MARKS Environmental, Inc.
Quality Groundwater, Soils, Remediation and Waste Management Services
140 Bollinger Road Elverson, PA 19520 · Telephone: (610)286-0802 Fax: (610) 913-0288

November 13, 2015

Ms. Tran N. Tran
USEPA
RCRA Project Manager
PA Operations Branch
1650 Arch Street, 3WC22
Philadelphia, PA 19103-2029

RE: **Submittal of Revised Post Remediation Care Plan, Accellent Inc., Montgomery County, Collegeville, PA**

Dear Ms. Tran:

Enclosed please find an electronic copy (on compact disk) of the revised Post-Remediation Care Plan (PRCP) prepared on behalf of Accellent Inc. (d.b.a. Lake Region Medical) and UTI Holdings, LLC (Accellent) to allow for termination of the Final Administrative Order on Consent, Docket No. RCRA-III-055-CA. The PRCP has been revised to address comments from the United States Environmental Protection Agency (USEPA) provided to Accellent in a letter dated October 2, 2015.

We look forward to you final approval of this revised PRCP. If you have any questions regarding this document please contact me at 610-286-0802.

Very Truly Yours,
MARKS ENVIRONMENTAL, INC.

Thomas R. Marks

Thomas R. Marks, P.G.
Principal Hydrogeologist

Cc.: J. Farina (Accellent)
R. Deist (Accellent)
D. Hilbert (Accellent)
H. Smith (Accellent)
C. McCabe, Esquire (MGKF)

POST REMEDIATION CARE PLAN

Accellent Inc. (d.b.a. Lake Region Medical) on behalf of UTI Holdings, LLC
Groundwater Remediation

Collegeville, PA Facility

November 2015

Prepared by:
Marks Environmental, Inc.
140 Bollinger Road
Elverson, PA 19520

Prepared for:
Accellent Inc.
d.b.a. Lake Region Medical
Collegeville, Pennsylvania

SECTION 1 INTRODUCTION

Section 1.1 General

This Post-Remediation Care Plan (PRCP) was prepared by Marks Environmental, Inc. (MEI) on behalf of Accellent Inc. (d.b.a. Lake Region Medical) and UTI Holdings, LLC (Accellent) to allow for termination of the Final Administrative Order on Consent, Docket No. RCRA-III-055-CA, executed by Accellent and the United States Environmental Protection Agency (USEPA) in March, 1992 (Consent Order). This PRCP provides for the on-going operation and monitoring of a groundwater extraction system that has been operated at the Accellent site (Site) located in Montgomery County, Pennsylvania (Figure 1) under the Consent Order. The remediation of this property has been on-going since 1978, initiated in less than a year after the discovery of a release of trichloroethene (TCE) and 1,1,1 trichloroethane (TCA) at the Site. The Accellent Collegeville, PA Site is comprised of two real estate parcels, Parcel #23-00-01012-00-9 (37.62 acres) and Parcel #23-00-01015-00-6 (2.64 acres).

This PRCP follows USEPA's approval of the *Technical Impracticability Determination for Groundwater Remediation, Accellent Inc., Montgomery County, Collegeville, PA* (TI Waiver Request), prepared by Marks Environmental, Inc., June 2012 on behalf of Accellent Inc., pursuant to which it has been demonstrated that the attainment of the Cleanup Goals identified in the Consent Order is technically impracticable. Accordingly, Accellent has proposed alternate performance standards and Points of Compliance (POCs), and has demonstrated attainment with such alternate performance standards at the proposed POCs. The TI Waiver Request was approved by the USEPA by letter dated August 22, 2013. This PRCP presents the groundwater monitoring and routine operation and maintenance (O&M) requirements for the ongoing operation of the Site groundwater extraction system. Annual reporting requirements and an environmental covenant (EC), that will ensure the continued protection of human health and the environment, are also included in, or referenced as an integral part of, this PRCP. Together, the PRCP and the EC provide enforceable mechanisms for site operation and USEPA oversight following termination of the Consent Order.

SECTION 2 POST-REMEDIATION CARE PLAN

EPA's approval of the TI Waiver Request was based on the determination that areas within the designated TI Zone will not be required to meet the original cleanup goals identified in the Consent Order, but will be monitored on a periodic basis via the TI Zone Monitoring Wells. It has been demonstrated that off-site receptors are not impacted by contaminant concentrations above USEPA's maximum contaminant levels ("MCLs"). On-site wells outside of the perimeter of the plume (POC Wells) have demonstrated consistent compliance with the MCLs due to their position outside of the TI Zone. Natural variability in the site hydrogeology and groundwater quality will be monitored in accordance with this PRCP to ensure that the documented progress in reducing the size of the plume continues. USEPA considers compliance at the plume perimeter as a statistical demonstration that contaminant levels outside of the TI Zone perimeter do not rise above the Federal Maximum Contaminant Levels (MCLs) and that off-site potential users remain protected. During a meeting on June 15, 2015 between the USEPA and Accellent, the historic groundwater quality data were reviewed and appropriate monitoring points for attainment monitoring were selected and incorporated into this PRCP.

As set forth below, this PRCP includes requirements for the continued operation of the pump and treat system, ongoing groundwater monitoring, and annual reporting to USEPA.

The PRCP includes the following elements:

1. Plume containment via groundwater extraction using both extraction wells (UTM-1 and UTM-11).
2. Annual groundwater level and contaminant concentration monitoring at site wells, including both TI Zone monitoring wells and POC wells.
3. Annual reporting of operations, maintenance, and monitoring results to USEPA.
4. Prohibition of future groundwater use (for potable water supply) within the TI-Zone.

Details regarding the ongoing monitoring and operations at the Site are provided in Sections 2.2 through 2.6 of the PRCP.

The Final Remedy described in the PRCP and the EC, will remain in place until USEPA agrees that the results of groundwater monitoring, Fate and Transport groundwater modeling, or other data indicate that attainment of the groundwater cleanup goals can be maintained without the continued operation of the pump and treat system. Accellent or the current Site owner may petition the USEPA to change or terminate these ongoing requirements in the future.

Section 2.1 Points-of-Contact

Key project points-of-contact are presented below in Table 1.

Table 1
Project Points-of-Contact

Contact/Affiliation	Title	Contact Phone and Email	Address
Ms. Tran N. Tran USEPA	RCRA Project Manager	(215) 814-2079 Tran.tran@epa.gov	PA Operations Branch 1650 Arch Street, 3WC22 Philadelphia, PA 19103-2029
Mr. Jeffrey M. Farina Accellent Inc.	Executive Vice President of Technology/ CTO	(610) 409-2252 jeff.farina@lakeregionmedical.com	200 W. 7th Avenue Collegeville, PA 19426
Mr. Robert P. Deist Accellent Inc.	Senior Director, Corporate EHS	(978)821-5570 Bob.deist@lakeregionmedical.com	200 W. 7th Avenue Collegeville, PA 19426
Mr. Thomas Marks Marks Environmental, Inc.	Principal Hydrogeologist	(610) 286-0802 marksenvironmental@comcast.net	140 Bollinger Road Elverson, PA 19520

Section 2.2 Groundwater Cleanup Goals

The groundwater cleanup goal outside the TI Zone is the Federal MCL for TCE, TCA, and chromium, which are as follows:

- TCE - 5 µg/l
- TCA - 200 µg/l
- Total Chromium – 100 µg/l

In order to demonstrate continued attainment at the site, and continued containment of the plume, five POC monitoring wells are established in Section 2.3 below, that will be monitored for TCE/TCA, periodically. Chromium has previously been documented as having attained the cleanup goal in all of the site monitoring wells therefore analysis for chromium is no longer required. Also included in Section 2.3 are TI Zone monitoring wells to be sampled annually as part of the ongoing site monitoring program. Figure 2 shows the POC monitoring wells and the TI Zone monitoring wells.

For purposes of future monitoring efforts, USEPA considers ongoing compliance with the groundwater cleanup standard to be a statistical demonstration that contaminant levels at the POC wells do not rise above Federal Maximum Contaminant Levels (MCLs), and that off-site potential groundwater users remain protected. Practically, this compliance goal can be demonstrated by maintaining the TI Zone at its approximate current footprint, or smaller. The statistical approach and POC wells presented below are designed to reflect this goal, while at the same time allowing for the natural variations in groundwater quality that have been documented over the past 35 years of active remediation at the Site.

Section 2.3 Post-Remediation Care Groundwater Monitoring

Annual (or Quarterly where designated or as warranted) Post Remediation groundwater sampling will be conducted to monitor the TI Zone and the area outside of the TI Zone. Accellent or the then current owner of the Site will sample and analyze the monitoring wells listed in Table 2 for TCE and TCA. The analytical method to be used for the analyses, and the QA/QC samples that will be collected with each sampling event, are also shown in Table 2. The selected locations include five wells located outside the perimeter of the TI Zone and nine wells located within the TI Zone.

Table 2
Annual Groundwater Monitoring Sample Collection Locations

Well	Sampling Frequency	Sample Parameters and Analysis	
		Compound	EPA Analytical Method
Point of Compliance Wells			
UTM-4	Annual	TCE/TCA	8260B
UTM-7*	Quarterly/Annual		
UTM-9	Annual		
UTM-21	Annual		
UTM-23	Annual		
		TI Zone Monitoring Wells	
UTM-1	Annual	TCE/TCA	8260B
UTM-6	Annual		
UTM-8	Annual		
UTM-10	Annual		
UTM-11	Annual		
UTM-14	Annual		
UTM-17	Annual		
UTM-20	Annual		
UTM-22	Annual		
		QA/QC Samples	
Trip Blank	One per shipment	TCE/TCA	8260B

**Note: POC well UTM-7 will be monitored quarterly for four quarters, and annually thereafter, in order to establish a recent data set for the statistical analyses.*

Sampling will be performed using the low-flow sampling method (EPA, Puls and Barcelona, 1995), consistent with historic sampling at the Site. A trip blank will be submitted to the laboratory for quality assurance/quality control (QA/QC) purposes for each shipment of samples. All samples will be placed into a pre-chilled cooler and submitted under chain-of-custody documentation to a Pennsylvania-certified analytical laboratory (currently ALS Environmental Laboratory, Middletown, Pennsylvania) for TCE/TCA analysis in accordance with USEPA Method 8260B.

After the first two annual rounds of Post Remediation groundwater sampling are completed, Accellent will review the results and propose, if appropriate, a reduced number of TI Zone Monitoring Points. Any USEPA-approved changes to the PRCP will be recorded as a modification to the existing EC, and thereby will become part of the required ongoing groundwater monitoring at the Site.

Section 2.4 Statistical Demonstration

The Point of Compliance Wells have been below the MCL during the most recent monitoring events, although there are not eight recent data points for UTM-7. As noted above, UTM-7 will be monitored quarterly for four quarters to obtain sufficient recent data for this comparison.

Although results above the MCL are not expected for the POC wells, such a result would not necessarily be a cause for concern if the remediation system is operating properly. The heterogeneous nature of the Brunswick Formation bedrock aquifer at the Site has been well documented. Significant seasonal variations in groundwater quality, likely related to dewatering portions of the aquifer (and upper fracture zones) occur during periods when the water table is low. The water table elevation typically fluctuates between a range of 10 feet to 30 feet above MSL throughout the year, depending on the monitoring point. Over the past 35 years of remediation monitoring at the Site, order of magnitude variations in the concentrations of TCE and TCA have been commonly observed within a one year period. Laboratory precision and field conditions during sampling, impart additional variability into the data. Even with the variability in groundwater quality at the Site - the historic monitoring of on-site and off-site wells, the Fate and

Transport model, and the receptor survey have demonstrated that there are no complete exposure pathways.

The above variability is common for groundwater remediation and it may be necessary to perform statistical analysis to demonstrate that contaminant levels outside of the TI Zone perimeter do not rise above the Federal Maximum Contaminant Levels (MCLs) and that off-site potential users remain protected. USEPA requested that the statistical demonstration consist of comparing the 95% Upper Confidence Limit (UCL) for the Point of Compliance wells to the MCLs to determine whether increased monitoring or other corrective action is warranted.

Statistical Testing

The following sequential approach will be utilized for determining whether any POC well analytical result continues to demonstrate attainment with the cleanup standard with sufficiently high confidence, or whether additional evaluation is warranted:

1. If the analytical result and/or the 95% UCL calculated based on the last 8 monitoring results are below the MCL, no further action (other than routine monitoring) is needed.
2. If the analytical result and the 95% UCL are above the MCL, the well will be re-sampled within two weeks of receipt of the initial analytical report, to determine whether the laboratory or field error may have been the cause of the anomalous result.
3. If using the re-sampling result in the place of the initial result indicates the initial sampling was anomalous (i.e., the result and/or the 95% UCL calculated using the re-sampling analysis are below the MCL), routine monitoring would resume, and the initial result will be replaced by the re-sampling result for the future UCL calculations.
4. If the result and the 95% UCL remain above the MCL (using the re-sampling analytical result in place of the initial result), the well will be monitored quarterly until the 95% UCL drops below the MCL, at which time routine annual monitoring will resume.
5. If TCE is detected at a concentration greater than 15 ug/L in two separate sampling events during the eight quarters of monitoring, or if the 95% UCL does not drop below the MCL

after eight quarters of sampling, a re-evaluation of the site hydrology will be initiated immediately as described below.

Additional Corrective Action

Additional corrective action will include reevaluating hydrology of the site area and assessing whether new pumping wells or changes in pumping rates have occurred in the site area. The additional corrective action will also include an evaluation of possible off site sources, as appropriate, that could explain a change in groundwater quality at the site. Should this re-evaluation indicate a change in the local hydrogeology is responsible for the exceedance, a survey and evaluation of potential off-site ecological or human receptors will be conducted to determine whether the apparent change in the groundwater flow regime poses a threat to any receptor. The evaluation shall include a determination of whether additional actions are necessary or appropriate to address contaminant levels at POC wells. A report of corrective action activities, findings and any proposed additional actions shall be submitted to the USEPA in accordance with the requirements in Section 4 below, in the next Quarterly or Annual Groundwater Monitoring Report. It is expected that this receptor survey will involve a modification of the fate and transport model for the plume (using updated analytical and hydrologic measurements) and a review of previous receptor surveys to determine potential exposure pathways. The assessment of potential off-site sources will include a regulatory file review to determine whether releases in the site area may be responsible for anomalous analytical results.

Section 2.5 Post-Remediation System Operations and Maintenance

The Final Remedy includes the continuous operation of the groundwater extraction system. Routine groundwater extraction system operation and maintenance ("O&M") has been and will continue to be performed by on-site Accellent personnel, or any future owner of the Site, MEI personnel, and outside contractors, as necessary. System O&M consists of daily, weekly, and monthly system checks that are performed in accordance with Site Operations and Maintenance Manual for the Groundwater Remediation and Soil Vapor Extraction Systems (O&M Manual) (MEI, 2002; updated January 2014). The O&M Manual is currently filed at the Accellent Collegeville Plant Maintenance Supervisor's office and in the Environmental, Health and Safety

Manager's office. The section of the O&M Manual listing periodic system maintenance and inspection requirements is included at Appendix A to this PRCP.

The extraction well system will remain in continuous operation and O&M activities will continue to occur at the frequencies identified in the O&M Manual until such time as USEPA approves changes to the required operation of the pump and treat system.

Section 2.6 System Failure Notifications

If system maintenance or repairs require that the primary (UTM-1) or secondary (UTM-11) groundwater extraction wells be shut down for greater than 10 days, the USEPA shall be notified by telephone. This notification will, at a minimum, include the following information:

1. The date of well(s) failure and suspected cause.
2. Current well status (returned to operation or temporarily down for repairs).
3. Expected time frame for repair activities/parts acquisition.
4. Expected time frame for return of system to operation.
5. Contingencies in place to deal with Plant 1 Sump water during the time period that the wells are not operable.

Upon completion of a system repair following such a notification, a letter and/or electronic mail summary of the actions performed to rectify each occurrence will be forwarded to USEPA.

SECTION 3 ENVIRONMENTAL COVENANT

An Environmental Covenant ("EC") was required by USEPA to be recorded for the Site to ensure that the PRCP was implemented and able to be enforced by USEPA. A copy of the EC is attached as Appendix B, and will be, upon USEPA approval, filed with the Recorder of Deeds for Montgomery County, PA.

SECTION 4 QUARTERLY/ANNUAL REPORTING

Quarterly sampling of POC well UTM-7 is required for four quarters, beginning upon approval of this PRCP. Depending upon the statistical evaluation of the groundwater results to be collected following the closure of the Consent Order, quarterly sampling of other wells may be required for a period of time necessary to evaluate anomalous data. Quarterly (if applicable) or Annual Groundwater Monitoring Reports covering the groundwater monitoring and system operations activities conducted pursuant to this PRCP shall be prepared and forwarded to the USEPA. The sampling events and reports will be conducted/prepared in a frequency consistent with the current schedule outlined in the Consent Order. Quarterly sampling rounds (if required) will be conducted during May, August, and November of each year. The annual sampling round will be conducted in February of each year. Quarterly reports (when applicable) will be submitted by the 15th day of the month of the next scheduled quarterly sampling event (i.e.: a quarterly report for a sampling event completed in August would be due by November 15th). The Annual Groundwater Monitoring Report will be submitted by May 15th of each year. Reports will be submitted by the then current owner of the Site.

The Annual Groundwater Monitoring Report shall include the following information:

- Sampling event dates, wells sampled, and general observations (e.g., well condition).
- Summary of analytical data findings and data comparison to previous sampling events, including comparing the POC well results and 95% UCL for the last 8 sampling events to the MCLs.
- Summary of extraction well system functionality and O&M repairs performed over the year period of performance.
- Summary of extraction well system compliance with NPDES and DRBC permit requirements.
- A discussion of general groundwater quality trends and any observed changes in groundwater quality at the Site.

- The results of any necessary re-sampling of POC wells and re-evaluations of the site hydrogeology (i.e.: updated graphical depictions of the TI-Zone and groundwater quality results, revised fate & transport groundwater flow model, etc.), as appropriate.
- A TCE plume isoconcentration map shall be prepared every five years, beginning five years from the date of approval of the PRPC.

The Quarterly Groundwater Monitoring Report, when required, shall include the following information:

- Sampling event dates, wells sampled, and general observations (e.g., well condition).
- Summary of analytical data findings and data comparison to previous sampling events.
- Summary of statistical analyses of the data.
- A discussion of general groundwater quality trends and any observed changes in groundwater quality at the Site.
- An evaluation of whether quarterly sampling continues to be appropriate, or whether a return to annual sampling is warranted.

If Additional Corrective Action (pursuant to Section 2.4) is required at the site, the USEPA will be notified, and will be provided an opportunity to review proposed corrective actions before final implementation.

SECTION 5 FINANCIAL ASSURANCE / POST REMEDIATION CARE COST ESTIMATE

Accellent or the then current owner of the Site shall provide a Financial Assurance Report annually that provides an updated cost estimate for the continued implementation of the Post Remediation Care Plan, and any other associated costs associated with the continued operations, monitoring, and maintenance of the groundwater extraction system. The report shall also provide financial assurance regarding the availability of funds to continue the remedial activities at the Site. This report shall be prepared in conjunction with the Annual Groundwater Monitoring Report and shall be submitted to the USEPA by March 31st of each year.

REFERENCES CITED

EPA, March 2009, Statistical Analysis of Ground Water Monitoring Data at RCRA Facilities—Unified Guidance, United States Environmental Protection Agency (USEPA), EPA 530/R-09-007)

Puls, R.W. and M.J. Barcelona, December 1995, *Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures*, United States Environmental Protection Agency (USEPA), EPA/540/5-95/504.

Marks Environmental, Inc., June 11, 2012; *Request for Technical Impracticability Determination for Groundwater Remediation,* Accellent Inc., Montgomery County, Collegeville, PA.

Marks Environmental, Inc., 2002; *Site Operations and Maintenance Manual for the Groundwater Remediation and Soil Vapor Extraction Systems,* Accellent Inc., Montgomery County, Collegeville, PA.

FIGURES

Legend

LRM Well Re-Survey 2015_4

- Monitoring Well
- Recovery Well
- Surface Water
- LRM Collegeville Land Parcel Boundary - Approximate

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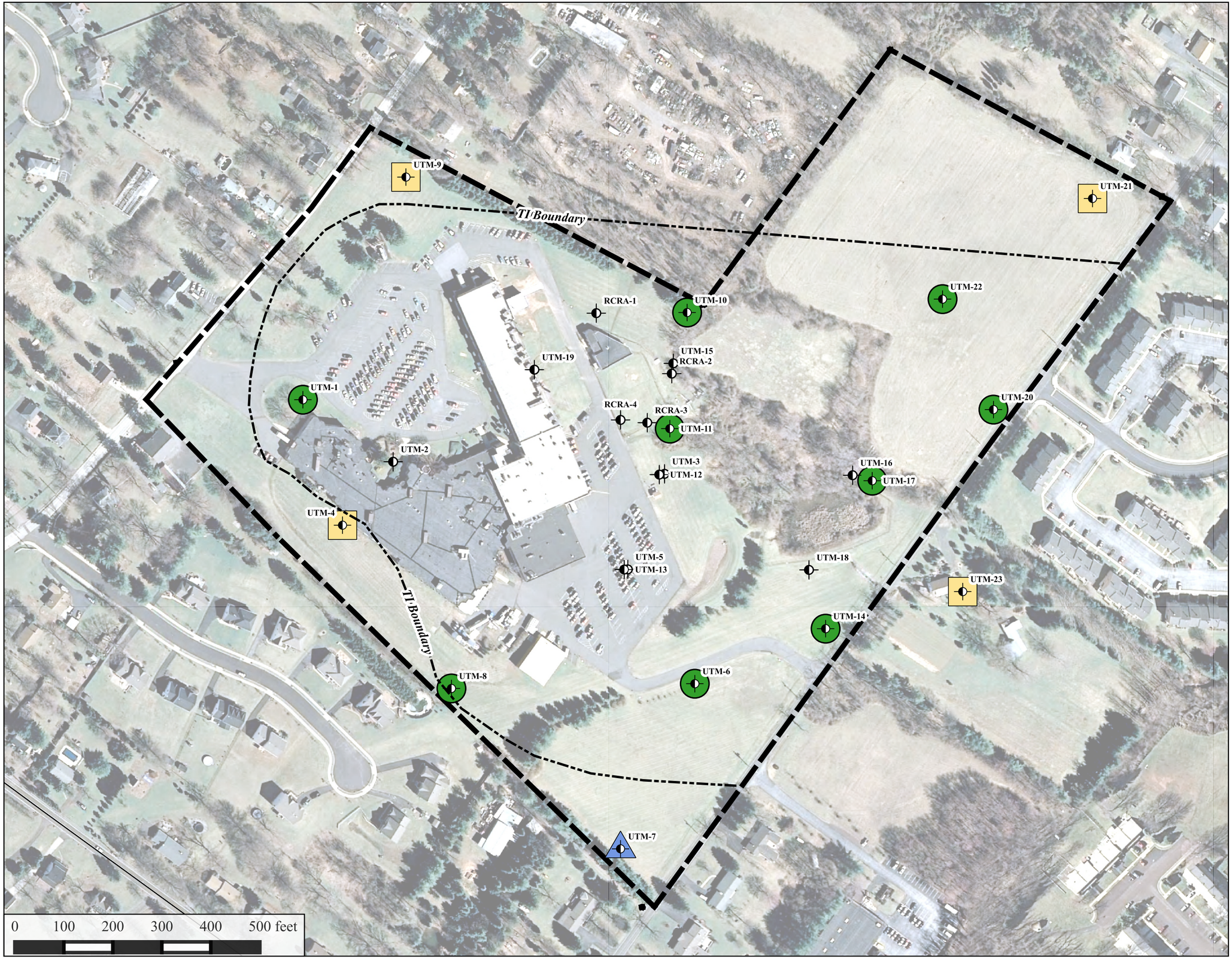
Figure 1

Monitoring and Recovery Wells
Lake Region Medical



Legend

- LRM Collegeville Land Parcel Boundary - Approximate
- TI Zone Boundary
- Monitoring Well
- TI Zone Monitoring Well
- Quarterly Point of Compliance Well *
- Annual Point of Compliance Well

* Quarterly sampling for four quarters, then revert to annual sampling thereafter

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Figure 2

Post-Remediation Groundwater Monitoring Points

Collegeville Pennsylvania Facility
Lake Region Medical

Appendix A

Groundwater Remediation System O&M Manual

System Maintenance and Inspection Requirements

OPERATIONS AND MAINTENANCE MANUAL

GROUNDWATER REMEDIATION SYSTEM

OPERATIONS AND MAINTENANCE MANUAL FOR THE GROUNDWATER REMEDIATION SYSTEM

Prepared for:

Accellent Inc.
Collegeville, Pennsylvania

October 2015
Revision No. 3

Prepared by:

Marks Environmental, Inc.
140 Bollinger Road
Elverson, PA 19520

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- Roy F. Weston, Inc. Design As-Built Diagrams

- Supplemental Design As-Built Diagrams

- Groundwater Pump & Treat Electrical Control Diagram

- Soil Vapor Extraction System Electrical Control Diagram (operation suspended in 2013)

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III. Equipment Manuals and Specification Sheets – Groundwater Extraction/Treatment System

- **Groundwater Control (Flow Meters, Flow Control Valves, Solenoids, Water Level Sensors)**

- **Groundwater Pumps/Tower Blower**

Purpose

The Purpose of this procedure is to define the daily and periodic inspection and maintenance requirements for the critical equipment associated with the groundwater extraction/treatment system. During normal operations the system will operate automatically and is equipped with malfunction alarms and interlocks, but periodic inspection and maintenance is required to ensure that it continues to operate reliably.

This procedure lists the recommended operation and maintenance (O&M) checks that will be completed by facility personnel or outside support and is based on the original O&M Plan (Weston, Final Design Document, Appendix C; O & M Plan, 1995), current system equipment, equipment manufacturer recommendations and over thirty years of operating experience. Items originally included on the weekly and quarterly log sheets are now either included in daily operational checks (not logged) or the monthly preventive maintenance, as described below. The attached groundwater treatment system monitoring monthly preventive maintenance log sheet is used in documenting the periodic maintenance inspections.

Major Mechanical Equipment associated with the groundwater extraction system includes the following:

1. Well UTM-11 pump, flow throttling valve, flow totalizer and associated flow meter, level controller, enclosure heater and fiberglass enclosure;
2. Well UTM-1 pump, flow restrictor, flow totalizer and associated flow meter.
3. Control and interlock floats in T-1 pump tank (stripping tower pump tank);
4. Air stripping tower feed pump, flow totalizer and associated flow meter, 80 gpm flow restrictor (with high flow bypass), and blower.
5. 2 ½" diameter high flow bypass valve on air stripper tower feed piping.

Daily Operational Checks

Daily operational checks are conducted during each normal business day while obtaining required flow totalizer readings at UTM-1, UTM-11, Plant 1 Sump and the Air Stripping Tower used for NPDES Permit and Delaware River Basin Commission (DRBC) Permit reporting. Malfunction alarms (e.g., high level in the T-1 Pump Tank, Air Stripper low air flow) audibly alert operators when malfunctions occur at other times and these are telemetered to an auto-dialer during off hours to alert on-call personnel.

During visits to the flow meter/totalizers, operators perform a range of visual and audible checks for unusual conditions and report any problems for corrective action. While the flow readings are logged, the associated operational checks are considered routine operations responsibilities and are not formally documented under the Preventive Maintenance program.

Daily readings and operational checks include:

1. Record day, time, and flow totalizer readings for UTM-1, UTM-11, and Plant 1 Sump (on "*Water Daily/Monthly Flow Meter Readings*" log[1]) and for the Air Stripping Tower (on "*Tower Inlet 002...Daily Flow Meter Readings...*" log[1]).
2. Calculate Air Stripping Tower net flow vs. prior reading and record (on "*Tower Inlet 002...Daily Flow Meter Readings...*"log[1]).
3. Check for leaks in groundwater conveyance piping, where visible;
4. Check the heater in well UTM-11 enclosure is working during winter months;
5. Check for unusual vibrations or surging in UTM-1 and UTM-11 well pumps evident at meter/piping;
6. Check to ensure that level controls are properly operating the T-1 pump by observing cycling of either the T-1 pump or tower high flow bypass, by no water visible above T-1 top float and by no alarms;
7. Observe proper operation of the stripping tower flow meter which should register about 80 gpm with normal flow through the flow restrictor when the pump is on and about 130-150 gpm with the high flow bypass valve open.
8. Check that the Air Stripper blower is on (normally audible) and there are no unusual vibrations or noise.
9. SHUT DOWN WELLS IMMEDIATELY if any of the following are observed:
    a. A leak of untreated groundwater;
    b. Unusual vibration likely to cause essential equipment failure;
    c. Air Stripper blower is off or not blowing air (and the system has not already shut itself down by the low air flow interlock);
    d. T-1 pump and/or high flow bypass valve are not cycling normally and there is a risk of overflow; or
    e. There is any other malfunction or failure of essential equipment or instrumentation/alarms that can cause a permit violation or system failure.

NOTIFY on-duty or on-call maintenance supervision/management IMMEDIATELY if the system is shutdown or:

1. Tower inlet, UTM-1 or UTM-11 have unusually low or high flow or are not pumping,
2. Any of the above observations are not considered "critical" requiring shutdown, but which need to be promptly addressed (e.g., other unusual vibration, leak or other malfunction or failure of equipment or instrumentation/alarms).

[1] These log sheets are for the NPDES permit compliance program and are not included in these procedures.

Monthly Equipment Checks and Preventive Maintenance

Monthly equipment checks will include the following:

1. Check Plant No. 1 Sump float switch and diaphragm pumps operation. Best done during rainy weather or using garden hose from acid room to run water into the sump. Observe that the first float turns on the lead pump and the high level float turns on the lag pump and opens the high flow bypass valve.
2. Check Stripping Tower Feed Tank T-1 operation including pump P-12, float controls and 2-1/2" bypass solenoid valve located on air stripper tower feed piping as follows (Warning: use pole, do not immerse hands in groundwater):
    a. Lift/lower yellow float - Pump P-12 turns on/off; and
    b. Lift/lower purple float - tower high flow bypass valve opens/closes;

    Note: Blue float interlock shutting all flow from UTM-1, UTM-11 and Plant No. 1 Sump is tested below.
3. Measure air flow on air stripper blower inlet using pitot tube and hand-held, digital, differential pressure gauge. Verify differential pressure readings are within ±10% of the 0.3" w.c. design (corresponding to ~2,900 cfm air flow).
4. Check and lubricate the blower per manufacturer's recommendations (lithium grease). [Motor bearings are sealed.]
5. Shut blower down and verify that the low air flow interlock shuts down feed pump P-12. After T-1 fills up, verify that the high level interlock in T-1 (blue float) shuts the wells off. Lock out the blower, inspect and adjust belt tension or change-out fan drive belts as per manufacturer's recommendations. Check set screws in bearing collars for tightness.
6. Document results of all the daily checks performed on the day of the monthly PM on the monthly checklist (e.g., air stripper blower motor and fan for unusual vibration, air stripper tower and wells and associated piping, for cracks, leaks and physical damage, etc.).

Use the attached log sheet for keeping monthly equipment checks and preventive maintenance records. Report any problems requiring maintenance or repair to the Maintenance Supervisor.

Troubleshooting Low Air Flow

If air flow pitot tube differential pressure readings are below 0.27" w.c. (-10% of design):

1. Verify lubrication and check pulleys and belt for proper operation.
2. Check power draw amps and verify in normal range.
3. Check inlet and outlet pressures of air stripper blower. If pressure drop is too high (>>> 5"- 6" w.c.), check for air stripper column or packing blockage. If

pressure drop is too low (<3" w.c.), consult manufacturer's manual for further checks of blower, motor, or adjustable drive pulley/fan belt malfunctions.

Monthly Readings and Checks for DRBC

Monthly DRBC readings are taken to meet DBRC permit reporting requirements. MEI will complete the following monthly readings and checks:

1. Water level readings at all pumping wells and required monitoring wells.
2. Assess all daily operational inspection items (vibration, leaks, etc.) applicable to the pumping wells, including inside the UTM-1 below ground well chamber.
3. Compare the well UTM-11 water level readout to the hand-held electronic water level indicator reading and recommend recalibration or repair to the Maintenance Supervisor, when necessary.
4. Record day, time, and flow totalizer readings at the UTM-1, UTM-11, Plant 1 Sump and Air Stripping Tower inlet flow meters.
5. Calculate total flows at well UTM-1, UTM-11, Plant No. 1 sump and Tower inlet since last monthly reading. Compare the sum of the three sources vs. the Tower inlet for the same time period. If not within 10%, assess further. Advise the facility to clean, recalibrate or replace individual flow meters, as necessary.

EMERGENCY PHONE NUMBERS

If there are any mechanical problems, deviations from the expected conditions noted above or any unusual trends in readings, contact one of the following:

Harry Smith	**x2245 or 610-850-2998**
Cara Ivens	**x2373 or 484.986.7845**
Tom Marks	**610-286-0802 or 610-909-8250**
Peter Puglionesi	**610-449-3430 or 610-662-7061**

Groundwater Treatment System Monthly PM Log Sheet

Year: _____

MONTHLY CHECKS	**Date Done / By**	**Plant No. 1 Sump Floats**[1]	**Pump Tank T-1 Floats**[2]	**Stripper Blower Flow**[3]	**Blower Bearing Lubed**[4]	**Blower Interlock Check**[4]	**Belt / Collar Check**[4]	**Well Pumps / Blower (Operational-No Leaks / Damage / Unusual Vibrations, Y/N)**				
MONTH	DD-MM-YY / Init.	Operational Y/N	Operational Y/N	in wc DP at pitot tube	Lubed Y/N	P-12 & wells stop Y/N	Tension / OK Y/N	UTM1	UTM11	T-1	Plant 1 Sump	Tower Blower
January												
February												
March												
April												
May												
June												
July												
August												
September												
October												
November												
December												

[1] Perform during wet weather if possible or fill; verify on/off and high flow bypass operates, check daily during periods of high precipitation or significant snowmelt.

[2] Open T-1 cover, verify pump P-12 turns on/off by lifting/lowering yellow float; stripper bypass solenoid opens/closes by lifting / lowering purple float.

[3] Get air flow reading concurrent with an effluent sampling event. Connect gage to plastic tubes at pitot tube, top to negative side of gage. If avg. Delta P < 0.27 " w.c. (±10% of 0.3" w.c., approx. 2,900 cfm design flow), notify and troubleshoot. If reading is negative, switch tube positions.

[4] Lithium grease (until visible). Shut blower down, verify low flow switch shuts P-12 and T-1 high level interlock shuts wells off. LOTO, belt tension, snug collars.

WATER DAILY / MONTHLY FLOW METER READINGS

(used for LPVRSA monthly report – from Maintenance – 3rd Shift)

Month _____ 20___

DAY / TIME	TUMBLING ROOM	UTM-1 WELL	UTM-11 WELL	PLANT-1 SUMP	Visual Insp. OK* / Corr. Action
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

* Check for visible leaks at wells/piping; UTM-11 heater working; unusual vibrations or surging at meter/piping. Note "OK" or "Corrective Action" if a problem was observed and it was corrected.

BEGININNING OF THE MONTH READINGS

(take readings on the 1ST week day of the month)

	DATE	TIME	READING
#1 ACID ROOM METER			
#2 ACID ROOM METER			
#1 BOILER WATER			
PLT 2 BOILER WATER #2			
PLT 2 BOILER WATER #3			
PLANT 1 TOWER			
ROUND TANK			
SQUARE TANK			

Route to
CARA IVENS

STRIPPING TOWER INLET / OUTFALL 002
DAILY FLOW METER READINGS / INSPECTION LOG – FILE #3621

(Used for NPDES monthly report – from Maintenance)

Month_____ 20___

Last Meter Reading from Last Month: _____ Date _____

DATE/TIME	METER READING	DAILY FLOW CALC. *	Visual Insp. OK/ Corrective Action*
1	00	00	
2	00	00	
3	00	00	
4	00	00	
5	00	00	
6	00	00	
7	00	00	
8	00	00	
9	00	00	
10	00	00	
11	00	00	
12	00	00	
13	00	00	
14	00	00	
15	00	00	
16	00	00	
17	00	00	
18	00	00	
19	00	00	
20	00	00	
21	00	00	
22	00	00	
23	00	00	
24	00	00	
25	00	00	
26	00	00	
27	00	00	
28	00	00	
29	00	00	
30	00	00	
31	00	00	

* Check for visible leaks; unusual vibrations or surging at meter/piping; T-1 level controls cycling T-1 pump or high flow bypass; no water visible above T-1 top float; no alarms; ~ 80 gpm normal or 130-150 gpm with high flow bypass valve open; blower on & no unusual vibrations/noise. Note “OK” or “Corrective Action” if a problem was observed and it was corrected.

NOTE: > 108,000 gallons/day or unusually low flow-contact EH&S/Engineering immediately.

Appendix B

Environmental Covenant

When recorded, return to:
Manko, Gold, Katcher & Fox, LLP
401 City Avenue, Suite 901
Bala Cynwyd, PA 19004
Attn: Carol F. McCabe, Esquire
Telephone: 484-430-5700

Parcel Identification Numbers: 23-00-01012-00-9 & 23-00-01015-00-6

GRANTOR: Accellent, Inc. (d.b.a. Lake Regional Medical) on behalf of UTI Holdings, LLC ("Accellent")

PROPERTY ADDRESS: 200 W. Seventh Ave., Trappe, Pennsylvania

ENVIRONMENTAL COVENANT

This Environmental Covenant is executed on behalf of the current and all future owners of the Property identified in paragraph 1 pursuant to the Pennsylvania Uniform Environmental Covenants Act, Act No. 68 of 2007, 27 Pa. C.S. §§ 6501 – 6517 (UECA). This Environmental Covenant subjects the Property identified in Paragraph 1 to the activity and/or use limitations in this document. As indicated later in this document, this Environmental Covenant has been approved by the United States Environmental Protection Agency (the "Agency").

1. **Property affected**. The property affected (the "Property") by this Environmental Covenant is located in Trappe Borough, Montgomery County.

The postal street address of the Property is: 200 West Seventh Ave., Trappe, PA
The latitude and longitude of the center of the Property affected by this Environmental Covenant is: 40º/11'/39.5" north and 75º/28'/59.1" west

A complete description of the Property is attached to this Environmental Covenant as Exhibit A, and a map of the Property is attached to this Environmental Covenant as Exhibit B.

2. **Property Owner / GRANTOR / GRANTEE**. Accellent, Inc., is the "Owner" of the Property and the "Grantor," and is also the "Grantee" and a "Holder," as that term is defined in 27 Pa. C.S. § 6502, of this Environmental Covenant.

3. Owner's mailing address is: 200 W. Seventh Ave., Trappe, PA 19426.

4. **Description of Contamination & Remedy**. Certain substances were detected in groundwater at the Property above Maximum Cleanup Levels ("MCLs") set by the Agency, including chromium, trichloroethylene and 1,1,1 trichloroethane. Owner subsequently performed certain remedial activities at the Property pursuant to a Final

Administrative Order on Consent ("AOC") executed with the Agency in 1992.. See In the Matter of UTI Corporation, USEPA Docket No. RCRA –III-055-CA, EPA I.D. PAD 00 234 4463. Pursuant to the AOC, certain Cleanup Goals were identified for chromium, trichloroethylene and 1,1,1 trichloroethane. Additional information about the historic remedial activities, including the specific substances detected, the sampling and monitoring that was performed, and the remedial activities that have been performed at the Property may be obtained from the United States Environmental Protection Agency, Region 3, 1650 Arch Street, Philadelphia, PA 19103. This Environmental Covenant sets forth the Agency-approved requirements of the Property.

5. **Activity & Use Limitations**. The Property is subject to the following activity and use limitations, as enumerated more fully in the attached Post Remediation Care Plan for the Property (attached hereto as Exhibit C), which the then current owner of the Property and its tenants, agents, employees and other persons under its control, shall abide by:

a. Use of contaminated groundwater at the Property shall be prohibited;

b. A groundwater recovery and treatment system shall be operated by the then current owner of the Property involving groundwater recovery from UTM-1 and/or UTM-11 at the Property as shown on Exhibit B; and,

c. Sampling shall be performed by the then current owner of the property in accordance with the requirements of the Post Remediation Care Plan at Exhibit C at the TI Zone and Perimeter monitoring well locations shown on Exhibit B for trichloroethylene and 1,1,1 trichloroethane, and the then current owner shall submit such sampling results to the Agency and to the Grantor, if the Grantor is not the current owner of the Property.

These Activity and Use Limitations shall be binding upon the Property until such time as this Environmental Covenant is terminated in accordance with Section 9, below.

6. **Access by the Agency**. This Environmental Covenant grants to the Agency a right to access the Property at reasonable times and in a reasonable manner for the purposes of determining compliance with the requirements of this Environmental Covenant by:

a. Inspecting records, operating logs, and contracts related to work required by this Environmental Covenant;

b. Reviewing the then current Property owner's compliance with the terms of this Environmental Covenant;

c. Conducting such tests, sampling, or monitoring as the Agency deems necessary; and

d. Verifying the reports and data submitted to the Agency by the current Property owner.

7. **Notice of Limitations in Future Conveyances**. Unless and until this Environmental Covenant is terminated, each instrument hereafter conveying any interest in the Property subject to this Environmental Covenant shall contain a notice of the activity and use limitations set forth in this Environmental Covenant and shall provide the recorded location of this Environmental Covenant.

8. **Recording & Proof & Notification**. Within 90 days after the Environmental Covenant has been approved and signed by the Agency, Owner shall file this Environmental Covenant with the Recorder of Deeds for Montgomery County and shall send a file-stamped copy of this Environmental Covenant to the Agency, Trappe Borough, Montgomery County, each person holding a recorded interest in the Property, and each person in possession of the Property.

9. **Termination or Modification**.

a. Except as otherwise provided herein, this Environmental Covenant may only be terminated or modified in accordance with Sections 9 and 10 of UECA, 27 Pa. C.S. §§ 6509 and 6510. The Agency must approve, in writing, such termination.

b. This Environmental Covenant may be amended or terminated as to any portion of the Property subject to the Environmental Covenant that is acquired for use as highway right of way by the Commonwealth of Pennsylvania, provided that:

1. The Pennsylvania Department of Environmental Protection ("Department") waives the requirements for an environmental covenant and for conversion under Section 6517 of UECA to the same extent that the environmental covenant is amended or terminated;

2. The Department determines that termination or modification of the environmental covenant will not adversely affect human health or the environment; and,

3. The Department will provide 30-days advance written notice to the current Property owner, each holder, and, as practicable, each person that originally signed the environmental covenant or successors in interest to those persons.

c. Exhibit B to the Environmental Covenant may be amended upon written agreement by the Grantor and the Agency to identify alternative TI Zone and Perimeter monitoring wells as appropriate based on sampling data. The designation and total number of monitoring wells shall remain as described within the Post Remediation Care Plan attached at Exhibit C, unless otherwise agreed upon by both parties.

ACKNOWLEDGMENTS:

Accellent, Inc. Owner/Grantor/Grantee/Holder

Date: _____ By: _____

Name: _____

Title: _____

APPROVED by the United States Environmental Protection Agency

Date: _____ By: _____

Name: _____

Title: _____

COMMONWEALTH OF PENNSYLVANIA)[other state, if executed outside PA]
)
COUNTY OF _____) SS:

On this ___ day of _____, 20__, before me, the undersigned officer, personally appeared _____ the _____ of Accellent, Inc., Owner, Grantor, Grantee and Holder who acknowledged himself/herself to be the person whose name is subscribed to this Environmental Covenant, and acknowledged that s/he executed same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

_____
Notary Public

COMMONWEALTH OF PENNSYLVANIA)
)
COUNTY OF _____) SS:

On this ___ day of _____, 20__, before me, the undersigned officer, personally appeared _____, who acknowledged himself/herself to be the _____ of the United States Environmental Protection Agency, whose name is subscribed to this Environmental Covenant, and acknowledged that s/he executed same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

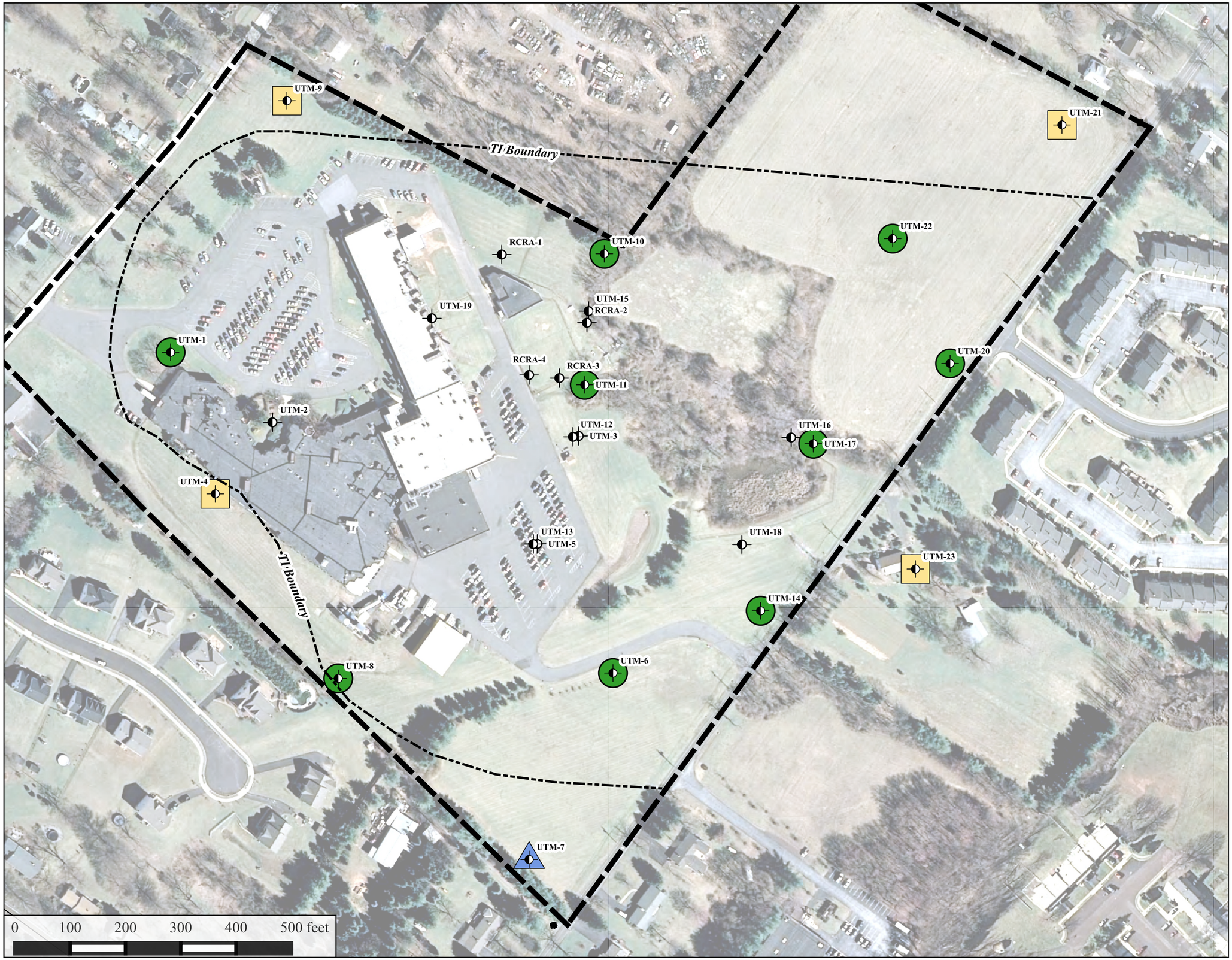
_____
Notary Public

Exhibit A

Site Description

Metes and Bounds from Property Deeds

(In progress; to be included in final signed version)



Legend

- LRM Collegeville Land Parcel Boundary - Approximate
- TI Zone Boundary
- Monitoring Well
- TI Zone Monitoring Well
- Quarterly Point of Compliance Well *
- Annual Point of Compliance Well

* Quarterly sampling for four quarters, then revert to annual sampling thereafter

N

MARKS Environmental, Inc.

Exhibit B

Post-Remediation Groundwater Monitoring Points

Collegeville Pennsylvania Facility
Lake Region Medical