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EPA East – Room 6428 Attn: Section 8(e)
Office of Pollution Prevention and Toxics
US EPA
1200 Pennsylvania Avenue NW
Washington DC 20460-0001

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RE: TSCA 8(E) SUBSTANTIAL RISK NOTICE ON: 1-Butanesulfonylfluoride, 1,1,2,2,3,3,4,4-octafluoro-4-[(trifluoroethenyl)oxy] (CAS: 88190-28-7)

Dear Sirs:

3M has received preliminary data for a 28-day oral toxicity study in rats conducted with a research and development chemical intermediate 1-Butanesulfonylfluoride, 1,1,2,2,3,3,4,4-octafluoro-4-[(trifluoroethenyl)oxy] (CAS: 88190-28-7) indicating neurological, kidney, liver and male secondary sex organ effects.

The study was conducted by Aventis Pharma Deutschland, GmbH. Sprague Dawley rats were given either 0, 3, 15, 60 or 240 mg/kg/day doses of 1-Butanesulfonylfluoride, 1,1,2,2,3,3,4,4-octafluoro-4-[(trifluoroethenyl)oxy] by oral gavage for 28 days. A 14-day recovery period without compound administration was included for the 0 and the 240 mg/kg/day dose groups.

Uncoordinated or stilted gait and a hunched posture was observed in the 15 mg/kg/day dose group beginning on day 15 of the study. A 3 mg/kg/day dose group was initiated approximately 3 weeks after the other dose groups due to these effects. Stilted gait and squatting posture have been observed in the 3 mg/kg/day dose group, starting on the 23rd day of dosing.

No animals died during the dosing phase of the study. One male rat in the 240 mg/kg/day dose groups was found dead on day 13 of recovery. At necropsy, gross observations included discolored kidneys in 3 of 5 males and in 1 of 5 female rats given 15 mg/kg/day, and in the higher dose groups. Liver and intestinal effects were observed in the 240 mg/kg/day dose groups. Gross histopathologic evidence of male secondary sexual organ abnormalities were noted at necropsy in the 240 mg/kg/day recovery group animals. The kidney and liver effects observed at the end of the

dosing period were, for the most part, no longer visible in the 240 mg/kg/day recovery group.

The study is not complete at this time. Necropsy of the low dose group is in progress, and an additional dose group of 0.3 mg/kg/day is planned. A final report will be forwarded to EPA when received.

Please contact Andrew Seacat (651-575-3161) if you have any questions or if we can provide additional information.

Sincerely,

Larry R Johnson

Dr. Larry R. Johnson
Director, Corporate Toxicology and Regulatory Services