESS REPORT - This is a progress report that is published by Intel on the following schedule which documents progress against its goals:

<table>
<thead>
<tr>
<th>REPORTING PERIOD</th>
<th>DATE PUBLISHED</th>
</tr>
</thead>
<tbody>
<tr>
<td>January, February, March</td>
<td>By May 31</td>
</tr>
<tr>
<td>April, May, June</td>
<td>By August 31</td>
</tr>
<tr>
<td>July, August, September</td>
<td>By November 30</td>
</tr>
<tr>
<td>October, November, December (included as part of the annual report)</td>
<td>By April 30</td>
</tr>
</tbody>
</table>

HAZARDOUS AIR POLLUTANTS - Hazardous Air Pollutants (HAPs) refers to the 189 chemicals and chemical categories listed in section 112(b) of the United States Clean Air Act. Under the Act, a major source of HAPs is defined as one that emits 10 tons/yr. of any single chemical on the list, or 25 tons/yr. of any combination of these chemicals.

HAZARDOUS MATERIALS MANAGEMENT PLAN (HMMP) - An emergency plan required by the City of Chandler for all operations, which store hazardous materials above a certain quantity on-site.

NITROUS OXIDES - In accordance with the definition in section 302, subsection V of the United States Clean Air Act, NOx refers to oxides of nitrogen. The oxides of nitrogen typically emitted from combustion processes are nitrogen monoxide (NO) and nitrogen dioxide (NO₂).
OTHER ACTIVITIES THAT BENEFIT THE ENVIRONMENT - Intel has committed to voluntarily engage in other activities, which may connect back to programs implemented by Intel Arizona and/or Intel’s corporate programs. The items that will be reported on include:

- Environmental mentoring/education
- Donation of equipment
- Environmental activities with suppliers
- Energy Conservation
- Transferability


PARTICULATE MATTER (PM10) EMISSIONS - Airborne particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM10) as defined in 40 CFR 51.100(qq).

PLANT SITE EMISSIONS LIMITS (PSEL) - The air permit establishes PSELs for emissions (tons per year (tpy)) of volatile organic compounds (VOCs/49 tpy), oxides of nitrogen (NOx/49 tpy), carbon monoxide (CO/49 tpy), particulate matter of 10 microns or smaller (PM10/10 tpy), sulfur dioxide (SO2/5 tpy), combined organic hazardous air pollutants, (HAPs/10 tpy), combined inorganic HAPs (10 tpy), sulfuric acid (1 tpy) and phosphine-also an inorganic HAP(1 tpy).

REGULATORY AGENCIES - The following are the regulatory agencies who participate in the Intel Ocotillo Environmental Excellence Stakeholder meetings:

ADEQ - Arizona Department of Environmental Quality  
City of Chandler  
EPA - U.S. Environmental Protection Agency  
MCAQD - Maricopa County Air Quality Department

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) - Refer to the statutes and promulgated EPA regulations in 40 CFR 260 through 282 which address the generation, storage, treatment and disposal of hazardous waste.
**REVERSE OSMOSIS (RO)** - Reverse Osmosis is a high-pressure filtration process which separates dissolved salt and minerals from water, using a membrane. Clean water passes through the membrane, and the salt and minerals are rejected.

**SOLID WASTE RECYCLE** - This includes materials that are designated as non-hazardous waste, based upon EPA’s definitions under the Resource Conservation and Recovery Act, which include such materials as, plastics, aluminum, glass, wood, pallets, metal, cardboard, etc. The percent recycled is calculated by dividing the quantity of materials within this category that are sent to beneficial recycle by the total volume of solid waste shipped off-site.

**SULFUR DIOXIDE (SO$_2$)** - This is an oxide of sulfur, which is emitted during the combustion of fossil fuels.

**SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) - TITLE III** - Refers to the statutes and promulgated EPA regulations, which address Emergency Planning and Community Right-to-Know.

**TOTAL CHEMICAL WASTE RECYCLE** - This category includes used chemical materials, which are collected for the purpose of returning them back into beneficial reuse via recycling, re-use, reclaim or fuel blending. The percent recycled is calculated by dividing the material in this category sent for beneficial reuse, divided by the total quantity of chemical waste generated.

**TOTAL DISSOLVED SOLIDS** - A measurement of the salt and mineral content in water.

**VOLATILE ORGANIC COMPOUNDS** - Volatile Organic Compounds (VOCs) are any compound of carbon which participate in atmospheric photochemical reactions, except those which are specifically excluded, as defined in 40 CFR 51.100(s).

**WATER CONSERVATION** - Efforts to Reduce, Reuse or Recycle water to avoid the use of the City of Chandler’s drinking water supply.