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May 30, 2009

Merrily A. Gere  
Connecticut Department of Environmental Protection  
Bureau of Air Management  
79 Elm Street  
Hartford, CT 06106-5127

Re: Notice of Intent to Amend the Regulations of Connecticut State Agencies and to Revise the State Implementation Plan for Air Quality: 3/25/2009 Draft Section 22a-174-20

Dear Ms. Gere:

This response is provided in keeping with the posting on the Connecticut Department of Environmental Protection (DEP) website soliciting comment on the referenced proposed amendments to 22a-174-20. United Technology Corporation comments are:

**22a-174-20(ii)**

UTC appreciates that the DEP recognizes the flight safety implications of subjecting aerospace facilities to another set of non-specific requirements such as those in Section 20(ii). The exemption included in Section 20(ii)(3)(A)(iv), "At an aerospace manufacturing and rework facility where cleaning solvent is used in accordance with 40 CFR 63", was seemingly included to ensure that such sources were not subject to a contradictory set of requirements. UTC operates multiple aerospace manufacturing and rework facilities in Connecticut, some of which are subject to the Aerospace NESHAP and some of which are not. UTC requests that the DEP ensure that language is included to clearly, unequivocally exempt from this section the non-major aerospace manufacturing and rework facilities that have the same flight safety and governmental requirements as the sources subject to the Aerospace NESHAP.

The exclusion of all aerospace sources from the regulation would be consistent with the model for the proposed general solvent cleaning language, the USEPA Industrial Cleaning Solvents CTG, and its reference regulation, the Bay Area Air Quality Management District solvent cleaning rule. Neither the EPA guidance or BAAQMD regulation include aerospace operations (with a brief mention in the BAAQMD of spray equipment cleaning), and we believe Connecticut should be equally consistent.

If Connecticut DEP chooses not to be consistent with the Industrial Cleaning Solvent CTG, then we strongly suggest that the DEP include a clarification that confirms that Aerospace facilities that use cleaners "... in accordance with 40 CFR 63" are exempt whether or not they are currently subject to the regulation based on their non-major status.

Section 20(ii)(3)(A)(viii) provides an exemption "In cleaning, including surface preparation prior to coating, necessary to meet a standard or specification of the United States Department of Defense". Our Sikorsky facilities in Connecticut do not use cleaning solvents in keeping with standards or specifications *issued by* the United States Department of Defense, and we do use these solvents as part of our own

specifications *as approved* by the United States Department of Defense. Sikorsky also works on legacy military aircraft in keeping with the Department of Defense and Federal Aviation Administration (FAA) approved technical manuals, which were produced by the aircraft original equipment manufacturers. Sikorsky has no authority to change these technical manuals.

MEK, acetone, denatured alcohol and IPA are used by UTC aircraft manufacturing and repair facilities in keeping with specifications approved by the FAA as part of the FAA program for regulating the manufacture and repair of flight critical parts. Based on contacts with our vendors, to our knowledge no water based cleaners or other cleaners exist that would meet the 0.42 lb/VOC/gal limit included in the proposed regulation. Additionally, if candidate solvents did exist, the process for adding new solvents to the approved FAA list includes a demonstration of performance and lack of damage to flight critical parts. This process is lengthy and would fall well past the January 1, 2010 compliance date.

UTC believes the intent of the proposed language is to exempt aerospace manufacturing and rework facilities that use cleaning solvents as required by the US Department of Defense. We ask that this language be changed to: “In cleaning, including surface preparation prior to coating, necessary to meet a standard or specification *issued or approved by* the United States Department of Defense, FAA, NASA, customer or other regulating entity”.

#### **22a-174-20(jj)**

As DEP has not included a categorical exemption for all aerospace and rework facilities, regardless of size, UTC feels strongly either such an exemption should be included or all the allowable spray gun application cleaning methods in Section 22a-174-20(jj) should be consistent with the Aerospace CTG and Aerospace NESHAP. This should include the following gun cleaning methods: 1) cleaning in an enclosed system; 2) nonatomized cleaning forcing solvent through the gun into a container with the atomizing cap in place but using no atomized air; 3) disassembled gun cleaning/soaking by hand in a container; and, 4) atomized cleaning forcing solvent through the gun into a container fitted with a device to capture the emissions.

UTC facilities do not always work to specifications for gun cleaning, but the paints used are required by our customer specifications for extreme performance characteristics. As a result, solvents that meet the rule as proposed may not effectively clean our spray guns. Aerospace coating manufacturers provide instructions on clean up of a particular coating from applicator equipment. These instructions typically require the applicator to be cleared with the same solvent as contained in the coating, in order to keep the applicator functioning properly. The complexity of these coatings and the solvents they contain (for example, Zenthane, a chemical agent resistant coating that cures by exposure to atmospheric humidity) highlight the hazards of attempting to impose a universal volatility cap that would prevent use of a solvent specified by the manufacturer.

The proposed rule includes the use of an enclosed gun cleaner as an alternate to the solvent VOC limit. Some of UTC’s smaller sites use a low vapor pressure VOC solvent (~4 mm Hg) to clean their spray guns by disassembly and soaking in a container that is closed when not in use. In addition such extended soaking may be required for some of our more viscous materials. Emissions are minimal and UTC requires the flexibility available in the Aerospace NESHAP and CTG to adequately clean this equipment.

UTC strongly urges the DEP to include a categorical exemption for all aerospace and rework facilities, regardless of size, or to update Section 22a-174-20(jj) to be consistent with the allowable gun cleaning methods in Aerospace CTG and Aerospace NESHAP.

**22a-174-20(f)**

Section 22a-174-20(f) should be clarified to clearly define its applicability to coating operations. This regulation was derived from LA Rule 66 which was provided as guidance for the original round of State Implementation Plans in 1972, and addressed “organic solvent emissions”. The language included in 20(f) contains that portion of the old rule that was designed primarily to address coating operations. Under this language, coating operations not addressed by one of the CTG based subsections in Section 20(f) will/could likely apply. UTC requests that Section 20(f) be clarified to only coating operations.

Section 22a-174-20(f)(11) exempts “such materials which exhibit a boiling point higher than 220 degrees F”. It is requested that 20(f)(11) be clarified to apply the boiling point exemption to the properties of the whole material and not the properties of the material’s constituents.

**22a-174-20(s)**

Section 22a-174-20(s)(2)(B)(vii) exempts the exterior surface of assembled aircraft but should be expanded to include all aerospace applications. Coating of aerospace parts, both interior surfaces and pre-assembled aircraft and parts, is routinely performed at many UTC facilities. In many applications, the coatings’ extreme performance characteristics are mandated by military and other Federal agency requirements. The extreme performance characteristics required in such cases do not always allow for coatings which comply with the VOC paint limits in 22a-174-20(s). This necessary variability is why the Aerospace NESHAP and CTG include specific limits for such “specialty coatings”. Should DEP decide that such specific requirements need to be included in the proposed regulations, UTC urges the DEP to incorporate the Aerospace CTG into section 20.

UTC appreciates the opportunity to provide comments on the proposed regulations. Should you have any questions or comments I can be reached at (860) 728-6513 or via email at [richard.love@utc.com](mailto:richard.love@utc.com).

Very truly yours,

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