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FYI-0805-01378

TSCA Confidential Business Information Center (7407M)
 EPA East - Room 6428 Attn: FYI
 U.S. Environmental Protection Agency
 1200 Pennsylvania Avenue, NW
 Washington, D.C. 20460-0001



RE: Supplemental Submission
 TSCA 8(e) FYI Notice - 0804-01378

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The General Electric Company (GE) submits the following corroborative data on Ammonium Perfluorooctanoate (APFO) CAS# 3825-26-1, the ammonium salt of Perfluorooctanoic Acid (PFOA) CAS# 335-67-1.

The attached data confirms and is consistent with data embodied in numerous reports, studies, draft risk assessments, and related manufacturer and chemical information found in EPA's TSCA 8(e) and FYI web site: www.epa.gov/oppt/tsca8e/doc/pacess.htm, PFOA Docket (#OPPT-2003-0012), and the Society of the Plastics Industry, Inc. (SPI) web-site www.PFOA-facts.com, respectively. None of the information provided within this FYI Notice is considered to represent new information, or information that would substantially change or alter the current understanding of any risk posed by APFO or PFOA to human health or the environment. However, given EPA's interest in this substance and its ongoing review, GE is submitting its data on detectable levels of PFOA in polytetrafluoroethylene (PTFE) based resins, dispersions and related high temperature processing releases.

The data was generated under two different processing scenarios, and summarized as follows:

Processing Scenario 1

GE, through its Energy (GE Energy) business, acquired BHA Technologies, Inc. (BHA), headquartered in Kansas City, Missouri, on August 31, 2004. BHA is currently a wholly owned subsidiary of GE.

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BHA manufactures and markets "expanded" polytetrafluoroethylene (ePTFE) membrane-based products. BHA purchases raw PTFE fluoropolymer resin (#601A) from DuPont and processes it through a variety of steps (some of which at high temperature) to create ePTFE. BHA does not independently purchase any APFO/PFOA chemical or chemical formulation for use in these operations.

ePTFE membranes are laminated to a variety of substrate media. These laminates are then manipulated into a variety of finished products including industrial air filtration cartridges, military protective wear, out-door performance apparel and other industrial end-use applications.

GE has determined through its business acquisition integration process that BHA sampled, analyzed and detected low levels of PFOA in these media and select processing locations within it's facilities in early 2004. Process air sampling was conducted at fixed stations utilizing OVS tubes. NOTE: this sampling and resultant data was NOT industrial hygiene (IH) air samples from pumps donned on employees.

The work was initiated as a result of published reports on Teflon®. BHA conducted this work in the interest of ensuring it was employing appropriate engineering controls and PPE to minimize the presence of PFOA/APFO in its facilities, and potential for exposure to it's own employees in consideration of the fact that there were no published regulatory standards.

Specific BHA data are summarized in the table below, with the actual laboratory report provided as Attachment A.

BHA PFOA Data Summary Table

<u>Sample Type</u>	<u>Value</u>	<u>UOM</u>	<u>Comment</u>
Bulk PTFE Resin	155 & 561	ppb	Stored at approx 45 F
Laminated Fabric samples	31 & 155	ppb	
ePTFE membrane	83.9	ppb	
Process Air Sample	<0.8	ppb	Extruder Head (room temperature)
Process Air Sample	4.6	ppb	Hot Drum (approx 260 F)
Process Air Samples	0.4 to 1.3	ppb	Laminators (approx 730 F)
Process Air Samples	<0.4	ppb	Dry Cans / Steam Drums (approx 650 F)
Process Air Sample	<1.4	ppb	Wicking Cabinet (approx 95 F)

Process Air
Samples 0.5 to 0.6 ppb Tenter Frames (approx 400 – 500 F)

Wipe Samples 834 & 2560 ppb Laminator Exhaust Hood Wipe Samples

Conclusion on Scenario 1

BHA results confirm that manufactured PTFE resin for commercial sale/distribution contains residual levels of APFO (as determined through the PFOA analyses), and that APFO sublimates under elevated processing temperatures.

Processing Scenario 2

GE operates a plastic resin manufacturing facility in Ottawa, IL, in which it manufactures a variety of "thermoplastics". Many of the thermoplastic formulations require the incorporation of T-SAN (Teflon-styrene acrylonitrile co-polymer) for anti-drip, wear resistance and lubrication properties. The Ottawa, IL facility manufactures T-SAN from a number of raw materials including a tetrafluoroethylene homopolymer (CAS# 9002-84-0) dispersion [Algoflon D60 27 supplied by Solvay-Solexis, Inc. – MSDS provided as Attachment B] comprising <0.5% by weight of Ammonium Perfluorooctanoate as one of its dispersion agents.

The commercial manufacture of T-SAN at the Ottawa, IL facility began in approximately the first quarter of 2003. This manufacturing was re-located from a non-US facility. Within the start-up phases of the T-SAN manufacturing process, process flow wastewater calculations were completed, and included the collection and laboratory testing of one process wastewater sample. This sample was not of treated site effluent (treated wastewater). The result of this sampling identified PFOA at 0.074 ppb (74000 ng/L) in the sampled process wastewater. Full laboratory results are provided as Attachment C.

Conclusion on Scenario 2

Ottawa results confirm that APFO is soluble in water (conversion to PFOA), and is simply a processing aid and not a reactant in the manufacture of organic polymers.

Questions regarding this submission should be directed to me.

Sincerely,



Mark G. Herwig, Manager
CMP Programs
GE Corporate Environmental Programs

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