

November 7, 2007

Certified Mail No. 7005 0390 0001 6087 5689
Return Receipt Requested

Richard Goodyear, P.E.
Permit Programs Manager
Air Quality Bureau
New Mexico Environment Department
P.O. Box 26110
Santa Fe, New Mexico 87502-6110

Re: Permit No. 325-M-9-Technical Permit Revision – Thermal Oxidizers

Dear Mr. Goodyear,

Per discussions with Jay Stimmel (NMED), Intel is submitting this technical permit revision for the replacement and relocation of all five thermal oxidizers at the site to a central location east of the Central Utilities Building (CUB) in accordance with 20.2.72.219.B.1.f NMAC. Even though they function virtually the same, the replacement units will operate at a different temperature and have different stack parameters. In addition, Intel is submitting ambient air quality modeling to demonstrate that emissions from the site after the relocation and replacement not cause ambient air quality standards to be exceeded.

Specifically, Intel intends to replace the existing Durr thermal oxidizers with similar equipment manufactured by Munters Corporation-Zeol Division. The Munters thermal oxidizers operate essentially the same as the Durr units; both units adsorb volatile organic compounds (VOCs) onto a zeolite disk or rotor to concentrate the solvents and then desorb the solvents into an oxidizer for combustion. The Munters units will meet the same overall VOC removal efficiency of at least 97%. One difference is that the Munters units have a separate stack for the concentrator and the oxidizer portions of the unit. The concentrator and the oxidizer stacks are combined in the Durr units into one single stack. Munters are designed with separate stacks to protect the equipment during emergency shutdowns by preventing hot oxidizer exhaust from traveling back to the rotor. The Munters units also require that the oxidizer is operated at an average temperature of 1385°F +/- 15°F to maximize destruction of the volatile organic compounds while minimizing the generation of combustion pollutants.

The stack parameters below are for the Munters unit oxidizer stack which contains the combustion pollutants included in the dispersion modeling.

Stack Height (meters)	Exhaust Temp. (K)	Exit Velocity (m/s)	Stack Dia. (meters)	Oxidizer Operating Temperature (°F)
23.2	547	4.2	0.46	1385 +/- 15

As discussed in the open house on October 15, 2007, the community has requested that Intel consider increasing the stack height of these units. The attached modeling assumes the stack heights at 23.2 m, which is the height of the stacks that are closest it. Intel is currently evaluating whether there are any operational impacts with an increased stack height and whether any Rio Rancho ordinances impact a decision on stack height. Additionally, Intel expects to discuss this further at the monthly Community Environmental Working Group (CEWG) meeting before deciding how to proceed. Intel requests that a final decision on whether to increase the proposed stack height not delay NMED's processing of this revision and be made outside of this technical permit revision process. Intel will notify NMED by letter of the final decision on the stack height and agrees to perform any additional modeling NMED deems necessary.

As discussed with Mr. Stimmel, Intel believes that the only permit condition requiring modification for the Munters thermal oxidizers is condition 4.C.vi, which specifies the minimum operating temperature for the oxidizers. All other conditions regarding the operation, testing, recordkeeping, reporting, and emissions limits should remain the same.

Pursuant to 20.2.72.219.B.6 NMAC, Intel has provided notice by certified mail to all municipalities, Indian tribes, and counties within a ten-mile radius of the site. Public notice has been submitted for publication and copies will be sent to NMED separately. Pursuant to 20.2.75.10.A NMAC enclosed please find a check in the amount of \$500.00 for the permit-filing fee. If you have any questions or need additional information, please contact Sarah Chavez at (505)794-4917.

Sincerely,

Frank Gallegos
NM Site Environmental Health and Safety Manager

Enclosures:
Ambient Air Quality Modeling
Certification

The modeling files are included on CD