



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

January 22, 2003

Mr. Joe Tota
Untied Technologies Corporation
United Technologies Building
Hartford, CT 06101

Re: RCRA Corrective Action
Pratt & Whitney, Pent Road, East Hartford, CT
EPA ID No.CTD000845131

Dear Mr. Tota:

We at the United States Environmental Protection Agency - New England (EPA) are pleased to inform you that we have used existing available data on your facility to determine that your facility has achieved the two Environmental Indicators (EI), *Current Human Exposures Under Control* and *Migration of Contaminated Groundwater Under Control*. These EI's are described in a February 5, 1999 Interim Final memorandum under Acting Director of EPA's Office of Solid Waste, Elizabeth Cotsworth.

More specifically, on January 6, 2003 EPA officially concurred with the *Migration of Contaminated Groundwater Under Control*, EI evaluation you submitted in December 2002. Likewise, on December 13, 2001, we concurred with the *Current Human Exposures Under Control*, EI evaluation you submitted in October 2001.

Please note the EI's are an interim goal only. You should be aware that any new information (e.g. a change in facility operations, results of groundwater monitoring revealing that the migration of contaminated groundwater is no longer under control or land use which results in a human health exposure scenario) could affect this determination.

Findings and Assumptions:

As you are well aware, in making our determination, EPA relied to a great extent upon the assumptions which were contained in the report entitled *Conceptual Site Models and Screening Levels for Pratt & Whitney's VCAP Connecticut Facilities*, which was prepared by Gradient Corporation. In addition, we agree with the more site-specific assumptions which were presented in the Appendices of your EI Determination Reports (e.g. Attachment D1, of the *Migration of Contaminated Groundwater Under Control*, EI evaluation).

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However, while your data collection efforts effectively evaluated the potential for exposures to releases of hazardous waste and migration of contaminated groundwater, we understand they were not focused more broadly on characterizing the nature and extent of all contamination (e.g. in support of a site-wide RCRA Facility Investigation and Corrective Measures Study).

In any event, to ensure that current human exposures are controlled EPA is relying on (among other things) your Design Process Review (DPR). This institutional control ensures a consistent approach to evaluating potential worker exposure to various environmental media, which could occur during facility modifications. While the DPR is followed prior to the undertaking of various construction projects, to protect workers on a more regular basis, you will need to continue with indoor air sampling to ensure that releases of hazardous waste do not create a potential inhalation risk. (Specifically, we are relying upon you to perform the sampling as outlined in your December 21, 2000 deliverable, Attachment No. 6, *Indoor Air Monitoring in Support of Stabilization.*)

As for ensuring that the migration of contaminated groundwater remains under control, since P&W is not currently planning long-term chemical monitoring of dissolved phase contaminants in groundwater downgradient of your pump and treat system, our determination is valid only for such a period that we can assume hydraulic control remains in effect.

Finally, in the future, EPA would like to see further sampling downgradient of the Southern Tank Farm area so as to ensure that concentrations of Xylene in Groundwater are not increasing.

Next Steps

Facilities such as yours will be expected to achieve the goal of a final remedy at some point in the future. In the meantime, facilities should be particularly careful when considering construction activities which could ultimately impact the ability to achieve a final remedy. Finally, please note that the Federal Register Notice dated July 27, 1990, entitled *Corrective Action for Solid Waste Management Units at Hazardous Waste Management Facilities; Proposed Rule* is currently the best reference guide for final remediation under the RCRA Corrective Action Program.

At this juncture, we would like to urge you to take this opportunity to examine whether your company could improve its overall environmental performance beyond remediation. Attached is a resource table of environmental technologies and practices that may help you reduce your generation of hazardous waste, limit your exposure to future environmental liabilities (including waste cleanup liabilities), reduce your cost of business, and provide a health benefit to your workers or your community. In addition to improving overall performance, the utilization of these techniques can also help a facility to ensure future stabilization; for example the implementation of an environmental management system can be used to demonstrate that future construction will be evaluated while maintaining controls over human exposure. You may also find this table on our website at www.epa.gov/region01/compliance. Note that many more

resources exist beyond those highlighted in the attached resource table.

Thank you for your continuing commitment to environmental excellence. If you have any questions, please do not hesitate to contact me at the address and numbers provided below. Also, if you would like to be included on the mailing list for Eco Edge, a periodic newsletter that provides tips and information on improving environmental performance, send an email to theroux.maggie@epa.gov.

Sincerely,



Aaron R. Gilbert, P.E.
RCRA Facility Manager
United States Environmental Protection Agency
Corrective Action Section - HBT
Office of Site Remediation and Restoration
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attachment

cc: Brian Cutler, LEA
Lauren Levine, UTC
David Ringquist, CT DEP
Ernest Waterman, EPA (letter only)

Disclaimer

The information provided in this table contains both EPA and non-EPA hyperlinks. The material is provided for informational purposes only. EPA neither endorses nor assumes responsibility for the accuracy and completeness of non-EPA materials. EPA does not endorse nor make any claim regarding the accuracy, validity, or effectiveness of any company, technology, process, service, or product that may be identified through the *Technology Connection*, or through any of the referenced hyperlinks. The effectiveness or appropriateness of any technology, process, product, or service is the sole responsibility of the user. To ensure full compliance with the law, the users should refer to the actual requirements of the law and use the compliance assistance links provided in this table as aids to compliance only.

Environmental Sustainability Resources

Resource	Description
<p>The <i>Technology Connection</i> – An Electronic Link to Environmental Technologies</p>	<p>The <i>Technology Connection</i> matches over 1000 providers of</p> <ul style="list-style-type: none">(a) innovative environmental technologies,(b) pollution prevention techniques, and(c) environmental management systems <p>with organizations that might benefit from those services. EPA-New England’s Center for Environmental Industry and Technology (CEIT) manages the program. CEIT is not involved in any way in evaluating compliance or pursuing enforcement actions; its purpose simply is to provide organizations which may benefit from services with a way to connect with providers of those services, especially innovative technologies and approaches. The connection can be made anonymously if the organization desires.</p> <p>This is a free and voluntary service. It involves placing an announcement in CEIT’s electronic newsletter, <i>Envirotech News</i>. The announcement summarizes the nature of the services you seek (for example, technologies to address a particular treatment issue) and requests the providers to respond if they can supply any relevant technologies. Interested providers will then respond to CEIT within 5 business days via e-mail. To submit your announcement, go to the referenced web site. While there, review the example announcement and responses so that you can see how little effort is required to obtain useful results.</p> <p>For more information, go to www.epa.gov/region01/steward/ceit/techconnection.html, or contact Margaret Theroux by phone at (617) 918-1613 or by e-mail at theroux.maggie@epa.gov. Also review our Innovative Technology Inventory at www.epa.gov/region01/steward/ceit_iti.</p>

Resource	Description
Sector-Specific Information	<ol style="list-style-type: none"> 1. EPA has developed sector notebooks for over 30 industrial and government sectors (e.g., the pharmaceutical industry, the transportation equipment cleaning industry, local government operations, and the printing industry). The notebooks provide environmental profiles of the various sectors, pollutant release data, regulatory compliance information, and pollution prevention opportunities unique to each type of industry. You can find the sector notebooks at www.epa.gov/oeca/sector. 2. A new web site, www.sectorstar.org, offers state-specific compliance and pollution prevention information for a few sectors. More sectors will be added. 3. At www.assistancecenters.net, EPA, in partnership with industry, universities, and other agencies, offers national compliance assistance centers for several industries and government sectors.
Compliance Assistance (General Resources)	<ol style="list-style-type: none"> 1. At www.epa.gov/region01/compliance, EPA New England offers fact sheets, checklists, workshops, and other outreach on a variety of compliance issues for a variety of sectors. 2. EPA's Headquarters offers a compliance assistance homepage at www.epa.gov/compliance/assistance. 3. EPA's national compliance assistance clearing house, found at www.epa.gov/clearinghouse, is a source of information on how to comply with the various statutes that EPA enforces. The clearinghouse is searchable by sector and area of environmental focus, among other ways. 4. EPA's Small Business Ombudsman's Office offers compliance resources for small businesses at www.epa.gov/sbo. 5. EPA sponsors hotlines that provide convenient assistance on environmental requirements. A listing of these hotlines can be found at: http://www.epa.gov/epahome/hotline.htm.

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Compliance Assistance (statute-specific summaries)	<p>EPA provides summaries of many environmental laws and regulations. Below is a list of some of those resources, by statute, although they may not offer all of the information that is necessary to achieve compliance at your facility. <i>Please note that these resources merely provide general background information; they are no substitute for reading the laws and regulations. Also note that additional state requirements may apply and, in some programs, substitute for the federal requirements. You can access state web sites via www.epa.gov/region1.</i></p>																			
	<table border="1"> <thead> <tr> <th>Program</th> <th>Resource</th> <th>URL</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Resource Conservation and Recovery Act (RCRA)</td> <td><i>RCRA: Reducing Risk from Waste</i></td> <td>www.epa.gov/oswer Enter the name of the document into the "search" field.</td> </tr> <tr> <td><i>RCRA Orientation Manual</i></td> <td>www.epa.gov/oswer Enter the name of the document into the "search" field.</td> </tr> <tr> <td><i>RCRA and UST Training Modules</i></td> <td>www.epa.gov/oswer Enter the name of the document into the "search" field.</td> </tr> <tr> <td rowspan="4">Water</td> <td><i>NPDES: Water Permitting 101</i></td> <td>Go to www.epa.gov/npdes/ and click on "publications" in the box marked "NPDES Information." Enter "Water Permitting 101" in the search field.</td> </tr> <tr> <td>Oil Spill Prevention, Control and Countermeasure requirements</td> <td>Go to www.epa.gov/oilspill for summaries of the requirements.</td> </tr> <tr> <td><i>Drinking water: Water on tap: A Consumer's Guide to the Nation's Drinking Water</i></td> <td>www.epa.gov/safewater/wot/wot.html</td> </tr> <tr> <td>Wetlands: Wetland Fact Sheets</td> <td>www.epa.gov/owow/wetlands/facts/contents.html</td> </tr> </tbody> </table>	Program	Resource	URL	Resource Conservation and Recovery Act (RCRA)	<i>RCRA: Reducing Risk from Waste</i>	www.epa.gov/oswer Enter the name of the document into the "search" field.	<i>RCRA Orientation Manual</i>	www.epa.gov/oswer Enter the name of the document into the "search" field.	<i>RCRA and UST Training Modules</i>	www.epa.gov/oswer Enter the name of the document into the "search" field.	Water	<i>NPDES: Water Permitting 101</i>	Go to www.epa.gov/npdes/ and click on "publications" in the box marked "NPDES Information." Enter "Water Permitting 101" in the search field.	Oil Spill Prevention, Control and Countermeasure requirements	Go to www.epa.gov/oilspill for summaries of the requirements.	<i>Drinking water: Water on tap: A Consumer's Guide to the Nation's Drinking Water</i>	www.epa.gov/safewater/wot/wot.html	Wetlands: Wetland Fact Sheets	www.epa.gov/owow/wetlands/facts/contents.html
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	Program	Resource	Web Site
	Clean Air Act	<i>Plain English Guide to the Clean Air Act</i>	www.epa.gov/oar/oaqps/peg_caa/pegcaain.html
		Information on the CAA permit program	www.epa.gov/air/oaqps/permitupdate
	Toxic Substances Control Act	List of compliance assistance publications.	www.epa.gov/opptintr/regulated.htm
	Pesticides	General information and fact sheets about the pesticide regulatory process	www.epa.gov/pesticides www.epa.gov/oppfead1/Publications/catalog/
	Lead	General information and summary of lead disclosure requirements	www.epa.gov/region01/compliance/enflead.html www.epa.gov/lead/leadbase.htm
	Emergency Planning and Community Right to Know Act	<i>Chemicals in Your Community</i>	www.epa.gov/oswer Enter document name in "search" field.
		<i>EPCRA Training Modules</i>	www.epa.gov/oswer Enter document name in "search" field.
	Comprehensive Environmental Response, Compensation, and Liability Act	<i>CERCLA/Superfund Orientation Manual.</i> Note that on January 11, 2002, CERCLA was amended by the Small Business Liability Relief and Brownfields Revitalization Act. This manual has not yet been updated to reflect the new amendments.	www.epa.gov/oswer Enter document name in "search" field.
		Summary of the new CERCLA amendments	www.epa.gov/region01/brownfields/legislation.htm

Resource	Description	For Further Information...
Environmental Management Systems	<p>An Environmental Management System (EMS) allows an organization's good intentions to be translated into action. An EMS is a set of management processes and procedures that allows an organization to analyze, control and reduce the environmental impact of its activities, products, and services. An EMS also allows an organization to operate with greater efficiency and direction. Benefits of an EMS include improved compliance, improved environmental performance in all areas of the organization's operations (including energy efficiency, recycling, and other non-regulated areas), expanded pollution prevention opportunities, cost savings, and enhanced operational control and efficiency.</p>	<p>www.epa.gov/region01/steward/ems</p> <p><i>Environmental Management Systems: An Implementation Guide for Small and Medium Sized Organizations</i>, found at http://www.epa.gov/OW-OWM.html/iso14001/ems2001fin.pdf, is particularly helpful.</p>
Pollution Prevention	<p>"Pollution prevention" (P2) means reducing waste and conserving resources at the point of generation or use. Increased efficiency and quality, along with reduced costs, can result when these potential losses are managed before they require recycling, treatment or disposal. P2 can involve changes in inputs, processes, products and practices. Less toxic inputs and reduced waste volume also can mean easier compliance.</p>	<p>www.epa.gov/region01/solutions.html (EPA-New England's P2 site)</p> <p>www.epa.gov/p2/assist (small business guide)</p> <p>www.p2rx.org (sector-specific P2 information)</p>

Resource	Description	For Further Information
Energy Efficiency	<p>Energy production is the single largest source of air pollution in the United States. An organization that is focused on being more energy efficient can save money, preserve our natural resources, and reduce air and water pollution. Energy efficiency projects range in cost and complexity, but even the simplest of projects, such as a lighting upgrade, can have significant environmental and cost benefits.</p>	<p>www.epa.gov/region1/topics/envpractice/efficiency.html (EPA-NE's energy efficiency site)</p> <p>www.energystar.gov (energy efficient products)</p> <p>www.eren.doe.gov (Department of Energy's energy efficiency site)</p> <p>www.nesea.org (Northeast Sustainable Energy Association's site)</p>
Green Buildings	<p>According to the Department of Energy, buildings in the U.S. account for one third of the energy consumed and two thirds of electricity consumed. Green building practices offer an opportunity to use energy efficiently and effectively, curtail water usage and pollution, reduce wastes, abate air pollution, and counter the negative effects of sprawl.</p>	<p>www.epa.gov/region1/topics/envpractice/gbuildings.html (EPA-NE's green building site)</p> <p>www.eren.doe.gov/buildings (Department of Energy's green building site)</p>

Resource	Description	For Further Information
Environmentally Preferable Purchasing	Environmentally-preferable purchasing can help conserve natural resources, improve health and safety, and prevent the creation of toxic waste.	<p>www.epa.gov/oppt/epp</p> <p><i>Private Sector Pioneers: How Companies are Incorporating Environmentally Preferable Purchasing</i> features interesting case studies. It can be found at http://www.epa.gov/oppt/epp/pubs/privsect.pdf</p> <p>www.p2ric.org/TopicHubs/toc.cfm?hub=13&subsec=7&nav=7 (step by step guidance on how to implement a green purchasing program)</p>
Recycling/ Solid Waste Reduction	Reduce the amount of solid waste being disposed through source reduction, reuse, recycling, and composting activities.	www.epa.gov/region1/compliance/solid/

Resource	Description		
Enhanced Security	In the wake of the September 11, 2001 terrorist attacks, many organizations are enhancing their security measures. The following web sites provide useful information for any business that could be vulnerable to an attack.		
	Type of Business	Description	Web Site
	General -- For All Businesses	EPA's web site for counter-terrorism includes information on EPA's homeland security role, publications, external links, and sign-up instructions for the weekly listserv, which provides information on chemical accident prevention and other chemical safety issues.	www.epa.gov/swercepp/cntr-ter.html
		For specific security needs, EPA New England's <i>Technology Connection</i> may help you locate the appropriate technology.	www.epa.gov/region01/steward/ceit/techconnection.html
		The ANSER Institute for Homeland Security, a nonprofit research organization, offers a virtual library with extensive information on homeland security, as well as a journal.	www.homelandsecurity.org/library.cfm www.homelandsecurity.org/journal/
	Chemical Sites	EPA offers a fact sheet which discusses how local emergency planning committees (LEPCs) can incorporate counter-terrorism measures into their local plans.	www.epa.gov/ceppo/factsheets/lepcct.pdf
		EPA has issued a Pesticide Safety and Site Security Alert to all pesticide industry organizations, facilities, and handlers, highlighting general security issues.	www.epa.gov/pesticides/citizens/pest_security_alert.htm
		The American Chemistry Council provides guidance on site and transportation security for the chemical industry.	www.americanchemistry.com/cmawebsite.nsf

Resource	Description		
		<p>The Lawrence Berkeley National Laboratories Secure Buildings web site focuses on safeguarding buildings against chemical or biological attacks. This web site is intended for emergency personnel and for building operators.</p>	<p>http://securebuildings.lbl.gov/</p>
	Type of Business	Description	Web Site
	<p>Chemical Sites (continued)</p>	<p>Federal Emergency Management Agency provides information on hazardous materials, including training information, alerts and advisories, publications, and the National Fire Incident Reporting System.</p>	<p>www.usfa.fema.gov/hazmat</p>
	<p>Water Security</p>	<p>American Water Works Association (AWWA), in partnership with EPA, has developed general security overview training that covers the entire spectrum of security issues, including assessing vulnerabilities, emergency response plans, and risk communication. AWWA also offers security-related seminars, seminar-in-a-box, and online courses.</p>	<p>www.awwa.org www.awwa.org/Communications/offer/secureresources.cfm</p>
		<p>The Association of Metropolitan Water Agencies provides access to the Information Sharing and Analysis Center.</p>	<p>www.amwa.net/isac/index.html</p>

Resource	Description	
	<p>EPA's website on Water Infrastructure Security provides information on financial assistance, training, vulnerability assessment tools, emergency response tools, information assistance, and research.</p> <p>In addition, this web site provides access to the Request for Application for grants for vulnerability assessments, emergency operations plans, and security enhancement planning/design at large drinking water utilities.</p>	<p>www.epa.gov/safewater/security/index.html</p> <p>www.epa.gov/safewater/security/rfa_large_grants.html</p>
	<p>EPA's web site for the Drinking Water State Revolving Fund (DWSRF) provides information on using the Fund to implement security measures at public water systems.</p>	<p>www.epa.gov/safewater/dwsrf/security-fs.pdf</p>
	<p>For wastewater security, EPA and the Association of Metropolitan Sewerage Agencies (AMSA) have developed the Vulnerability Self Assessment Tool (VSAT), which is available at the AMSA web site.</p>	<p>www.amsa-cleanwater.org/advocacy/sec_index.cfm</p>
	<p>The Water Environment Federation provides information on wastewater and water infrastructure security.</p>	<p>www.wef.org/publicinfo/WEFsecurity.jhtml</p>