DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION
Interim Final 2/5/99
RCRA Corrective Action
Environmental Indicator (EI) RCRIS code (CA750)

Migration of Contaminated Groundwater Under Control

Facility Name: **Emtrol, Inc.**
Facility Address: **3050 Hempland Road Lancaster, PA 17601**
Facility EPA ID #: **PAD054139506**

1. Has all available relevant/significant information on known and reasonably suspected releases to the groundwater media, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units [SWMU], Regulated Units [RU], and Areas of Concern [AOC]), been **considered** in this EI determination?

   [X] If yes – check here and continue with #2 below.

   [ ] If no – re-evaluate existing data, or

   [ ] If data are not available skip to #6 and enter "IN" (more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Migration of Contaminated Groundwater Under Control" EI

A positive "Migration of Contaminated Groundwater Under Control" EI determination ("YE" status code) indicates that the migration of "contaminated" groundwater has stabilized, and that monitoring will be conducted to confirm that contaminated groundwater remains within the original "area of contaminated groundwater" (for all groundwater "contamination" subject to RCRA corrective action at or from the identified facility (i.e., site-wide)).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Migration of Contaminated Groundwater Under Control" EI pertains ONLY to the physical migration (i.e., further spread) of contaminated ground water and contaminants within groundwater (e.g., non-aqueous phase liquids or NAPLs). Achieving this EI does not substitute for achieving other stabilization or final remedy requirements and expectations associated with sources of contamination and the need to restore, wherever practicable, contaminated groundwater to be suitable for its designated current and future uses.

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

2. Is **groundwater** known or reasonably suspected to be **"contaminated"**[1] above appropriately protective "levels" (i.e., applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action, anywhere at, or from, the facility?

X If yes - continue after identifying key contaminants, citing appropriate "levels," and referencing supporting documentation.

____ If no - skip to #8 and enter "YE" status code, after citing appropriate "levels," and referencing supporting documentation to demonstrate that groundwater is not "contaminated."

____ If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s):
The facility is an approximately 54,000 square-foot single-story building on a 7.1-acre parcel of land located in East Hempfield Township at 3050 Hempland Road, west of Centerville Road and south of United States (US) Route 30. The land was undeveloped, residential, and/or agricultural from at least 1864 until the construction of a structure similar to the present-day structure in 1973 (some documents say 1971).

International Signals Corporation (ISC) conducted electronics manufacturing operations from approximately 1973 to 1993 and possibly used solvents in the manufacturing and assembly of electronic components. Hazardous waste codes associated with ISC operations included F001, F002, and F003 and other F-listed wastes, i.e., solvents typically associated with cleaning or degreasing operations. ISC Defense Systems, Inc., a division of International Signal and Control Corporation, was acquired by Ferranti International, P.L.C. in 1987. In December 1993, Ferranti International, P.L.C. was forced into bankruptcy. According to a letter dated May 18, 1993, it appears that the Ferranti Technologies, Inc. division was leasing the facility from High Associates, a division of High Industries. The lease was being terminated by Ferranti Technologies, Inc., and the property was intended to be sold by High Associates. In 1995, Emtrol purchased the property from High Associates. Emtrol used most of the building space for a design and engineering office. Some space was also used for assembly of electronic controls and automatic storage equipment in support of the baked goods industry. In April 2003, Emtrol became a subsidiary of Weldon Solutions, Inc. of York, Pennsylvania, which acquired its assets. On April 29, 2003, Weldon Solutions, Inc. originally announced that the facility would continue to operate; however, subsequent information indicated that Weldon acquired only non-physical assets and intellectual property. The physical property and structures of the facility were acquired by YLC, Inc., and the entire building was stripped down and facilities were installed for York Technical Institute (YTI), which started operations in 2003. Blackford Development purchased the property shortly after YTI started their operations and, as of 2008, were leasing it to YTI.

A USEPA generator number PAD054139506 was assigned to ISC on October 9, 1980. On August 31, 1995, Emtrol submitted to the USEPA a notification of the generation of small quantities (less than 100 kg/month) of wastes carrying F001, F003, and F005 codes. The USEPA ID number previously assigned to ISC (PAD054139506) was entered on this notification.

Groundwater data were presented in the Draft Limited Phase II Environmental Site Assessment (ESA) for GMS Companies (Blackstone Consulting LLC [Blackstone], 2007) and additional laboratory reports. Groundwater was encountered in all boreholes at the facility. The depth to groundwater in the boreholes ranged from approximately 5 feet below the ground surface (bgs) to more than 19 feet bgs. A comparison of the analytical data to PADEP's Act 2 nonresidential (NR) medium-specific concentrations (MSCs) for Used Aquifers containing less than 2,500 mg/L of total dissolved solids (TDS) was conducted at the facility. At SB-03, located outside the southern central portion of the facility building, concentrations of tetrachloroethylene (PCE) (6.3 µg/L), trichloroethylene (TCE) (9.6 µg/L), and 1,1-dichloroethene (1,1-DCE) (84 µg/L) exceeded their NR MSCs of 7 µg/L, 5 µg/L, 5 µg/L, and 7 µg/L, respectively. At SB-01, located east of the building, TCE (5.2 µg/L) exceeded its NR MSC (5 µg/L). Four additional monitoring wells are identified on a sample location figure in the report. Groundwater samples were analyzed for volatile organic compounds

[1] "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriate "levels" (appropriate for the protection of the groundwater resource and its beneficial uses).

(VOCs). Samples from monitoring wells MW-7 and MW-10, located closest to the southern side and southwestern corner of the building, contained the highest concentrations of chlorinated VOCs; whereas, MW-8 and MW-9, located further south of the building, contained significantly lower concentrations of these compounds. The groundwater sample from MW-7, contained PCE (42 µg/L), TCE (11 µg/L), and 1,1-DCE (88 µg/L) at concentrations exceeding their respective NR MSCs of 5 µg/L, 5 µg/L, and 7 µg/L. The sample from MW-10 contained 1,1-DCE (98 µg/L) and TCE (21µg/L) exceeding their respective NR MSCs of 7 µg/L and 5 µg/L. Although the parent compound of 1,1-DCE, (i.e. 1,1-TCA, the solvent that is likely to have been historically used at the facility) was also detected in the groundwater samples collected from MW-7 (29 µg/L) and MW-10 (54µg/L), the concentrations were below its NR MSC of 200 µg/L. The breakdown products of TCE (i.e., 1,2-dichloroethylene, and vinyl chloride) were not detected at any of the monitoring well locations. Therefore, groundwater contamination exists, at least, within the perched groundwater zone that was investigated.

No records of a National Pollution Discharge Elimination System (NPDES) permit were found during the facility records search. According to a Draft Phase I Environmental Site Assessment (Draft Phase I ESA) (Blackstone, 2007), the potential exists that for about a year, the facility may have discharged industrial waste via the septic system prior to its connection to the Lancaster Area Sewer Authority (LASA) system.

3. Has the **migration** of contaminated groundwater **stabilized** (such that contaminated groundwater is expected to remain within "existing area of contaminated groundwater"[2] as defined by the monitoring locations designated at the time of this determination)?

____ If yes - continue, after presenting or referencing the physical evidence (e.g., groundwater sampling/measurement/migration barrier data) and rationale why contaminated groundwater is expected to remain within the (horizontal or vertical) dimensions of the "existing area of groundwater contamination"[2]).

____ If no (contaminated groundwater is observed or expected to migrate beyond the designated locations defining the "existing area of groundwater contamination"[2]) - skip to #8 and enter "NO" status code, after providing an explanation.

X If unknown - skip to #8 and enter "IN" status code.

Rationale and Reference(s): The facility is used as a technical training institute. The facility uses public water and no production wells are known to be present at the facility; therefore, contaminated groundwater present within the perched groundwater zone is unlikely to be used. However, since groundwater was encountered at a depth of 5 feet and it contained chlorinated VOCs exceeding MSCs, a health and safety plan (to protect a construction worker) is recommended for any future excavation work.

The contamination present in the perched groundwater could migrate horizontally in the shallow perched zones or into the deeper aquifer, if site conditions are not adequately controlled. Inadequate monitoring has been conducted to determine whether the site conditions are such that migration has stabilized. Documentation appended to the Phase I EA (Property Solutions, 2005) indicated the presence of 10 groundwater wells within a 1-mile radius surrounding the facility, including a public water supply well within a 0.5 to 1.0 mile radius north of the facility, and two wells within a 0.25 to 0.5 mile radius in a southeasterly direction. The depths of the intakes of these wells or the status of their users are unknown. Pennsylvania Groundwater Information System (PAGWIS) indicates that at least one domestic well (total depth 129 feet; static water level recorded at approximately 46 feet), installed in 1946, may be present within approximately 0.5 miles southeast of the facility. There are no controls by the local municipality on use of groundwater for potable purposes.

If the former septic system was used as a discharge location for solvents during the operation of ISC, as reported in the Draft Phase I ESA, it is a potential area of concern (AOC) that has not been identified in previous investigations. The location is reportedly near the western side of the property; however, its exact location is not known.

No surface water exposure pathways are presently known to the present.

[2] "existing area of contaminated groundwater" is an area (with horizontal and vertical dimensions) that has been verifiably demonstrated to contain all relevant groundwater contamination for this determination, and is defined by designated (monitoring) locations proximate to the outer perimeter of "contamination" that can and will be sampled/tested in the future to physically verify that all "contaminated" groundwater remains within this area, and that the further migration of "contaminated" groundwater is not occurring. Reasonable allowances in the proximity of the monitoring locations are permissible to incorporate formal remedy decisions (i.e., including public participation) allowing a limited area for natural attenuation.

4. Does “contaminated” groundwater **discharge** into **surface water** bodies?

_____ If yes - continue after identifying potentially affected surface water bodies.

_____ If no - skip to #7 (and enter a “YE” status code in #8, if #7 = yes) after providing an explanation and/or referencing documentation supporting that groundwater “contamination” does not enter surface water bodies.

_____ If unknown - skip to #8 and enter “IN” status code.

Rationale and Reference(s):

5. Is the **discharge** of "contaminated" groundwater into surface water likely to be **"insignificant"** (i.e., the maximum concentration[3] of each contaminant discharging into surface water is less than 10 times their appropriate groundwater "level," and there are no other conditions (e.g., the nature, and number, of discharging contaminants, or environmental setting), which significantly increase the potential for unacceptable impacts to surface water, sediments, or eco-systems at these concentrations)?

_____ If yes - skip to #7 (and enter "YE" status code in #8 if #7 = yes), after documenting: 1) the maximum known or reasonably suspected concentration[3] of key contaminants discharged above their groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) provide a statement of professional judgement/explanation (or reference documentation) supporting that the discharge of groundwater contaminants into the surface water is not anticipated to have unacceptable impacts to the receiving surface water, sediments, or eco-system.

_____ If no - (the discharge of "contaminated" groundwater into surface water is potentially significant) - continue after documenting: 1) the maximum known or reasonably suspected concentration[3] of each contaminant discharged above its groundwater "level," the value of the appropriate "level(s)," and if there is evidence that the concentrations are increasing; and 2) for any contaminants discharging into surface water in concentrations[3] greater than 100 times their appropriate groundwater "levels," the estimated total amount (mass in kg/yr) of each of these contaminants that are being discharged (loaded) into the surface water body (at the time of the determination), and identify if there is evidence that the amount of discharging contaminants is increasing.

_____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s):

[3] As measured in groundwater prior to entry to the groundwater-surface water/sediment interaction (e.g., hyporheic) zone.

6. Can the **discharge** of "contaminated" groundwater into surface water be shown to be "**currently acceptable**" (i.e., not cause impacts to surface water, sediments or eco-systems that should not be allowed to continue until a final remedy decision can be made and implemented[4])?

_____ If yes - continue after either: 1) identifying the Final Remedy decision incorporating these conditions, or other site-specific criteria (developed for the protection of the site's surface water, sediments, and eco-systems), and referencing supporting documentation demonstrating that these criteria are not exceeded by the discharging groundwater; OR
2) providing or referencing an interim-assessment,[5] appropriate to the potential for impact, that shows the discharge of groundwater contaminants into the surface water is (in the opinion of a trained specialists, including ecologist) adequately protective of receiving surface water, sediments, and eco-systems, until such time when a full assessment and final remedy decision can be made. Factors which should be considered in the interim-assessment (where appropriate to help identify the impact associated with discharging groundwater) include: surface water body size, flow, use/classification/habitats and contaminant loading limits, other sources of surface water/sediment contamination, surface water and sediment sample results and comparisons to available and appropriate surface water and sediment "levels," as well as any other factors, such as effects on ecological receptors (e.g., via bio-assays/benthic surveys or site-specific ecological Risk Assessments), that the overseeing regulatory agency would deem appropriate for making the EI determination.

_____ If no - (the discharge of "contaminated" groundwater can not be shown to be "**currently acceptable**") - skip to #8 and enter "NO" status code, after documenting the currently unacceptable impacts to the surface water body, sediments, and/or eco-systems.

_____ If unknown - skip to 8 and enter "IN" status code.

Rationale and Reference(s):

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[4] Note, because areas of inflowing groundwater can be critical habitats (e.g., nurseries or thermal refugia) for many species, appropriate specialist (e.g., ecologist) should be included in management decisions that could eliminate these areas by significantly altering or reversing groundwater flow pathways near surface water bodies.

[5] The understanding of the impacts of contaminated groundwater discharges into surface water bodies is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration to be reasonably certain that discharges are not causing currently unacceptable impacts to the surface waters, sediments or eco-systems.

7. Will groundwater **monitoring** / measurement data (and surface water/sediment/ecological data, as necessary) be collected in the future to verify that contaminated groundwater has remained within the horizontal (or vertical, as necessary) dimensions of the "existing area of contaminated groundwater?"

_____ If yes - continue after providing or citing documentation for planned activities or future sampling/measurement events. Specifically identify the well/measurement locations which will be tested in the future to verify the expectation (identified in #3) that groundwater contamination will not be migrating horizontally (or vertically, as necessary) beyond the "existing area of groundwater contamination."

_____ If no - enter "NO" status code in #8.

_____ If unknown - enter "IN" status code in #8.

Rationale and Reference(s):

8. Check the appropriate RCRIS status codes for the Migration of Contaminated Groundwater Under Control EI (event code CA750), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (attach appropriate supporting documentation as well as a map of the facility).

____ YE Yes, "Migration of Contaminated Groundwater Under Control" has been verified. Based on a review of the information contained in this EI determination, it has been determined that the "Migration of Contaminated Groundwater" is "Under Control" at the **Emtrol, Inc.** facility, EPA ID # **PAD054139506**, located at **3050 Hempland Road Lancaster, PA 17601**. Specifically, this determination indicates that the migration of "contaminated" groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater". This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

____ NO - Unacceptable migration of contaminated groundwater is observed or expected.

X IN - More information is needed to make a determination.

Completed by (signature) _____ Date _____

(print) _____ _____

(title) _____ _____

Supervisor (signature) _____ Date _____

(print) _____ _____

(title) _____ _____

(EPA Region or State) _____ _____

Locations where References may be found:

USEPA Region III
Waste and Chemical Mgmt. Division
1650 Arch Street
Philadelphia, PA 19103

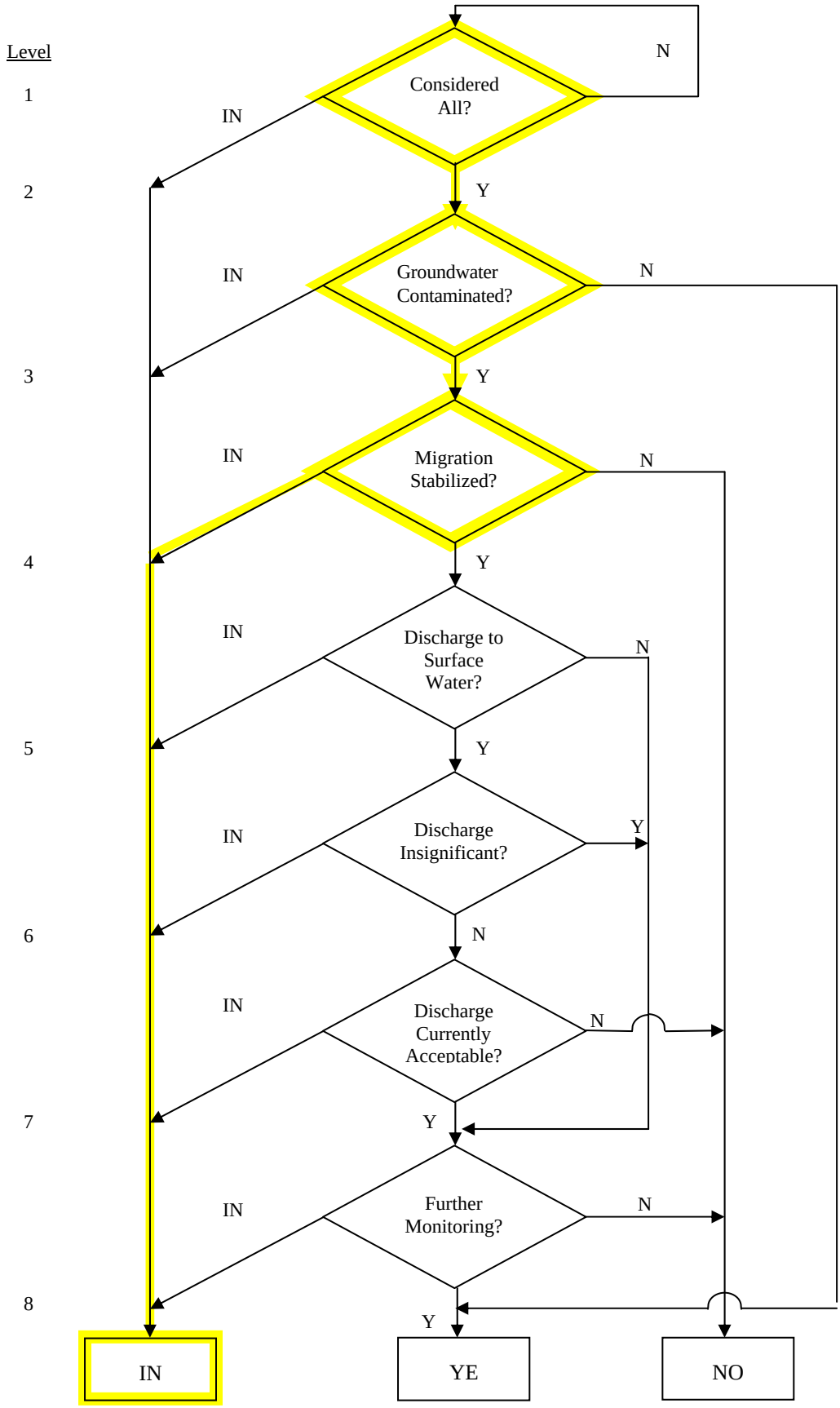
PADEP
South Central Regional Office
909 Elmerton Avenue
Harrisburg, PA 17110

Contact telephone and e-mail numbers

(name) _____
(phone#) _____
(e-mail) _____

Facility Name: Emtrol, Inc.
EPA ID# PAD054139506
City/State Lancaster, PA 17601

MIGRATION OF CONTAMINATED GROUNDWATER UNDER CONTROL (CA 750)



DOCUMENTATION OF ENVIRONMENTAL INDICATOR DETERMINATION
Interim Final 2/5/99
RCRA Corrective Action
Environmental Indicator (EI) RCRIS code (CA725)
Current Human Exposures Under Control

Facility Name: **Emtrol, Inc.**
Facility Address: **3050 Hempland Road Lancaster, PA 17601**
Facility EPA ID #: **PAD054139506**

1. Has **all** available relevant/significant information on known and reasonably suspected releases to soil, groundwater, surface water/sediments, and air, subject to RCRA Corrective Action (e.g., from Solid Waste Management Units (SWMU), Regulated Units (RU), and Areas of Concern (AOC)), been **considered** in this EI determination?

   [X] If yes – check here and continue with #2 below.

   [ ] If no – re-evaluate existing data, or

   [ ] If data are not available skip to #6 and enter "IN" (more information needed) status code.

BACKGROUND

Definition of Environmental Indicators (for the RCRA Corrective Action)

Environmental Indicators (EI) are measures being used by the RCRA Corrective Action program to go beyond programmatic activity measures (e.g., reports received and approved, etc.) to track changes in the quality of the environment. The two EI developed to-date indicate the quality of the environment in relation to current human exposures to contamination and the migration of contaminated groundwater. An EI for non-human (ecological) receptors is intended to be developed in the future.

Definition of "Current Human Exposures Under Control" EI

A positive "Current Human Exposures Under Control" EI determination ("YE" status code) indicates that there are no "unacceptable" human exposures to "contamination" (i.e., contaminants in concentrations in excess of appropriate risk-based levels) that can be reasonably expected under current land- and groundwater-use conditions (for all "contamination" subject to RCRA corrective action at or from the identified facility [i.e., site-wide]).

Relationship of EI to Final Remedies

While Final remedies remain the long-term objective of the RCRA Corrective Action program the EI are near-term objectives which are currently being used as Program measures for the Government Performance and Results Act of 1993, GPRA). The "Current Human Exposures Under Control" EI are for reasonably expected human exposures under current land- and groundwater-use conditions ONLY, and do not consider potential future land- or groundwater-use conditions or ecological receptors. The RCRA Corrective Action program's overall mission to protect human health and the environment requires that Final remedies address these issues (i.e., potential future human exposure scenarios, future land and groundwater uses, and ecological receptors).

Duration / Applicability of EI Determinations

EI Determinations status codes should remain in RCRIS national database ONLY as long as they remain true (i.e., RCRIS status codes must be changed when the regulatory authorities become aware of contrary information).

Current Human Exposures Under Control
Environmental Indicator (EI) RCRIS code (CA725)

2. Are groundwater, soil, surface water, sediments, or air **media** known or reasonably suspected to be **"contaminated"**[1] above appropriately protective risk-based "levels" (applicable promulgated standards, as well as other appropriate standards, guidelines, guidance, or criteria) from releases subject to RCRA Corrective Action (from SWMUs, RUs or AOCs)?

	Yes	No	?	Rationale/Key Contaminants
Groundwater	**X**			Chlorinated VOCs exceed NR MSCs
Air (indoors)[2]		**X**		VOCs released to subsurface
Surface Soil (e.g., <2 ft)		**X**		Minor releases near drain spouts; remediation not required by PADEP
Surface Water		**X**		No surface water exposure pathways are present
Sediment		**X**		No sediment exposure pathways are present
Subsurf. Soil (e.g., >2 ft)			**X**	Extent of contamination is unknown
Air (outdoors)		**X**		Facility is no longer in operation

____ If no (for all media) - skip to #6, and enter "YE," status code after providing or citing appropriate "levels," and referencing sufficient supporting documentation demonstrating that these "levels" are not exceeded.

X If yes (for any media) - continue after identifying key contaminants in each "contaminated" medium, citing appropriate "levels" (or provide an explanation for the determination that the medium could pose an unacceptable risk), and referencing supporting documentation.

X If unknown (for any media) - skip to #6 and enter "IN" status code.

Rationale and Reference(s): The facility is an approximately 54,000 square-foot single-story building on a 7.1-acre parcel of land located in East Hempfield Township at 3050 Hempland Road, west of Centerville Road and south of United States (US) Route 30. The land was undeveloped, residential, and/or agricultural from at least 1864 until the construction of a structure similar to the present-day structure in 1973 (some documents say 1971).

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[1] "Contamination" and "contaminated" describes media containing contaminants (in any form, NAPL and/or dissolved, vapors, or solids, that are subject to RCRA) in concentrations in excess of appropriately protective risk-based "levels" (for the media, that identify risks within the acceptable risk range).

[2] Recent evidence (from the Colorado Dept. of Public Health and Environment, and others) suggest that unacceptable indoor air concentrations are more common in structures above groundwater with volatile contaminants than previously believed. This is a rapidly developing field and reviewers are encouraged to look to the latest guidance for the appropriate methods and scale of demonstration necessary to be reasonably certain that indoor air (in structures located above (and adjacent to) groundwater with volatile contaminants) does not present unacceptable risks.

International Signals Corporation (ISC) conducted electronics manufacturing operations from approximately 1973 to 1993 and possibly used solvents in the manufacturing and assembly of electronic components. Hazardous waste codes associated with ISC operations included F001, F002, and F003 and other F-listed wastes, i.e., solvents typically associated with cleaning or degreasing operations. ISC Defense Systems, Inc., a division of International Signal and Control Corporation, was acquired by Ferranti International, P.L.C. in 1987. In December 1993, Ferranti International, P.L.C. was forced into bankruptcy. According to a letter dated May 18, 1993, it appears that the Ferranti Technologies, Inc. division was leasing the facility from High Associates, a division of High Industries. The lease was being terminated by Ferranti Technologies, Inc., and the property was intended to be sold by High Associates. In 1995, Emtrol purchased the property from High Associates. Emtrol used most of the building space for a design and engineering office. Some space was also used for assembly of electronic controls and automatic storage equipment in support of the baked goods industry. In April 2003, Emtrol became a subsidiary of Weldon Solutions, Inc. of York, Pennsylvania, which acquired its assets. On April 29, 2003, Weldon Solutions, Inc. originally announced that the facility would continue to operate; however, subsequent information indicated that Weldon acquired only non-physical assets and intellectual property. The physical property and structures of the facility were acquired by YLC, Inc., and the entire building was stripped down and facilities were installed for York Technical Institute (YTI), which started operations in 2003. Blackford Development purchased the property shortly after YTI started their operations and, as of 2008, were leasing it to YTI.

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Surface Soil: During a Phase I audit in support of potential redevelopment of the property, sheens were observed on accumulated rainwater at roof downspouts. Accumulated water and soil from test pits were collected and analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and total petroleum hydrocarbons (TPH)

in gasoline-, diesel-, and motor oil- ranges to determine the presence of contaminants. TPH, naphthalene, and 1,2,4-trimethylbenzene were detected in the water. TPH, n-butylbenzene, sec-butylbenzene, naphthalene, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,2-propanediol, octane, nonane, and decane were detected in soil. An evaluation indicated that nominal levels of contamination are confined to under the building's foundation, at a depth of 10 to 20 inches, and the small area on the west side of the building. The December 16, 1994 letter to PADEP concluded that the detected contaminant concentrations were below established cleanup levels, that there were no remaining sources, and that the area was serviced by public water supply. On December 21, 1994, PADEP agreed that no remediation was required

Surface Water/Sediment: No surface water or sediment is known to be present at/near the facility.

Subsurface Soil: During the No. 2 fuel UST removal, approximately 30 tons of visually-apparent contaminated soil were removed, apparently the result of overfill and piping failure. No groundwater was encountered. Soil samples were collected when clean soil was encountered at a depth of approximately 11 feet below the ground surface (bgs) and analyzed for TPH, benzene, toluene, ethylbenzene, and xylenes (BTEX). The results indicated that these compounds were less than their detection limits.

During the Draft Limited Phase II ESA, soil samples were collected continuously from beneath the asphalt/concrete surface to the top of the saturated zone, field screened with a photoionization detector (PID) for VOCs, with one soil sample from each borehole submitted for USEPA Method 8260 VOC analysis. Boring depths ranged from 13.5 to 28 feet bgs. Soil samples were collected from six soil borings. VOCs were detected at less than PADEP Residential Direct-Contact MSCs, Non-Residential Direct Contact MSCs, as well as Soil-to-Groundwater MSCs for Used Aquifers as reported in the Limited Phase II ESA (Blackstone, 2007). The report concluded the soil samples did not reveal target compound concentrations above applicable MSCs for Statewide Health Standards for residential (R) or non-residential (NR) thresholds. If the former septic system was used as a discharge location for solvents during the operation of ISC, as reported in the Draft Phase I ESA, it is a potential area of concern (AOC) that has not been identified in previous investigations. The location is reportedly near the western side of the property; however, its exact location is not known.

3. Are there **complete pathways** between "contamination" and human receptors such that exposures can be reasonably expected under the current (land- and groundwater-use) conditions?

Summary Exposure Pathway Evaluation Table

	Potential **Human Receptors** (Under Current Conditions)						
Contaminated Media	Residents	Workers	Day-Care	Construction	Trespassers	Recreation	Food[3]
Groundwater	In	No	No	Yes	No	No	No
~~Air (indoors)~~							
~~Soil (surface, e.g., <2 ft.~~							
~~Surface Water~~							
~~Sediment~~							
Soil (subsurface e.g., >2 ft.	No	No	No	In	No	No	No
~~Air (outdoors)~~							

Instructions for Summary Exposure Pathway Evaluation Table:

1. Strike-out specific Media including Human Receptors' spaces for Media which are not "contaminated" as identified in #2 above.

2. enter "yes" or "no" for potential "completeness" under each "Contaminated" Media -- Human Receptor combination (Pathway).

Note: In order to focus the evaluation to the most probable combinations some potential "Contaminated" Media - Human Receptor combinations (Pathways) do not have check spaces ("___"). While these combinations may not be probable in most situations they may be possible in some settings and should be added as necessary.

____ If no (pathways are not complete for any contaminated media-receptor combination) - skip to #6, and enter "YE" status code, after explaining and/or referencing condition(s) in-place, whether natural or man-made, preventing a complete exposure pathway from each contaminated medium (e.g., use optional Pathway Evaluation Work Sheet to analyze major pathways).

X If yes (pathways are complete for any "Contaminated" Media - Human Receptor combination) - continue after providing supporting explanation.

X If unknown (for any "Contaminated" Media - Human Receptor combination) - skip to #6 and enter "IN" status code.

Rationale and Reference(s):

Groundwater: The facility is used as a technical training institute. The facility uses public water and no production wells are known to be present at the facility; therefore, contaminated groundwater present within the perched groundwater zone is unlikely to be used. However, since groundwater was encountered at a depth of 5 feet and it contained chlorinated VOCs exceeding MSCs, a health and safety plan (to protect a construction worker) is recommended for any future excavation work.

[3] Indirect Pathway/Receptor (e.g., vegetables, fruits, crops, meat and dairy products, fish, shellfish, etc.

The contamination present in the perched groundwater could migrate horizontally in the shallow perched zones or into the deeper aquifer, if site conditions are not adequately controlled. Inadequate monitoring has been conducted to determine whether the site conditions are such that migration has stabilized. Documentation appended to the Phase I EA (Property Solutions, 2005) indicated the presence of 10 groundwater wells within a 1-mile radius surrounding the facility, including a public water supply well within a 0.5 to 1.0 mile radius north of the facility, and two wells within a 0.25 to 0.5 mile radius in a southeasterly direction. The depths of the intakes of these wells or the status of their users are unknown. Pennsylvania Groundwater Information System (PAGWIS) indicates that at least one domestic well (total depth 129 feet; static water level recorded at approximately 46 feet), installed in 1946, may be present within approximately 0.5 miles southeast of the facility. There are no controls by the local municipality on use of groundwater for potable purposes; therefore, the current status of potential direct human exposure to groundwater contaminants because of the migration from the location of releases from this facility is indeterminate.

Soil (Subsurface): Current exposures to soil are considered under control since the majority of the facility is covered by the building and surrounding parking lots. Since the location of the former septic system was not investigated, a health and safety plan (to protect a construction worker) is recommended for any future excavation work. Therefore, potential subsurface soil exposures are indeterminate because contamination is unknown.

4. Can the **exposures** from any of the complete pathways identified in #3 be reasonably expected to be **"significant"**[4] (i.e., potentially "unacceptable" because exposures can be reasonably expected to be: 1) greater in magnitude (intensity, frequency and/or duration) than assumed in the derivation of the acceptable "levels" (used to identify the "contamination"); or 2) the combination of exposure magnitude (perhaps even though low) and contaminant concentrations (which may be substantially above the acceptable "levels") could result in greater than acceptable risks)?

_____ If no (exposures can not be reasonably expected to be significant (i.e., potentially "unacceptable") for any complete exposure pathway) - skip to #6 and enter "YE" status code after explaining and/or referencing documentation justifying why the exposures (from each of the complete pathways) to "contamination" (identified in #3) are not expected to be "significant."

_____ If yes (exposures could be reasonably expected to be "significant" (i.e., potentially "unacceptable") for any complete exposure pathway) - continue after providing a description (of each potentially "unacceptable" exposure pathway) and explaining and/or referencing documentation justifying why the exposures (from each of the remaining complete pathways) to "contamination" (identified in #3) are not expected to be "significant."

_____ If unknown (for any complete pathway) - skip to #6 and enter "IN" status code

Rationale and Reference(s):

5. Can the "significant" **exposures** (identified in #4) be shown to be within **acceptable** limits?

_____ If yes (all "significant" exposures have been shown to be within acceptable limits) - continue and enter "YE" after summarizing and referencing documentation justifying why all "significant" exposures to "contamination" are within acceptable limits (e.g., a site-specific Human Health Risk Assessment).

_____ If no (there are current exposures that can be reasonably expected to be "unacceptable")- continue and enter "NO" status code after providing a description of each potentially "unacceptable" exposure.

_____ If unknown (for any potentially "unacceptable" exposure) - continue and enter "IN" status code

Rationale and Reference(s):

[4] If there is any question on whether the identified exposures are "significant" (i.e., potentially "unacceptable") consult a human health Risk Assessment specialist with appropriate education, training and experience.

6. Check the appropriate RCRIS status codes for the Current Human Exposures Under Control EI event code (CA725), and obtain Supervisor (or appropriate Manager) signature and date on the EI determination below (and attach appropriate supporting documentation as well as a map of the facility):

_____ YE – Yes, "Current Human Exposures Under Control" has been verified. Based on a review of the Information contained in this EI Determination, "Current Human Exposures" are expected to be "Under Control" at the **Emtrol, Inc.** facility, EPA ID # **PAD054139506**, located at **3050 Hempland Road Lancaster, PA 17601** under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

_____ NO - "Current Human Exposures" are NOT "Under Control."

__X__ IN - More information is needed to make a determination.

Completed by (signature) _____ Date _____

(print) _____ _____

(title) _____ _____

Supervisor (signature) _____ Date _____

(print) _____ _____

(title) _____ _____

(EPA Region or State) _____ _____

Locations where References may be found:

USEPA Region III
Waste and Chemical Mgmt. Division
1650 Arch Street
Philadelphia, PA 19103

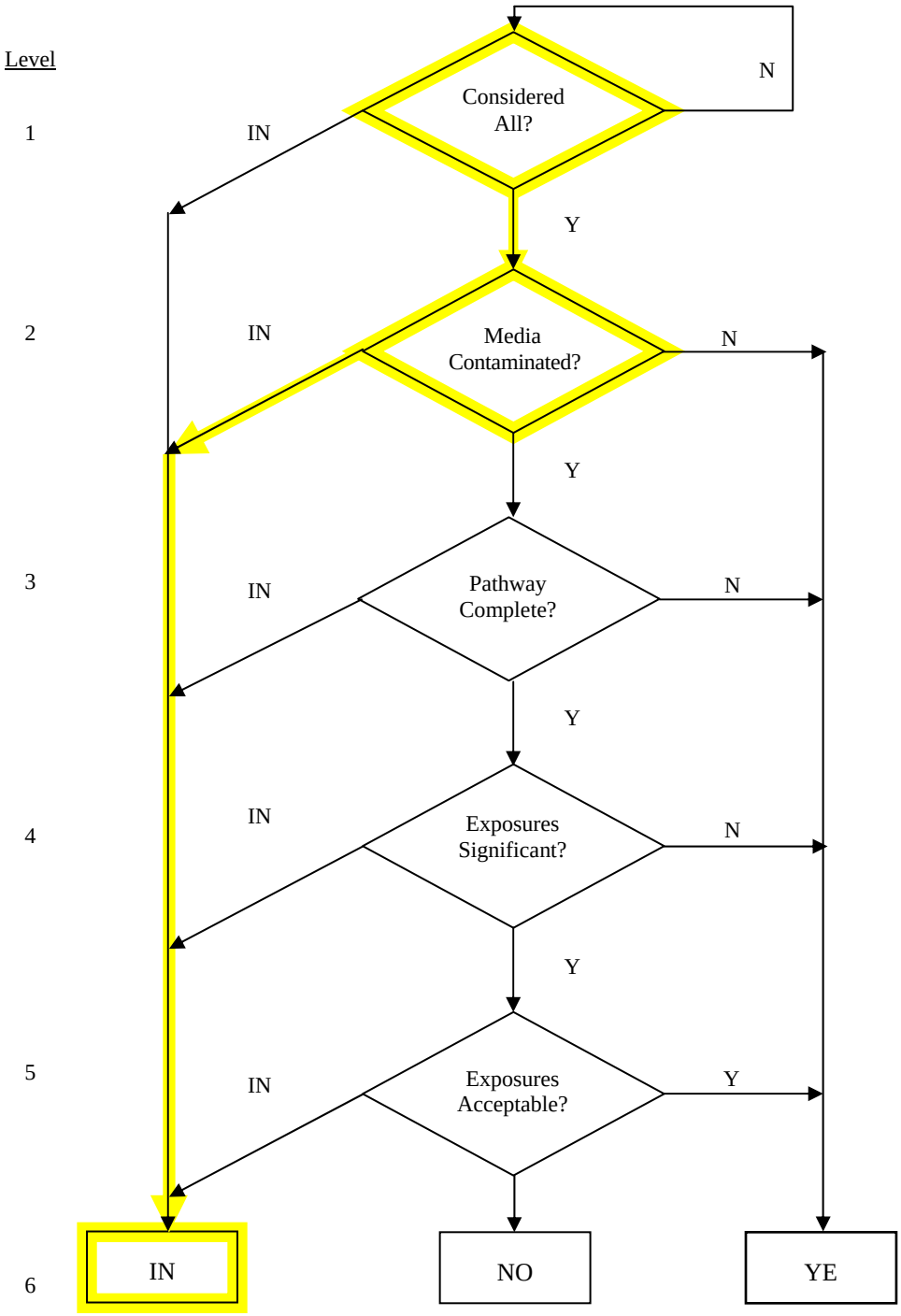
PADEP
South Central Regional Office
909 Elmerton Avenue
Harrisburg, PA 17110

Contact telephone and e-mail numbers
(signature) _____
(print) _____
(title) _____

FINAL NOTE: THE HUMAN EXPOSURES EI IS A QUALITATIVE SCREENING OF EXPOSURES AND THE DETERMINATIONS WITHIN THIS DOCUMENT SHOULD NOT BE USED AS THE SOLE BASIS FOR RESTRICTING THE SCOPE OF MORE DETAILED (E.G., SITE-SPECIFIC) ASSESSMENTS OF RISK.

Facility Name: Emtrol, Inc.
EPA ID# PAD054139506
City/State Lancaster, PA 17601

CURRENT HUMAN EXPOSURES UNDER CONTROL (CA725)



United States Environmental Protection Agency
Region III
Corrective Action Program

Environmental Indicator Inspection Report
For

Emtrol, Inc.
3050 Hempland Road
Lancaster, Pennsylvania 17601

EPA ID No. PAD054139506

Prepared By

Baker

August 2010

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Note: The EI site visit was conducted on December 18, 2008.

RCRA SITE INSPECTION REPORT

Purpose: To gather relevant information from the former Emtrol, Inc. (Emtrol) facility, in order to determine whether human exposures and groundwater releases are controlled, as per Environmental Indicator Determination forms. (Note: The United States Environmental Protection Agency [USEPA] generator ID PAD054139506 was originally assigned to International Signal & Control Corporation (ISC) on October 9, 1980, who generated waste solvents over 20 years at this facility; in 1995, Emtrol inherited the ID for the generation of smaller quantities of waste paint and solvents in drums.)

Documentation Review: Prior to the site visit, Mr. Christopher Plominski and Mr. JP Kumar, of Michael Baker Jr., Inc. (Baker), conducted a records review at the Pennsylvania Department of Environmental Protection (PADEP) South Central Regional Office (SCRO) and the U.S. Environmental Protection Agency (USEPA) Region III Philadelphia Office files and found limited documentation regarding ISC and Emtrol. Through discovery, six property owners were identified: ISC; High Associates, Ltd.; Emtrol, Inc.; York Technical Institute, Inc. (YLC, Inc.); Blackford Development, LLC; and York Tech Associates, LP. Owner representatives were obtained, if possible, and contacted for facility history:

- ISC – no contact obtained
- High Associates – Mr. Lin Good (no facility information provided)
- Emtrol – Mr. Matt Anater (limited facility information provided)
- York Technical Institute, Inc. – no contact obtained
- Blackford Development – Mr. Nick Karamanos (legal counsel) (facility information provided)
- York Tech Associates – Mr. Ken Richards (no facility information provided)

During the site visit, when monitoring wells were observed onsite, additional documentation was requested from the current owner (York Tech Associates). York Tech Associates referred PADEP to Blackstone Consulting, LLC (Blackstone) who conducted the investigations in support of a potential buyer of the property (CMS Companies [CMS]). Subsequent to the site visit, the PADEP SCRO office, through the diligence of their personnel, obtained documentation regarding these investigations.

Attendees:

Name	Organization	Phone Number	E-Mail address
Ms. Linda Houseal	PADEP	717-705-4919	lhouseal@state.pa.us
Ms. Lisa Wilt	PADEP	717-705-4910	lwilt@state.pa.us
Mr. JP Kumar	Baker	412-269-6060	jpkumar@mbakercorp.com

Meeting Summary: A meeting at the former Emtrol facility was held with the attendees noted above on December 18, 2008. A representative of the current owner (York Tech Associates) was not available for the site visit. A determination was made by the site visit attendees that because the interior of the building was reportedly stripped and converted to a culinary school, only the exterior of the property would be observed. The intent of the site visit was conveyed to Mr. Ken Richards of York Tech Associates via the receptionist, who relayed back that Mr. Richards acquiesced to a visual survey of the property surrounding the building. Site investigations reports, that were subsequently provided by Blackford Development and obtained by PADEP, were not available at the time of the site visit. Therefore, the site visit was conducted to with the intent to view and record only readily identifiable features outside the building, such as monitoring wells.

Previously, on October 29, 2008, Mr. Kumar had a phone conversation with Mr. Anater (former Vice President of Emtrol) to discuss the facility operations and history. Limited information regarding their operations from approximately 1995 to 2003 was verbally relayed, indicating that under Emtrol's occupation of the facility, hazardous waste generation was limited to a minor volume of solvent generation from painting cleanup operations.

Photographs of the site visit are presented in Appendix A – Photographs.

A. Location and Operational History of the Facility, Including all Wastes Generated at the Facility and their Management.

Site Layout and Background Information

The facility is an approximately 54,000 square-foot single-story building on a 7.1-acre parcel of land located in East Hempfield Township at 3050 Hempland Road, west of Centerville Road and south of United States (US) Route 30. Appendix B: Figure 1- Facility Location Map shows the location of the facility.

The facility began operation in 1971 (1973 per the Draft Phase I Environmental Site Assessment [Draft Phase I ESA], Blackstone Consulting LLC [Blackstone], February, 2007) under the ownership of ISC, subsequently known as ISC Defense Systems, Inc., as noted in the Part A Permit Application that was submitted in 1980. A letter dated February 17, 1981 to the USEPA from ISC, indicates that they leased the facility and the owner was High Properties. On November 4, 1986 and February 26, 1988, the facility notified the USEPA of the name change to ISC Technologies, Inc. ISC Defense Systems, Inc., a division of International Signal and Control Corporation, was acquired by Ferranti International, P.L.C. in 1987, according to a March 1990 news item in the New York Times.

According to the Draft Phase I ESA prepared for discussion purposes on privileged and confidential basis for CMS Companies (Blackstone, 2007), the land was undeveloped, residential, and/or agricultural from at least 1864 until the construction of a structure similar to the present-day structure in 1973. ISC conducted electronics manufacturing operations at the facility from approximately 1973 to 1993 and possibly used solvents in the manufacturing and assembly of electronic components.

Hazardous waste codes associated with ISC operations included F001, F002, and F003 and other F-listed wastes, i.e. solvents typically associated with cleaning or degreasing operations. According to the Draft Phase I ESA, documentation regarding past ISC operations and materials handling indicated the use of two vapor degreasers in the ISC production lines. Degreasing solvents used by ISC were conjectured to have included tetrachloroethylene (PCE) and trichloroethylene (TCE) (Blackstone, 2007). In December 1993, Ferranti International, P.L.C. was forced into bankruptcy. According to a letter dated May 18, 1993, it appears that the Ferranti Technologies, Inc. division was leasing the facility from High Associates, a division of High Industries. The lease was being terminated by Ferranti Technologies, Inc., and the property was intended to be sold by High Associates.

In 1995, Emtrol purchased the property from High Associates, according to a telephone interview on October 29, 2008 with Mr. Anater (This information contradicts the Draft Phase I ESA [Blackstone, 2007], which stated that Emtrol leased the property). Emtrol used most of the building space for a design and engineering office. Some space was also used for assembly of electronic controls and automatic storage equipment in support of the baked goods industry. In April 2003, Emtrol became a subsidiary of Weldon Solutions, Inc. of York, Pennsylvania, which

acquired its assets. On April 29, 2003, Weldon Solutions, Inc. originally announced that the facility would continue to operate; however, subsequent information (supplied on May 12, 2008) indicated that Weldon acquired only non-physical assets and intellectual property. The physical property and structures of the facility were acquired by YLC, Inc., and the entire building was stripped down and facilities were installed for York Technical Institute (YTI), which started operations in 2003. In a letter dated August 29, 2005, Originators Resource Group, Inc. indicated the owner as YTI, Inc. and that the property was under contract to be sold to Blackford Development. Blackford Development purchased the property shortly after YTI started their operations and, as of 2008, were leasing it to YTI (Karamanos personal conversation; October 30, 2008). Appendix B: Figure 2 - Facility Layout and Sampling Locations shows the facility layout and its immediate surroundings.

In 2007, an investigation in support of a Draft Limited Environmental Phase II ESA (Blackstone, 2007) by a prospective buyer (CMS) resulted in the detection of contamination associated with solvent compounds in the shallow groundwater. The levels exceeded PADEP Medium Specific Concentrations (MSCs) for Used Aquifers containing less than 2,500 milligrams per liter (mg/L) of total dissolved solids (TDS). PADEP personnel obtained the reports and data from CMS in support of this EI. At least two monitoring wells from the ESA were visible during the site visit in 2009. The Draft Phase I ESA identifies the current owner at York Tech Associates.

Appendix C contains a list of documents and references used in this report.

Permit and Regulatory Action History

USEPA generator number PAD054139506 was assigned to ISC on October 9, 1980. The owner of the property (High Associates) initially refused to sign the permit application submitted by ISC because of their delinquency in meeting lease obligations; eventually (in April 1981), their signature was secured and the permit application was considered complete.

An interim status permit was issued to ISC on August 28, 1981, allowing the facility to store 2,750 gallons of wastes carrying F001, F002, F003, D008, and U140 codes in containers.

On March 12, 1985, PADEP served a letter-agreement in settlement for a violation that cited the facility for failing to develop a Preparedness, Prevention, and Contingency (PPC) plan from

November 1981 until November 1984. The PPC plan was issued on February 17, 1986 and updated in 1986, 1988, 1989, 1990, 1991, 1992, and 1993.

On February 26, 1988, the facility's name change from ISC Defense Systems, Inc. to ISC Technologies, Inc. was communicated to the USEPA.

On December 13, 1989, the facility notified PADEP of the status of corrective measures that were taken pursuant to an inspection report from April 11, 1989. The facility had installed a hazardous waste storage building and instituted a hazardous materials training program.

On November 9, 1992, PADEP informed the facility that the Bureau of Radiation Protection had noted during a recent site visit that the equipment (presumably radiation-related equipment) had been inactive and portions of the facility associated with the operation of this equipment had been closed. In this letter, PADEP requested that should the unit be returned to service, sold, salvaged, or removed from the facility, the Bureau of Radiation Protection should be notified.

On March 23, 1993, Ferranti Technologies requested USEPA terminate the facility's USEPA ID and TSD status. The facility provided attachments of two recent inspections that revealed that no hazardous wastes were stored in the building or on the surrounding property. On May 18, 1993, in a letter to USEPA, High Associates indicated that Ferranti Technologies was leasing the facility from High Associates and that High Associates had been assigned the USEPA ID in response to a protective filer. According to this letter, Ferranti Technologies was vacating the premises and it requested that the USEPA ID be deleted.

On August 31, 1995, Emtrol submitted to the USEPA a notification of the generation of small quantities (less than 100 kg/month) of wastes carrying F001, F003, and F005 codes. The USEPA ID number previously assigned to ISC (PAD054139506) was entered on this notification. Thus, Emtrol began using this USEPA ID.

On July 25, 1997, Emtrol informed PADEP that there were no heavy metals in the paints that were used during 1996 and 1997 at their facility. No other regulatory actions or permitting information was documented related to Emtrol's activities. According to Mr. Anater, wastes generated at the facility were from a minor volume of painting and solvents from cleanup. To the best of Mr. Anater's recollection, no industrial discharges or air discharge permits were

reportedly required as part of Emtrol's operations, which correlates with the findings in the regulatory records.

National Pollution Discharge Elimination System (NPDES)

No records of a NPDES permit were found during the facility records search. According to a Draft Phase I ESA, the potential exists that for about a year, the facility may have discharged industrial waste via the septic system prior to its connection to the Lancaster Area Sewer Authority (LASA) system.

B. Description of all Solid Waste Management Units (SWMUs) and/or Areas of Concern (AOCs)

SWMUs

No SWMUs were identified at the facility.

AOCs

No AOCs were identified at the facility; however, hazardous waste was stored in drums during ISC's operations. The September 1984 and January 1989 inspections did not identify a specific waste storage area. A new Model #22 Safety Storage Containment Building was noted delivered on November 30, 1989 in the December 1989 letter regarding corrective measures taken by the facility. An updated PPC plan described a hazardous waste storage building (with the dimensions of approximately 22-feet by 9 feet) as one of the buildings at the facility. Note: No other details of the storage operations or inspection reports were available.

Additionally, a former septic system (west side of original building but covered by building expansion) was reportedly used for about a year to discharge industrial waste, prior to its connection to the LASA system. The potential to subsurface impact via the former septic system was identified as a recognized environmental concern (REC) during the Phase I ESA. The Limited Phase II ESA was conducted to address the REC. Details are provided in the *Investigations and Remedial Actions to Date* section.

Storage Tanks

On December 14, 1989, Ferranti International Defense Systems, Inc. registered a 10,000-gallon

underground storage tank (UST) (Tank Number 001) containing No. 2 fuel oil (heating oil), which it reported as having been installed in June 1985. Note: a 10,000-gallon UST was identified in the February 19, 1993 Ferranti PPC. On February 1, 1990, High Associates registered a UST with the same number containing heating oil, but with an 8,000-gallon capacity and having been installed in 1972. On September 15, 1994, High Associates, Ltd. completed the UST Closure Notification Form for a 8,000-gallon No. 2 fuel tank that was installed in December 1972. On October 26, 1994, during removal, approximately 20 cubic yards of contaminated soils resulted from minor spills and overfills from the UST was reported to PADEP. No bedrock or groundwater was reportedly encountered. On October 31, 1994, High Associates, Ltd. completed the Registration of Storage Tank form for the removal of the 10,000 gallon heating oil UST on October 27, 1994 (installed in 1972). On November 21, 1994, High Industries reported the removal and closure of a 6,000-gallon UST and piping that was reported to have contained No. 2 fuel oil. Note: The UST size of 6,000 gallons was determined upon removal and the closure report noted the incorrect size was identified during the registration. On February 13, 1995, PADEP approved the closure report, as described subsequently under *Investigations and Remedial Action to Date*.

No USTs were observed during the Phase I Environmental Assessment (Phase I EA) in 2005 (Property Solutions, Inc., October 2005), and YTI representatives were not aware of the presence of any in 2005.

According to a review of the documentation available for the property, the Draft Phase I ESA reported that no USTs existed at the property in 2007. The former 6,000-gallon heating oil UST (registered as a 10,000-gallon and referred to as both a 6,000-gallon and 8,000-gallon UST) located within ten feet of the north side of the building was removed in October 1994.

Investigations and Remedial Actions to Date

Environmental Investigation (1994)

During a Phase I audit in support of potential redevelopment of the property, sheens were observed on accumulated rainwater at roof downspouts. The locations were evaluated further on November 18, 1994 by Lancaster Environmental Sciences, Inc. (LES). Accumulated water and soil from test pits were collected and analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and total petroleum hydrocarbons (TPH) in gasoline-, diesel-, and motor oil-

ranges to determine the presence of contaminants. TPH, naphthalene, and 1,2,4-trimethylbenzene were detected in the water. TPH, n-butylbenzene, sec-butylbenzene, naphthalene, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,2-propanediol, octane, nonane, and decane were detected in soil. On December 13, 1994, LES returned to the facility to delineate the area of contamination. Initially, the contaminated area was identified as a small area extending 6 feet from the west side of the building. As additional samples were evaluated using an organic vapor analyzer (OVA), very low levels of vapors (less than 0.5 parts per million [ppm] were detected along the foundation of the building. The evaluation indicated that nominal levels of contamination are confined to under the building's foundation, at a depth of 10 to 20 inches, and the small area on the west side of the building. The December 16, 1994 letter to PADEP concluded that the detected contaminant concentrations were below established cleanup levels, that there were no remaining sources, and that the area was serviced by public water supply. On December 21, 1994, PADEP agreed that no remediation was required.

UST Closure (1994)

On October 26, 1994, High Associates removed a 6,000-gallon UST system that was located within the lawn area between the building and US Route 30 and reported to have contained No. 2 fuel oil. At the time of the UST removal, the facility was vacant. The overall condition of the tank was satisfactory.

During the UST removal, approximately 30 tons of visually-impacted contaminated soil were removed, apparently the result of overfill and piping failure. No groundwater was encountered. Soil samples were collected when clean soil was encountered at a depth of approximately 11 feet below the ground surface (bgs) and analyzed for TPH, benzene, toluene, ethylbenzene, and xylenes (BTEX). The results indicated that these compounds were less than their detection limits.

A November 11, 1994 letter from Edward Armstrong & Sons, Inc. to High Associates documented the removal of the 6,000 gallon UST. Previously, the UST was identified as a 8,000 and 10,000-gallon capacity tank.

Phase I ESA Prior to Emtrol Purchase of Property in 1995

On November 21, 1994, High Associates, Ltd. submitted a closure report to PADEP. On February 13, 1995, PADEP accepted the closure report and determined that no further remediation was required.

Sale of Property to Emtrol (1995)

According to a telephone interview with Mr. Anater (October 29, 2008), Emtrol purchased the property and building approximately in 1995. Prior to Emtrol's occupation in 1995, a Phase I ESA was conducted based on a requirement of the Bank of Lancaster County. The ESA contained no findings adverse to the sale of the property, according to a former employee of Emtrol (October 29, 2008 telephone interview with Mr. Anater).

Phase I Environmental Assessment (2005)

On October 18, 2005, as part of a final Phase I EA for YTI, a file review of PADEP and USEPA files was conducted by Property Solutions, Inc., and submitted to Morgan Stanley Mortgage Capital, Inc. No environmental conditions that suggested further investigation were recognized. Documentation appended to this report indicated the presence of 10 groundwater wells within a 1-mile radius surrounding the facility, including a public water supply well within a 0.5 to 1.0 mile radius north of the facility, and two wells within a 0.25 to 0.5 mile radius in a southeasterly direction.

Draft Phase I Environmental Site Assessment (2007)

A Draft Phase I ESA report, dated February 14, 2007, was prepared for discussion purposes on privileged and confidential basis for CMS Companies in support of their potential purchase of the property from YTI. Upon PADEP's request, this Draft Phase I ESA was supplied by Blackstone. This report identified one recognized environmental condition associated with the former manufacturing operations at the facility. The electronics manufacturing operations under ISC from approximately 1973 to 1993 represented a REC based on the widely recognized use of solvents in the manufacturing and assembly of electronic components. Hazardous waste codes associated with past ISC operations included F001, F002, and F003. F-listed wastes are generated by common manufacturing and industrial processes, such as solvents that have been used in cleaning or degreasing operations. According to this report, documentation regarding past ISC operations and materials handling also indicated the use of two vapor degreasers in the ISC production lines. This report further supposed that typical vapor degreaser solvents included TCE, methylene chloride, and PCE, and that these chlorinated solvents readily penetrate concrete floors and can impact underlying soil and groundwater. Based on the duration (20 years) of ISC operations, the recognized use of chlorinated solvents in the electronics manufacturing process, and the time period of operation during the 1970s and early 1980s which pre-dates various hazardous substance/waste reporting, handling, and disposal requirements, the former site use by ISC was considered a REC. Note: The locations of the degreasers were not described in the reviewed documents.

The Draft Phase I ESA indicates that "a septic system located along the western side of the site was used when the facility was first constructed in 1973". In 1974, the facility was connected to the LASA and therefore, it was further surmised that chlorinated solvents may have also been discharged via the former septic system. The location of the septic system was not described in the Draft Phase I ESA, but did identify it as a REC. Sources quoted in the Draft Phase I ESA did not appear to have detailed knowledge of records of the septic system.

The Draft Phase I ESA reported that "no water wells" were present at the facility. No wetlands or ponded areas were documented.

Draft Limited Phase II Environmental Site Assessment (March 2007)

In February of 2007, as part of a Draft Limited Phase II ESA to further evaluate the RECs, Blackstone collected soil and groundwater samples from six boreholes (SB-01 through SB-06) at various locations outside the building perimeter. Appendix B: Figure 2 - Facility Layout and Sampling Locations shows the Draft Phase II ESA sampling locations.

A Draft Limited Phase II ESA report dated March 14, 2007 was prepared for discussion purposes on an attorney-client privileged basis as attorney work product material by Blackstone. Upon PADEP's request, this Draft Limited Phase II ESA report was provided by Blackstone, along with several tables, figures, and related documentation. The Draft Limited Phase II ESA report described the field investigation, analytical findings, and provided recommendations for further work.

Soil samples were collected continuously from beneath the asphalt/concrete surface to the top of the saturated zone, field screened with a photoionization detector (PID) for VOCs, with one soil sample from each borehole submitted for USEPA Method 8260 VOC analysis. Boring depths ranged from 13.5 to 28 feet bgs. VOCs were detected at less than PADEP Residential Direct-Contact MSCs, Non-Residential Direct Contact MSCs, as well as Soil-to-Groundwater MSCs for Used Aquifers as reported in the Limited Phase II ESA (Blackstone, 2007).

The regional soil was characterized as moderately permeable, friable silty loam. The bedrock beneath the surficial deposits is a stratified sequence shale and limestone (Cambrian-age Kinzers Formation). Soil borings indicated the presence of clayey soil along the southern side of the building where the contamination was prevalent and silty sand along the northwestern side of the building. Groundwater was encountered in all boreholes at the site. The depth to groundwater in the boreholes

ranged from approximately 5 feet bgs to more than 19 feet bgs. Based on area topography and field observations, groundwater in the region was anticipated to flow to the southeast. According to the United States Geological Survey National Water Summary – 1986 the bedrock aquifer beneath the region was expected to be "carbonate aquifers", which are the primary water-bearing formations in Pennsylvania.

Upon completion of soil sampling, a one-inch diameter polyvinyl chloride (PVC) temporary monitoring well was installed within each of the six boreholes. Temporary monitoring wells were developed by removing approximately three well volumes or until groundwater was free of fines. Following well development, the wells were allowed to stabilize. Several temporary monitoring wells could not be fully developed because of low water volume and very slow recharge, which indicated limited volume of water in the water-bearing deposits. Groundwater was sampled when field parameters stabilized and the groundwater was allowed to recover. Some monitoring wells were sampled before stabilization was achieved, owing to low sample volume and slow well recovery.

The report concluded the soil samples did not reveal target compound concentrations above applicable MSCs for Statewide Health Standards for residential (R) or non-residential (NR) thresholds. Groundwater samples revealed several VOCs with concentrations exceeding the applicable MSCs for Statewide Health Standards for used aquifers. VOCs detected in groundwater included TCE at SB-01 (west of the building), and 1,1-dichloroethene (1,1-DCE), PCE and TCE at SB-03 (south of the building). With the exception of 1,1-DCE, the concentrations of VOCs were below the NR used aquifer or NR non-used aquifer MSCs. The concentration of 1,1-DCE in SB-03 was 84 micrograms per liter (µg/L) which exceeds the NR used aquifer and NR non-used aquifer MSCs of 7 µg/L and 70 µg/L, respectively. Note: At SB-01, TCE (5.2 µg/L) exceeded its NR used aquifer MSC (5 µg/L). At SB-03, concentrations of PCE (6.3 µg/L) and TCE (9.6 µg/L) exceeded their NR used aquifer MSCs of 5 µg/L and 5 µg/L, respectively.

Four additional monitoring wells are identified on a sample location figure in the report. Monitoring wells MW-7 and MW-10 are located south and southwest of the building, closest to the area exhibiting the highest concentrations of VOCs; MW-9 is located along the southwestern side of the parking lot, and MW-8 along the southern side of the parking lot (Appendix B: Figure 2 - Facility Layout and Sampling Locations). Results of March 28, 2007 groundwater sampling of MW-7

through MW-10 were presented in a April 10, 2007 analytical report from Test America and summarized in a draft table. This table was submitted to PADEP separately from the draft report.

The groundwater sample from MW-7 contained PCE (42 µg/L), TCE (11 µg/L), and 1,1-DCE (88 µg/L) at concentrations exceeding their respective NR used aquifer MSCs of 5 µg/L, 5 µg/L, and 7 µg/L, and the NR non-used aquifer MSC for 1,1-DCE (70 µg/L) . The groundwater sample from MW-10 contained 1,1-DCE (98 µg/L)and TCE (21µg/L), exceeding their respective NR used aquifer MSCs of 7µg/L and 5 µg/L, and the NR non-used aquifer MSC for 1,1-DCE (70 µg/L). 1,1,1-Trichloroethane (1,1,1-TCA) also was detected in the groundwater samples collected from MW-7 (29 µg/L) and MW-10 (54 µg/L), at concentrations below its NR used aquifer MSC (200 µg/L).

The Draft Limited Phase II ESA report recommended that the owner of the property submit a notice of intent to remediate (NIR) to PADEP. A site-specific standard was anticipated to be applicable to the site because the groundwater was present within a perched aquifer. Perched water was encountered in all borehole locations at a depth ranging from 5 to 19 feet bgs. The discontinuous saturated zones were encountered in coarser deposits and were characterized as "perched" water rather than a regional water-table aquifer.

The Draft Limited Phase II ESA report recommended the evaluation of the indoor air pathway to achieve closure using the site-specific standard. Results obtained by PADEP included a EMSL Analytical Inc. laboratory report with indoor air analytical results from a March 26, 2007 sampling event and a draft summary table. As summarized in the draft table, concentrations of the detected compounds were below Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs). Four 8-hour composite and two 12-hour composite samples were collected from various class rooms and analyzed for Toxic Organic (TO)-15 compounds.

On March 27, 2009, Blackstone supplied a Well Abandonment Activities letter to CMS Companies describing the abandonment of monitoring wells MW-07, MW-08, MW-09, and MW-10 that had been conducted on March 25, 2009 at the request of the latter. The total depths of these monitoring wells were noted in the letter to range from 16 to 40 feet.

Inspection

On September 12, 1984 (under the occupancy of ISC), a hazardous waste inspection noted that a still had been purchased to process Freon (at 300 gallons per day) from a vapor degreaser. A

smaller still was in operation and the cooling water was being discharged to the storm drain. It was recommended in the inspection report by PADEP that the discharge be redirected to the sewer. A PPC plan was not found; however, four other previously identified violations had been corrected.

On January 26, 1989, PADEP inspected the facility for hazardous waste generation activity and noted that wastes were generated from vapor degreasers and waste isomer foams. Freon (under the trade name "Gensolv") was noted to be recycled at the facility. It was also noted that still bottoms (labeled as "waste solvent") were not labeled as a hazardous waste. PADEP recommended that a determination of the hazardous waste nature of the waste foams be made. Documentation identified the foam waste as non-hazardous. Finally, PADEP required that the receipts from Safety Kleen (as the receiving TSD) be supplied. On February 16, 1989 in an internal memo, Ferranti International Signal, Inc. discussed the recycling of the waste "Gensolv". On February 17, 1989, ISC Technologies submitted a letter to PADEP providing the information requested at the inspection.

As reported in a December 13, 1989 letter from Ferranti International Defense Systems Inc. to PADEP, an inspection was conducted on April 11, 1989. The letter provided updates on the status of the corrective measures taken at the facility. A Safety Storage Containment Building was delivered to the facility on November 30, 1989 for use as a hazardous waste storage building. In addition, key facility personnel completed 40 hours of safety training for hazardous materials.
On August 29, 1991, the facility was inspected for hazardous waste generation activity, and it was considered to be a small quantity generator (SQG). It was noted that the facility was in the process of closing.

On September 1, 1992, a "closeout inspection" noted that the facility (Ferranti Technologies, Inc.) was no longer producing any waste. Two issues that remained to be addressed were as follows: 1) the fate of two drums ("Gensolv" and Toluene Diisocyanate), and 2) the inspection of one of the two magazines that could not be inspected to verify that it no longer contained explosives. PADEP stated the facility does not generate hazardous waste and recommended that they request EPA remove their disposal ID number. On December 17, 1992, Ferranti International submitted a letter to PADEP answering a question from the inspection: the two 55-gallon drums of chemicals, one Gensolv and on PE-18AS (toluene diisocynate) were unused commercial products (virgin chemicals) and they were transferred to another facility. On March

3, 1993 Ferranti International submitted a letter to PADEP verifying no explosives were contained within the magazine and that the magazine was moved to another facility on February 28, 1993 when the building was vacated.

A subsequent inspection on March 4, 1993 revealed that no wastes were present, and the facility informed PADEP that the drums had been moved to another facility. The inspection also noted that no explosives had been found during the September 1992 inspection of the magazines at the property and they were subsequently moved to another facility (mentioned March 3, 1993 letter). Again, the inspector recommended the facility contact USEPA to remove it disposal ID number.

On July 9, 1997, a hazardous waste inspection report noted that the Emtrol facility had moved from *123 Locust Street* to *3050 Hempland Road* in 1995. (Note: The 123 Locust facility had operated under USEPA ID PAD003022084 prior to 1995)

C. Description of Exposure Pathways for all Releases or Potential Releases

Air: The population of East Hempfield Township according to the year 2000 census was approximately 21,000. The facility is no longer in operation. However, subsurface releases of VOCs have occurred and a vapor-intrusion evaluation was conducted on March 2007.

Groundwater: The Draft Limited Phase II ESA described the groundwater encountered as a perched layer of groundwater ranging from approximately 5 to more than 19 feet bgs. These discontinuous saturated zones were encountered in coarser deposits and were characterized as "perched" water. According to this report, based on area topography and field observations, groundwater in the region was anticipated to flow to the southeast. The bedrock aquifer beneath the region was expected to be "carbonate aquifers", which are the primary water-bearing formations in Pennsylvania.

The facility is supplied by Lancaster City Water Bureau. There is no information to suggest that onsite production wells are present and being used at the facility. Groundwater wells are not used at the facility. Documentation appended to this Phase I EA indicated the presence of 10 groundwater wells within a 1-mile radius surrounding the facility, including a public water supply well within a

0.5 to 1.0 mile radius north of the facility, and two wells within a 0.25 to 0.5 mile radius in a southeasterly direction.

Surface Water: The facility did not operate under a NPDES permit. The only surface water features present at the facility are the drains located in the parking lots surrounding the building, as noted during the site visit in 2009. Landscaped and grass-covered areas are present outside the paved parking areas. No wetlands or ponded areas were documented in the Draft Phase I ESA.

Soil: The regional soil was characterized as moderately permeable, friable silty loam (Blackstone, 2007). The bedrock beneath the surficial deposits was expected to be stratified sequence shale and limestone (Cambrian-age Kinzers Formation). Soil borings presented in the Draft Limited Phase II ESA indicated the presence of typically clayey soil along the southern side of the building where the contamination was prevalent and silty sand along the northwestern side of the building. The area immediately adjacent to the building was observed to be paved. Areas further away toward the east and north were grass-covered.

D. Exposure Pathway Controls and/or Release Controls Instituted at the Facility

Air: USEPA has requested that the vapor intrusion pathway be evaluated as part of the EI process. The USEPA 2002 OSWER *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance)* provides a methodology for vapor intrusion evaluation under current land use conditions using available site data. It should be noted that the USEPA 2002 guidance is not generally recommended for use in evaluating settings that are primarily occupational. However, the PADEP Act 2 vapor intrusion guidance (specifically, *Land Recycling Program Technical Guidance Manual – Section IV.A.4, Vapor Intrusion into Buildings from Groundwater and Soil under the Act 2 Statewide Health Standard*) can be applied to both residential and nonresidential receptors. This guidance provides decision matrices for soil and groundwater (under a Statewide Health or generic approach) for determining if indoor air quality is a concern. Therefore, the Technical Guidance Manual was used to evaluate a potential vapor intrusion pathway in this EI Report.

As previously mentioned, analytical results presented in the Draft Limited Phase II ESA and

additional laboratory reports demonstrated concentrations of PCE, TCE, 1,1-DCE, and 1,1-TCA in groundwater in the immediate vicinity of the building. Samples from monitoring wells MW-7 and MW-10 that were located closest to the southern side and southwestern corner of the building contained the highest concentrations of chlorinated VOCs. Soil boring logs from the six boreholes (SB-01 through SB-06) indicated the presence of typically clayey soil along the southern side of the building where the contamination was prevalent and silty sand along the northwestern side of the building. The Draft Limited Phase II ESA report also indicates groundwater was encountered in all boreholes at the site. The depth to groundwater in the boreholes ranged from approximately 5 feet below the surface to more than 19 feet below the surface. While boring logs were not available for monitoring wells MW-7 through MW-10, the driller's Water Well Completion Reports indicate groundwater levels were similar to the initial soil borings. Additionally, no evidence of preferential pathways was noted during the 2008 site visit. Therefore, since available information indicates at least five feet of soil-like material between the building and groundwater, the PADEP derived values were used to screen the detected VOCs for potential impact to indoor air. Maximum detected concentrations were compared to the PADEP derived values. The results of the screening are presented in the table below.

VOC	Maximum Concentration in Groundwater (µg/L)	PADEP Groundwater Screening Value (µg/L) for Protection of Indoor Air: Nonresidential
PCE	42	70,000
TCE	21	24,000
1,1-DCE	98	220,000
1,1,1-TCA	54	NOC

Note: NOC – Not of concern, value exceeds constituent water solubility

As noted in the table, the maximum detected VOC concentrations are well below the PADEP derived values. Therefore, it can be concluded that the subsurface vapor to indoor air pathway is not a concern, assuming a nonresidential exposure scenario.

Additionally, it should be noted that indoor air analytical results (chain-of-custody attached to a laboratory report dated April 4, 2007) of four 8-hour and two 12-hour composite samples that were collected from various class rooms in the building and analyzed for TO-15 compounds. The results showed that concentrations of the detected compounds were below OSHA PELs.

Groundwater: Groundwater data were presented in the Draft Limited Phase II ESA and in an additional laboratory reports. A comparison of the data to NR MSCs for used aquifers containing less than 2,500 mg/L of TDS was conducted. Note: Although the postal address for the facility is within Lancaster, Pennsylvania, it is not physically located within the non-use aquifer zones defined by the City of Lancaster, and approved by PADEP (November 20, 2007). At SB-03, located outside the southern central portion of the facility building, concentrations of PCE (6.3 µg/L), TCE (9.6 µg/L), and 1,1-DCE (84 µg/L) exceeded their NR MSCs of 5 µg/L, 5 µg/L, and 7 µg/L, respectively. At SB-01 (located east of the building), TCE (5.2 µg/L) exceeded its NR MSC (5 µg/L). Samples from monitoring wells MW-7 and MW-10, located closest to the southern side and southwestern corner of the building, contained the highest concentrations of chlorinated VOCs. MW-8 and MW-9, located further south of the building, contained significantly lower concentrations of these compounds. The groundwater sample from MW-7 contained PCE (42 µg/L), TCE (11 µg/L), and 1,1-DCE (88 µg/L) at concentrations exceeding their respective NR MSCs of 5 µg/L, 5 µg/L, and 7 µg/L. The sample from MW-10 contained 1,1-DCE (98 µg/L)and TCE (21µg/L), exceeding their respective NR MSCs of 7 µg/L and 5 µg/L. Although the parent compound of 1,1-DCE, (i.e. 1,1,1-TCA, the solvent that is likely to have been historically used at the facility) was also detected in the groundwater samples collected from MW-7 (29 µg/L) and MW-10 (54µg/L), the concentrations were below its NR MSC of 200 µg/L. The breakdown products of TCE (i.e., 1,2-dichloroethylene and vinyl chloride) were not detected in any groundwater samples.

The facility uses public water and no production wells are known to be present at the facility, therefore, contaminated groundwater present within the perched groundwater zone is unlikely to be used. However, since groundwater was encountered at a depth of 5 feet and contained chlorinated VOCs exceeding MSCs, a health and safety plan (to protect a construction worker) is recommended for any future excavation work.

Furthermore, the contamination could migrate horizontally in the shallow perched zones or into the deeper aquifer if site conditions are not appropriately controlled. Inadequate monitoring has been conducted to determine whether the site conditions are such that migration has stabilized. Documentation appended to the Phase I EA indicated the presence of 10 groundwater wells within a 1-mile radius surrounding the facility, including a public water supply well within a 0.5 to 1.0 mile radius north of the facility, and two wells within a 0.25 to 0.5 mile radius in a southeasterly direction. The depths of the intakes of these wells or the status of their users are unknown. Pennsylvania Groundwater Information System (PAGWIS) indicates that at least one

domestic well (total depth 129 feet; static water level recorded at approximately 46 feet) owned by Frank Henne, installed in 1946, may be present within approximately 0.5 miles southeast of the facility. There are no controls by the local municipality on use of groundwater for potable purposes, therefore, the current status of potential direct human exposure to groundwater contaminants because of the migration of releases from this facility is indeterminate.

Lastly, if the former septic system was used as a discharge location for solvents during the operation of ISC, as reported in the Draft Phase I ESA, it is a potential area of concern (AOC) that has not been identified in previous investigations. The location is reportedly near the western side of the property, however, its exact location is not known. No investigation of closure status is known.

Surface Water: No surface water exposure pathways are presently known.

Soil: Soil samples were collected from six soil borings. VOCs were detected at less than the R and NR MSCs. However, the location of a former septic system, where solvents may have been discharged during a period of the ISC's operation, may or may not have been targeted for investigation. Therefore, the extent of subsurface soil contamination has been inadequately defined.

Current exposures to surface soil are considered under control since the majority of the facility is covered by the building and surrounding parking lots. Since the location of the former septic system was not investigated, a health and safety plan (to protect a construction worker) is recommended for any future excavation work. Therefore, potential subsurface soil exposures are indeterminate because contamination is unknown.

E. Follow-up Action Items

USEPA Region III will decide if additional information or sampling at the facility is required to determine whether or not the environmental indicators have been met or if corrective action is required for the facility.

APPENDIX A

Photographs

MICHAEL BAKER JR., INC. – PHOTOGRAPHIC RECORD

SITE NAME: Emtrol, Inc.

PHOTOGRAPH **1**	
VIEW **Northwest**	
PHOTOGRAPHS BY **Baker**	

Comments: Former Emtrol facility building (currently occupied by YTI)

PHOTOGRAPH **2**	
VIEW **North**	
PHOTOGRAPHS BY **Baker**	

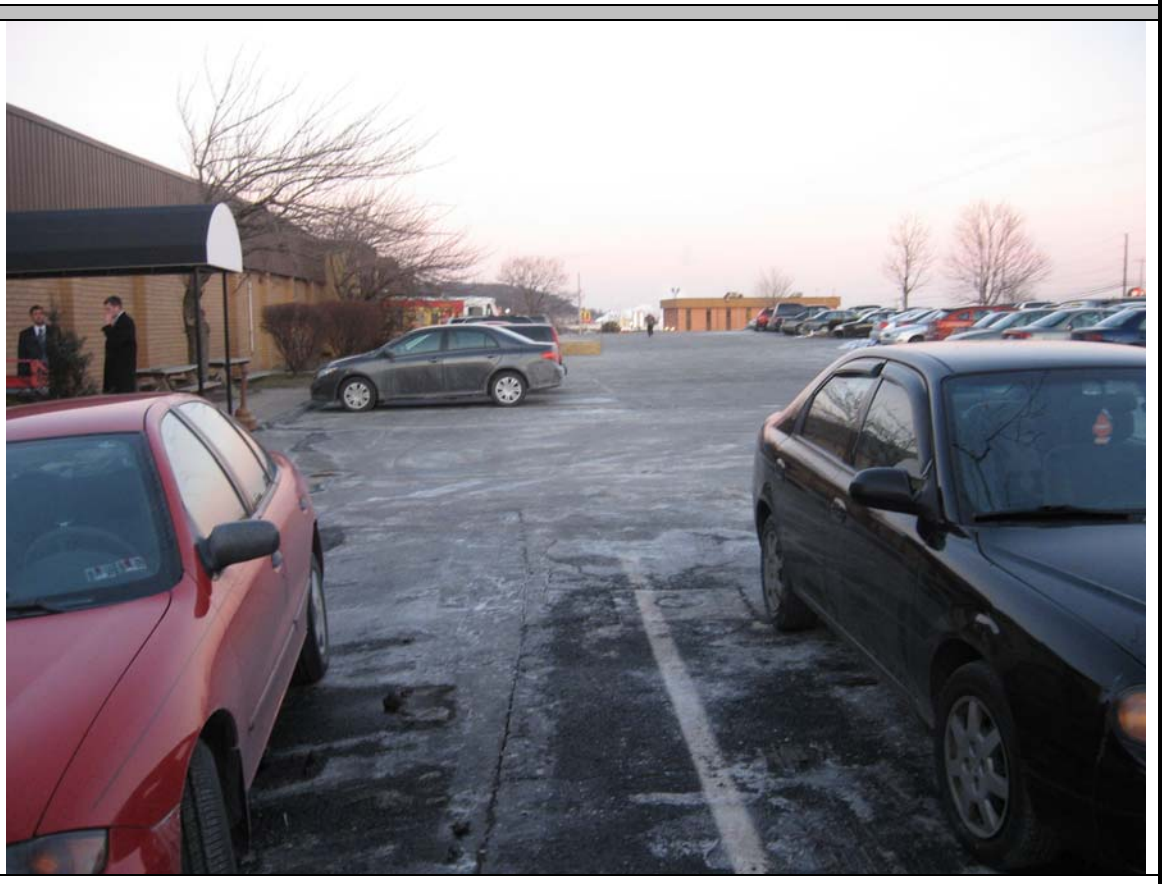
Comments: View of building from parking lot from vicinity of Hempland Road

MICHAEL BAKER JR., INC. – PHOTOGRAPHIC RECORD

SITE NAME: Emtrol, Inc.

PHOTOGRAPH **3**	
VIEW **Down**	
PHOTOGRAPHS BY **Baker**	

Comments: Closeup of monitoring well in parking lot visible in Photograph 2

PHOTOGRAPH **4**	
VIEW **East**	
PHOTOGRAPHS BY **Baker**	

Comments: View of monitoring well in parking lot close to facility building

MICHAEL BAKER JR., INC. – PHOTOGRAPHIC RECORD

SITE NAME: Emtrol, Inc.

PHOTOGRAPH **5**	
VIEW **West**	
PHOTOGRAPHS BY **Baker**	

Comments: Rear parking lot of facility

PHOTOGRAPH **6**	
VIEW **Northwest**	
PHOTOGRAPHS BY **Baker**	

Comments: Vacant field and U.S. Route 30 adjacent to north of facility

MICHAEL BAKER JR., INC. – PHOTOGRAPHIC RECORD

SITE NAME: Emtrol, Inc.

PHOTOGRAPH

7

VIEW
South

PHOTOGRAPHS BY

Baker

Comments: Manufacturing facility (Purina Dog Foods) across Hempland Road

PHOTOGRAPH

8

VIEW
Southwest

PHOTOGRAPHS BY

Baker

Comments: Other manufacturing facilities further west/southwest along Hempland Road.

APPENDIX B

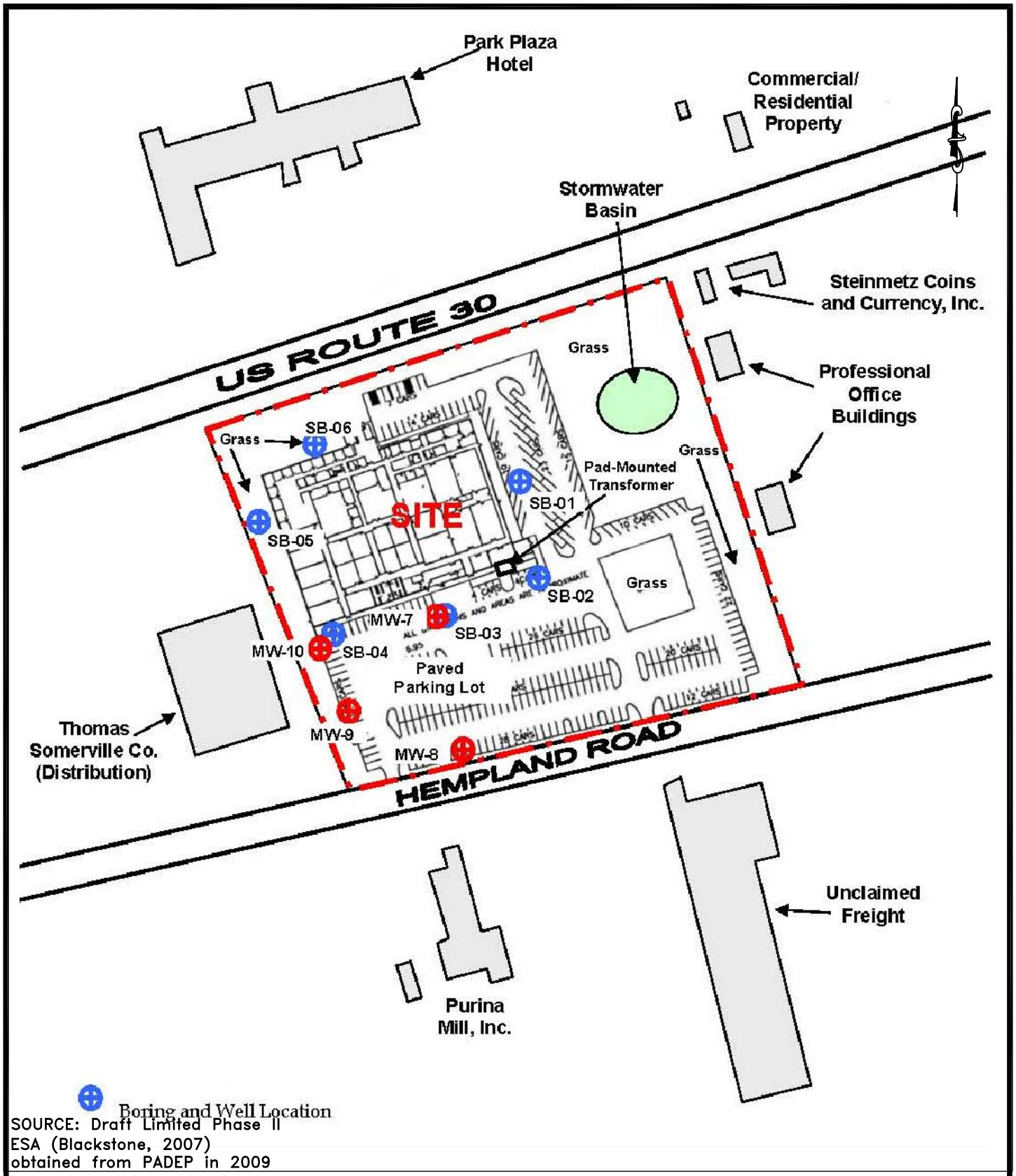
Figures

SOURCE:
GOOGLE.com

SCALE: Approx.1"=400'	DATE: OCTOBER 2009	
S.O. NO.: 114484	FILE: 114484_EMTR-01	
DSN/DWN: JPK/RRR	CHK: JPK	

Baker MICHAEL BAKER JR., INC.
MOON TOWNSHIP, PENNSYLVANIA

FIGURE 1
FACILITY LOCATION MAP
FORMER EMTROL, INC.,
3050 HEMPLAND ROAD,
LANCASTER, PENNSYLVANIA



SOURCE: Draft Limited Phase II ESA (Blackstone, 2007) obtained from PADEP in 2009

FIGURE 2
FACILITY LAYOUT AND SAMPLING LOCATIONS
FORMER EMTROL INC.
LANCASTER, PENNSYLVANIA

SCALE:	NOT TO SCALE	DATE: MAY 2010	Baker Michael Baker Jr., Inc.
S.O. NO.:	114484	FILE: 114484_EMTR_02	MICHAEL BAKER JR., INC.
DSN/DWN:	JPK/RRR	CHK: JPK	MOON TOWNSHIP, PENNSYLVANIA

APPENDIX C

Inventory of Documentation and Reference Documents

The following is a list of documents in the order referenced in the report.

Document Date	Document
April 23, 1981	Part A Permit Application
1981-1984	Permit Application Correspondence
1980-1997	Hazardous Waste Notifications
February 14, 2007	Draft Phase I ESA
October 29, 2008	Telephone Interview Regarding Emtrol Operations
April 29, 2003	Weldon Acquisition of Emtrol
August 23, 2005	Property Appraisal and Letter
March 14, 2007	Draft Limited Phase II ESA
August 28, 1981	Interim Status
March 12, 1985	Settlement Agreement for Violations
December 13, 1989	Ferranti-Status of Corrective Measures
November 9, 1992	Ferranti Not Operating
July 25, 1997	Paint Overspray Information
February, 19, 1993	Ferranti PPC Plan
1989, 1990, 1994	ISC Tank Registrations
October 24, 1994	ISC-UST Closure
February 13, 1995	PADEP letter, UST Closure
October 5, 2005	Phase I Environmental Assessment
December 16, 1994	Former ISC, Ferranti Site Contamination Report
October 18, 2005	File Review for EA by Property Solutions
March 2007	Well Installer Driller Forms
February – March 2007	Soil Boring Logs (Draft Limited Phase II ESA)
April 10, 2007	Groundwater Data for MW 7-10
Not Dated	Table 2 (Soil Data), Table 3 (Groundwater Data), Table 4 (Indoor Air Data)
April 4, 2007	Indoor Air Laboratory Data
March 29, 2009	YTI Well Closure Letter
September 12, 1984	Hazardous Waste Inspection
January 26, 1989	ISC-Hazardous Waste Inspection Report
January 31, 1989	Ferranti Internal Correspondence
February 17, 1989	ISC Plant Information
December 17, 1992	Inspection Follow-up Regarding Fate of Drums
March 3, 1993	Magazine Empty and Moved
March 4, 1993	Ferranti-Inspection Report
May 18, 1993	Request to Delist TSD Status
July 9, 1997	Inspection Note - Facility Moved from Locust Street