

FINAL PLAN OF REMEDIAL ACTION



605 SOUTH BAY ROAD OPERABLE UNIT-1

*605 South Bay Road
Dover, Delaware*

*August 2014
DNREC Project No. DE-1564*

This Final Plan of Remedial Action (Final Plan) presents clean-up actions required by the Department of Natural Resources and Environmental Control (DNREC) to address environmental contamination at 605 South Bay Road (Site) – Operable Unit 1.

DNREC issued public notice of the Proposed Plan of Remedial Action (Proposed Plan) for Operable Unit 1 (OU-1) of the Site on July 23, 2014 and opened a 20-day public comment period. The Proposed Plan is attached. There were no comments from the public; therefore, the Proposed Plan is adopted as the Final Plan.

Approval:

This Final Plan meets the requirements of the Hazardous Substance Cleanup Act.



Timothy T. Ratsep, Program Administrator
Site Investigation and Restoration Section

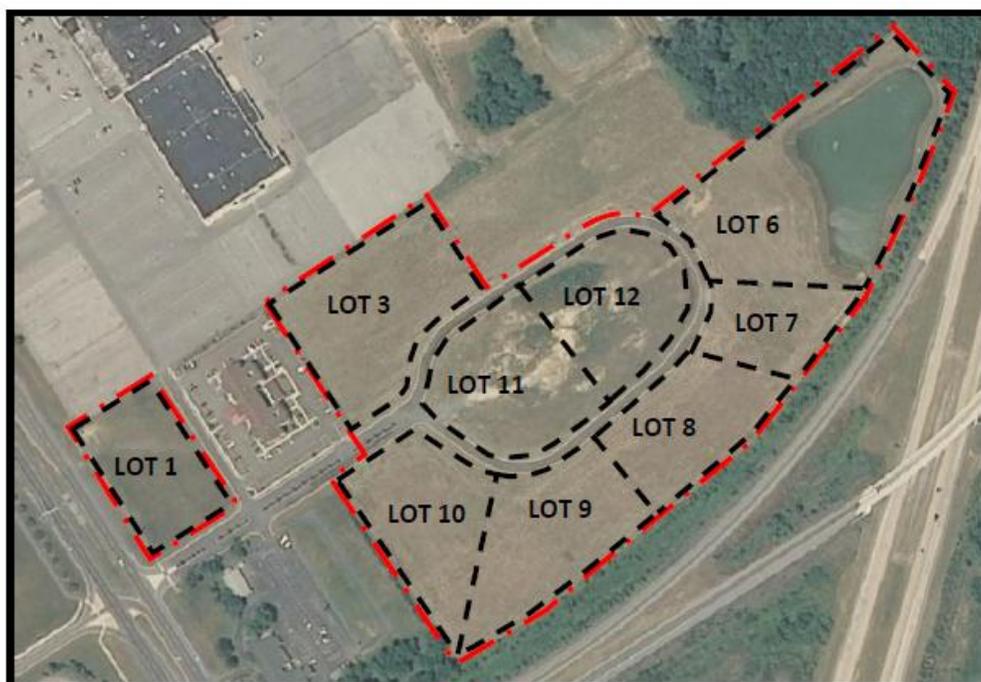
August 15, 2014

Date



PROPOSED PLAN OF REMEDIAL ACTION

605 South Bay Road Operable Unit-1
Dover, Delaware
DNREC Project No. DE-1564



July 2014

Delaware Department of Natural Resources and Environmental Control
Division of Waste and Hazardous Substances
Site Investigation & Restoration Section
391 Lukens Drive
New Castle, Delaware 19720

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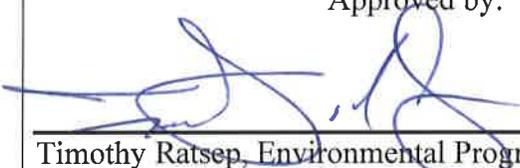
PROPOSED PLAN OF REMEDIAL ACTION

605 South Bay Road Operable Unit-1
Dover, Delaware
DNREC Project No. DE-1564



Approval:

This Proposed Plan meets the requirements of the Hazardous Substance Cleanup Act.

Approved by:

Timothy Ratsep, Environmental Program Administrator Site Investigation & Restoration Section
Date <u>July 18, 2014</u>



What is the Proposed Plan of Remedial Action?

The Proposed Plan of Remedial Action (Proposed Plan) summarizes the clean-up (remedial) actions that are being proposed to address contamination found at the 605 South Bay Road Operable Unit-1 (Site) for public comment. A legal notice is published in the newspaper for a 20-day comment period. DNREC considers and addresses all public comments received and will publish a Final Plan of Remedial Action (Final Plan) for the Site after consideration of all public comments.

What is the 605 South Bay Road OU-1 Site?

The 605 South Bay Road Site (OU-1 and OU-2) consists of 24.57 acres, located at 605 South Bay Road, Dover, DE (Figure 1). The Site is bordered by South Bay Road (U.S. Rt. 113) to the west, Korean War Veterans Memorial Highway (U.S. Rt. 1) to the east, the Blue Hen Corporate Center and Mall to the north, and Puncheon Run Connector to the south. The Site is currently an undeveloped tract of land and is currently owned by 605 South Bay Road LLC. The Site consists of nine (9) tax parcels identified as Kent County parcels ED-05-077.00-03-01.00-000; ED-05-077.00-03-03.00-000; and ED-05-077.00-03.06.00-000 through ED-05-077.00-03-12.00-000 (Figure 2). Division of the Site into two operable units, OU-1 and OU-2, will enable two separate sets of restrictions and development. The boundary of the OU-1 is identified in Figure 3.

What happened at the 605 South Bay Road OU-1 Site?

The Site is located in Dover and has been previously used as orchards for at least 60 years. Based on the sources reviewed, the main farm operations were west of the orchard and consisted of several buildings with open space. No evidence of buildings on the Site was apparent from the 30's through the lifetime of the orchard's operations. The eastern portion of the Site (Lots 6 and 7) ceased to have orchard trees in the 1960's. Orchard operations began diminishing in the early 1990's. The remaining orchard trees were removed in the 2000's. In 2007, steps were taken to improve the Site's appearance and to prepare the site for future redevelopment including the construction of the Stormwater Management Basin at the northeast end of Lot 6.

No known business operations or use of chemicals or hazardous substances appears to have occurred at the Site, other than the fertilizers and pesticides applied to fruit orchard crops for an unknown period from before 1937 extending to the late 1980s / early 1990s.

What is the environmental problem at the 605 South Bay Road OU-1 Site?

Previous agricultural use of the property suggested the potential for contamination in soil and in groundwater. A Remedial Investigation performed at the Site found contamination including arsenic, lead, and thallium in soils.

A risk assessment evaluated the potential for adverse human health risks associated with Site contamination. As a result, the calculated future carcinogenic direct soil contact risks on these individual lots exceeded the HSCA-allowable risk value for residential land uses. However, surface soils risks are acceptable for future site users (construction/excavation workers, outdoor commercial/ industrial workers, and indoor commercial/ industrial workers).

What does the owner want to do at the 605 South Bay Road OU-1 Site?

The owner is planning to sell lots for the purpose of constructing commercial space including office buildings.

What clean-up actions are needed at the 605 South Bay Road OU-1 Site?

DNREC proposes the following remedial actions for the Site (OU-1), which needs to be completed before Certification of Completion of Remedy (COCR) can be issued:

- An Environmental Covenant, consistent with Delaware's Uniform Environmental Covenants Act (Title 7, Del. Code Chapter 79, Subtitle II) (UECA), will be recorded in the office of the Recorder of Deeds to include the following:
 - a. Use Restriction. Use of the Property shall be restricted solely to those non-residential type uses permitted within Commercial, Manufacturing, or Industrial Districts;

What are the long term plans for the 605 South Bay Road OU-1 Site after the cleanup?

The 605 South Bay Road OU-1 Site will be restricted to non-residential (commercial/industrial) purposes only in accordance with the recorded environmental covenant.

How can I find additional information or comment on the Proposed Plan?

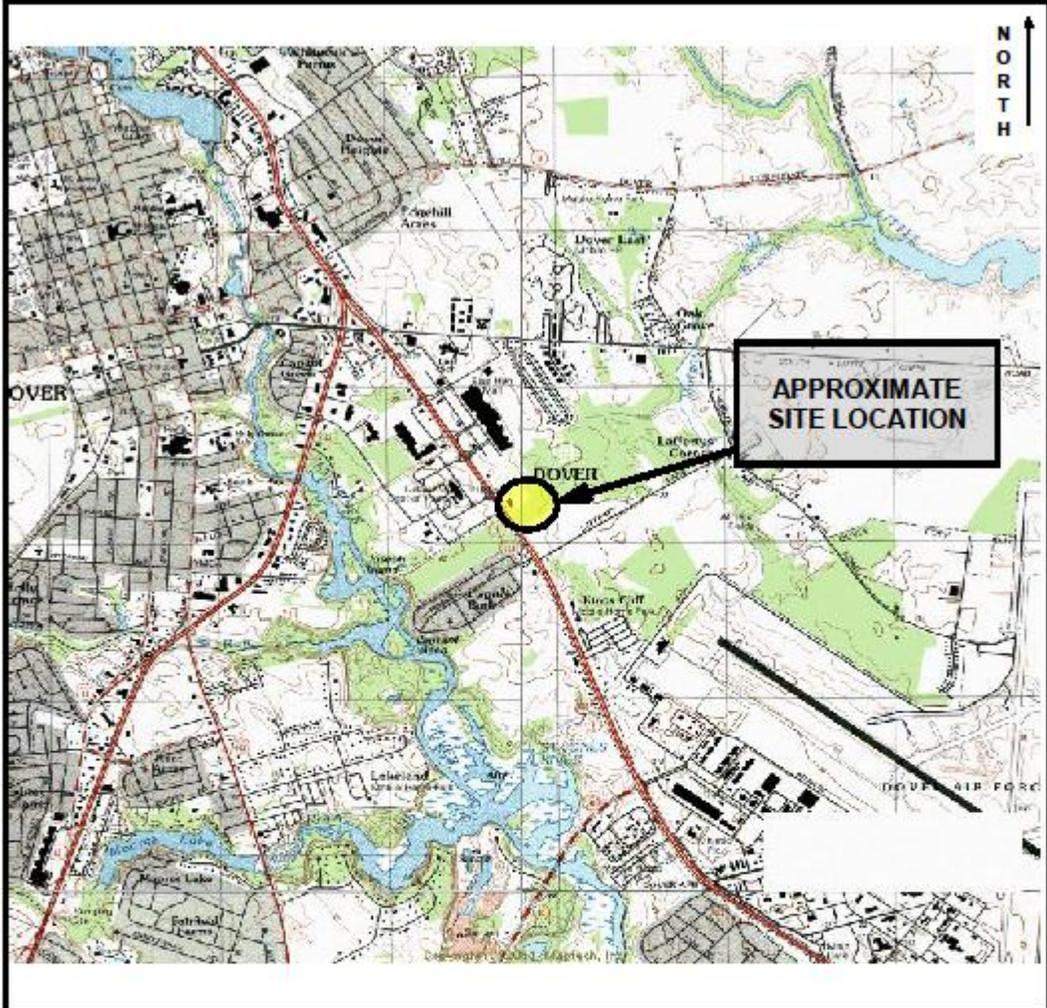
The complete file on the Site including the Remedial Investigation Report and the other reports and documents are available at the DNREC office, 391 Lukens Drive in New Castle, 19720. Most documents are also found on: <http://www.nav.dnrec.delaware.gov/DEN3/>

The 20-day public comment period begins on July 23, 2014 and ends at close of business (4:30 pm) on August 12, 2014. Please send written comments to the DNREC office at 391 Lukens Drive, New Castle, DE 19720 to Project Officer, Tiffany Neumann, Project Officer, or Robert Newsome, Public Information Officer.

Figure 1: Site location sketch

Figure 2: Lot identification sketch

Figure 3: Operable units



This location sketch was adapted from the Maptech USGS Topographic Series, Edition 1.0 for Delaware (2001)

 <p>Ten Bears Environmental Associates Co. 606 Federal Street Milton, DE 19968 Phone: (302) 684-5080 Fax: (302) 684-5081</p>	FIGURE 1 - SITE LOCATION SKETCH	
	605 S. BAY ROAD VCP SITE (DE-1564)	
	CITY OF DOVER, DELAWARE	
	DATE: 8/24/2014	JOB NUMBER: 13-1319.C
	DRAWN BY: BKE	SCALE: 1" = approx. 2,400'
CHECKED BY: BKE	FIGURE NO: 1	
FILE NO: 131319C.FIG	SHEET 1 OF 1	

Figure 1

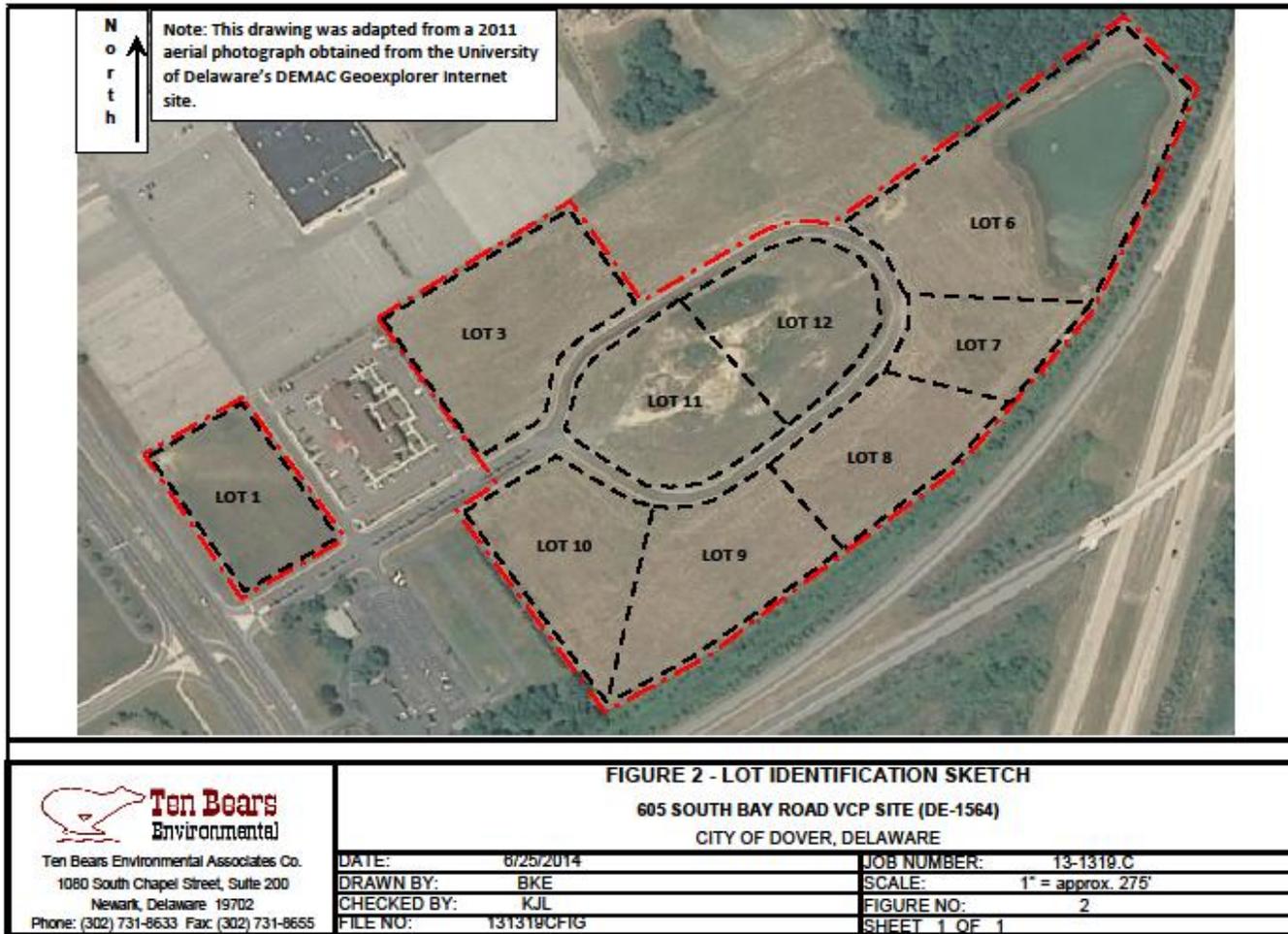


Figure 2

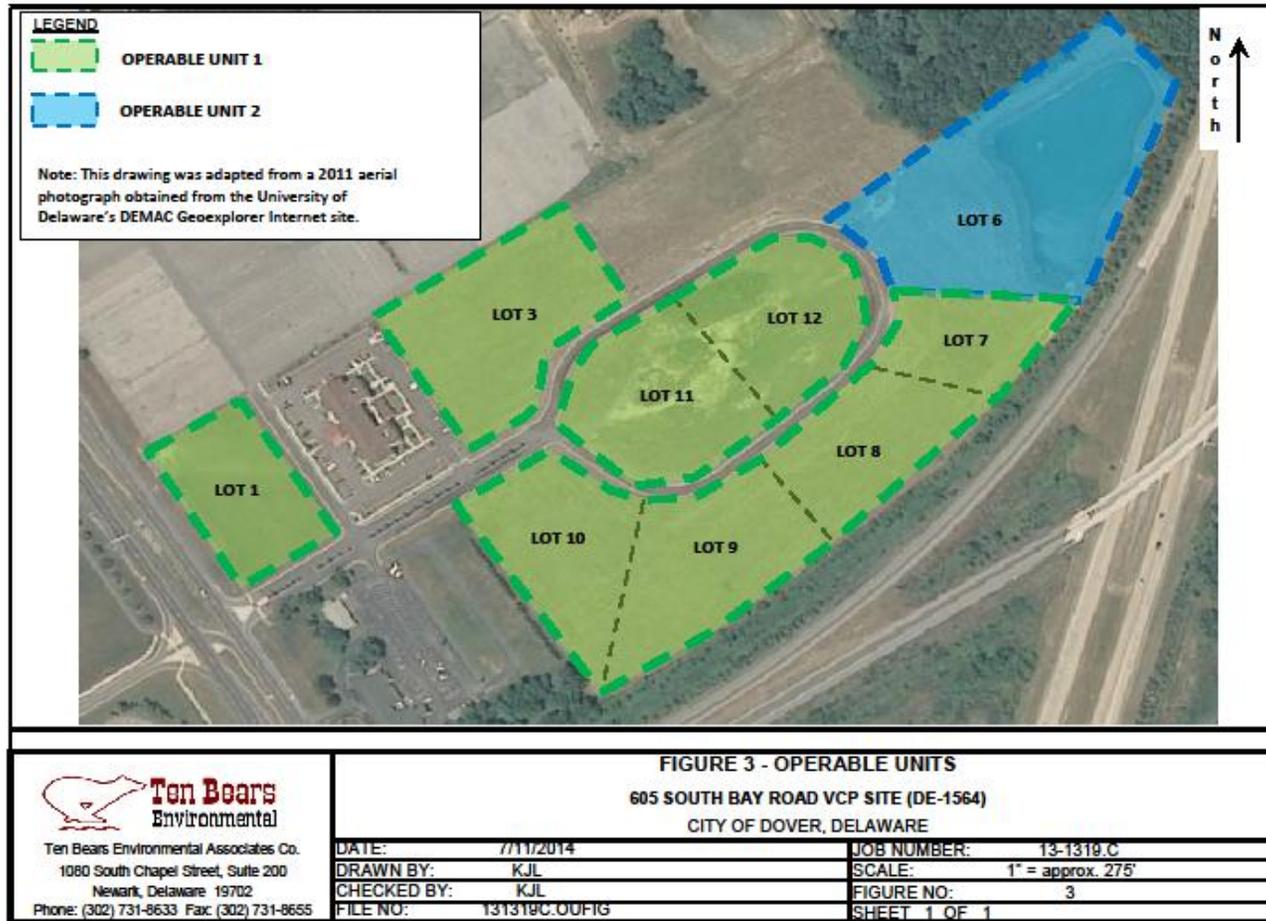


Figure 3

Glossary of Terms Used in this Proposed Plan

Area of Concern (AOC)	A discrete section of the Site representing the local bounds of contamination in soil or ground water.
Certification of Completion of Remedy (COCR)	A formal determination by the Secretary of DNREC that remedial activities required by the Final Plan of Remedial Action have been completed.
Contaminant of Concern (COC)	Potentially harmful substances at concentrations above acceptable levels.
Contaminated Materials Management Plan	A written plan specifying how potentially contaminated material at a Site will be sampled, evaluated, staged, transported and disposed or reused properly.
Contamination	The introduction of harmful or hazardous matter into the environment.
Exposure	Contact with a substance through inhalation, ingestion, or direct contact with the skin. Exposure may be short term (acute) or long term (chronic).
Final Plan of Remedial Action	DNREC's adopted plan for cleaning up a hazardous site.
Hazardous Substance	(a) Any hazardous waste as defined in 7 <i>Delaware Code</i> , Ch. 63, or any hazardous waste designated by regulation issued under 7 <i>Del. C.</i> , Ch. 63; (b) Any hazardous substance as defined in CERCLA or regulations issued under CERCLA; (c) Petroleum, including crude oil or any fraction thereof; however, any release of hazardous substances from an underground storage tank which is regulated by 7 <i>Del. C.</i> , Ch. 74 or regulations issued under it is not subject to these regulations except that such a release is eligible for funding under Subsection 14.1; (d) Any substance in sufficient concentrations which the Secretary through regulation determines may present risk to the public health, welfare, or the environment.
Hazardous Substance Cleanup Act (HSCA)	Delaware Code Title 7, Chapter 91. The law that enables DNREC to identify parties responsible for hazardous substances releases and requires cleanup with oversight of the Department.
Operable Unit (OU)	The cleanup of a site can be divided into a number of operable units depending on the complexity of the problems associated at a site. Operable units may address geographic portions of a site, specific site problems, or initial phases of an action, or may consist of any set of actions that are concurrent but located in different parts of a site. The determination of an operable unit may vary over time as a result of change in activity or need.
Owner or Operator	(a) Any person owning or operating a facility. (b) Any person who previously owned, operated, or otherwise controlled activities at a facility. (c) The term "owner or operator" does not include an agency of the State or unit of local government that acquired title or control of the facility involuntarily through bankruptcy, tax delinquency, abandonment or other

	<p>circumstances.</p> <p>(d) The term "control" does not include regulation of the activity by a federal, state or local government agency.</p> <p>(e) The term "owner or operator" does not include a person, who, without participating in the management of a facility, holds indicia of ownership primarily to protect his security interest in the facility.</p>
Release	<p>Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of a hazardous substance, pollutant or contaminant into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant), but exclude[ing]:</p> <p>(a) any release which results in exposure to a person solely within his or her workplace, with respect to a claim which such person may assert against his or her employer; provided, however, that this exclusion does not apply to any such release which also results in exposure to the environment;</p> <p>(b) emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel or pipeline pumping station engine;</p> <p>(c) the appropriate and legal application of fertilizers and pesticides; and</p> <p>(d) any discharges in compliance with State permits issued in conformance with Title 7 of the <i>Delaware Code</i> and federally permitted releases under CERCLA.</p>
Remedial Investigation (RI)	<p>A detailed evaluation of a release or imminent threat of release of a hazardous substance. An RI is conducted to determine the extent of contamination and the risks to public health and welfare and the environment. It typically includes site characterization, field investigations, and performance of risk assessments as well as collection of engineering data that may be required to complete a feasibility study and or remedial design.</p>
Remedy	<p>Any action, response, or expenditure consistent with the purposes of HSCA, or any regulations or guidance issued under HSCA to identify, minimize, or eliminate any imminent threat posed by any hazardous substances, including preparation of any plans, conducting of any studies and any investigative, oversight, or monitoring activities, and any health assessments, risk assessments, or similar studies conducted to determine the risk or potential risk to public health or welfare or the environment.</p>
Risk	<p>Likelihood or probability of injury, disease, or death.</p>
Restricted Use	<p>Commercial or Industrial setting</p>
SIRS	<p>Site Investigation Restoration Section of DNREC, which oversees cleanup of sites that were contaminated as a result of past use, from dry cleaners to chemical companies.</p>