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permit file

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RECEIVED

NOV 2 1994

November 2, 1994

Division of Air
Resources Management

By Facsimile and U.S. Mail

Mr. Ernest Frey, Director
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Northeast District
Department of Environmental
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Jacksonville, Florida 32256-7577

Mr. Alton W. Yates, Director
Department of Regulatory &
Environmental Services
City of Jacksonville
Suite 412
421 West Church Street
Jacksonville, Florida 32202-4111

RE: D-Graphics

Dear Gentlemen:

In our continuing review of current practices at the D-Graphics facility, two issues dealing with lower explosive level (LEL) detection and control processes have been found. The 1984 permit application states the following:

The press ductwork will be altered to recirculate up to 80 percent of the exhaust air to build up the LEL concentration to approximately 10 percent. LEL controls will regulate the recirculation air quantities to prevent excessive vapor concentrations. Normal press operation with 80 percent recirculation will produce approximately 10 percent LEL, which is a midpoint operating condition for the downstream equipment. As the LEL exceeds 10 percent, the recirculation air will start to reduce and if the LEL were to exceed 20 percent, the dampers would cycle to the purge position and vent directly to atmosphere due to safety considerations.

The LEL controls will automatically stop the press through electrical interlocks when the 20 percent LEL condition is reached since this should only occur in the event of a major VOC spill or equipment failure.

Neither of these systems, as they were described above, are in place, nor does it appear that they ever were. Instead, alternative, equally effective systems were installed to control the explosive level

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to the incinerator and to protect the catalytic bed from high VOC levels. The LEL monitor does exist, but it is not interlocked with controls.

The recirculation rate is controlled by dampers that have been fixed in position based on air balancing and destruction test results. It does not appear the automatic controls were ever installed on these dampers. The practice of fixed damper positions in systems like the one at D-Graphics is very typical, based on discussions with Demtrol Systems, the manufacturer of the incinerator.

In place of the high LEL shutdown system, the catalytic incinerator has a high bed temperature alarm that alerts the operators to the condition. The operators will initiate an orderly shutdown of the printing press once they have verified a high bed temperature condition. It appears that the high bed temperature alarm has been in place since the start-up of the incinerator. An orderly press shutdown is a much safer approach in terms of hazards and in terms of the environment. The practice of an orderly shutdown due to high bed temperature versus an electrical interlock is also common practice in this industry per Demtrol Systems.

The Company's technical staff is of the opinion that these existing systems are very effective in controlling VOC incineration and protecting the catalyst from high explosive concentrations.

This letter is part of the Company's attempt to keep your respective agencies totally up to date on our comprehensive review. Should you have any questions, please let us know.

Sincerely,

Terry Cole for

Michael C. Farrar
Vice President
Environmental and
Governmental Affairs

c: Howard Rhodes
Jeff Braswell
Pete Fodor
Steve Pace
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