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: Former American Cyanamid (aka Davis & Geck)
Facility Address: 1 Casper Street, Danbury, Connecticut 06810
Facility EPA ID #: CTD 000791095

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 #8 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 nearterm 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?

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

__X__ 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):

Seven rounds of groundwater characterization during the Phase III ESA in 1999-2002 show that there are no significant plumes from on-site releases and that substance concentrations in groundwater are below the RGWVC and SWPC. Two upgradient groundwater plumes have affected the groundwater quality both north and south of Casper Street.

Post-remedial groundwater monitoring was initiated in June 2009. The results of post-remedial monitoring thus far confirm the previous findings that there are no significant plumes from on-site releases. A cumulative summary is included in the attached addendum. Details of the groundwater characterization can be found in the following Malcolm Pirnie reports:

- *Phase III ESA Work Plan,* March 2001
- *Phase III ESA Report,* November 2002
- *Application for Alternative Post-Remedial Groundwater Monitoring Program*, December 2002.

[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).

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.

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

Rationale and Reference(s):

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[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 judgment/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).

 X 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 American Cyanamid/Davis & Geck facility, EPA ID # CTD000791095, located at 1 Casper Street, Danbury, CT. 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.

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

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HISTORY AND BACKGROUND

The Kendall Sherwood Davis & Geck (KSD&G) facility located at 1 Casper Street, Danbury, Connecticut ("site") manufactured surgical instruments and supplies and was active on-site from 1952 to 1999 (see Figure 1). Before 1952, hat manufacturing and fur cutting industries used portions of the property. The site is an Establishment as defined by the Connecticut Property Transfer Act (Connecticut General Statutes (CGS) Section 22a-134(3)) and has changed ownership within the past few years. The site was owned by American Cyanamid Co. (a division of American Home Products) who then sold it to Kendall (a division of Tyco). As the certifying party on the Transfer Act form III filing, American Home Products (now Wyeth) retained responsibility for environmental investigation and remediation. After it closed in 1999, Kendall sold the site to Tyco Holdings, which subsequently sold the site to Pharmaceutical Discovery Corporation (now MannKind Corporation) in February 2001.

The site underwent environmental site characterization and remediation under RCRA Corrective Action and the Connecticut Property Transfer Program (PTP).

SITE DESCRIPTION

Physical Setting

The 19-acre site lies in a mixed residential and light commercial/industrial neighborhood near the center of Danbury. It is situated in an approximately ½-mile-wide, southeastern-trending valley and has generally level topography with an elevation of approximately 360 feet above mean sea level (see Figure 1). The northeastern side of the site is bordered by a railroad line, homes, and various light commercial/industrial facilities. The Still River occupies a 15-foot-deep, partially concrete-lined channel along the southwestern side of the site.

Casper Street divides the site into northern and southern areas. Until 2007, the northern area included KSD&G's Plant 1 (117,000 square feet, mostly built in 1952) along Casper Street, a large parking lot, and a field at the northern end (see Sheet 1). A 5-foot-deep drainage ditch separated the parking lot from the field. However, recent development by site owner MannKind Corporation added a 60,600-square-foot building to the north of Plant 1, completely regraded and rearranged the parking around it, and constructed a new parking area over the former field north of the drainage ditch. Until 2006, the southern area included KSD&G's Plant 2, used by hat and fur cutting companies before purchase in 1951 (23,660 square feet, built sometime between 1934 and 1950), KSD&G's Building 9 (71,600 square feet, built in 1986 as a research and development facility and now know by MannKind as Building 8), and another parking lot between them. However, recent development by site owner MannKind Corporation removed Plant 2, replaced it with temporary offices, and repaved and rearranged the parking around it.

The site has undergone significant physical changes within the last 25 years, particularly the razing and construction of facilities and the re-routing of the Still River by the United States Army Corps of Engineers (USACOE). The previous channel passed to the west of former hat and fur cutting factories at the north end of the site. The river flowed southward near the present concrete lined channel, then eastward close to the north side of Plant 1, southward again between Plant 1 and the former EMF facility (now Hi-Temp Products), crossed under Casper Street just southwest of EMF, and passed to the west of Plant 2 and neighboring off-site facilities.

By 1975 the USACOE had razed the old factories and dredged a temporary river channel through their former location. The temporary channel joined the previous river channel approximately 1,000 feet upstream of Casper Street. At the same time, the present river channel was being excavated just west of the temporary channel, Plant 1, and the future Building 9. Spoils from these excavations were moved and staged throughout the former hat factory area. Sheet 1 shows the changes to the river channel. See Appendix C for detailed, annotated aerial photographs and historic insurance maps of this area.

After completion of the present channel, both the temporary and the former channel were backfilled and the former hat factory area was left as a field northwest of the Plant 1 parking lot. Both the walls and the bottom of the northern 700 feet of the existing channel are lined with concrete.

Geology

The Still River valley surrounding the site is underlain by a series of unconsolidated sedimentary deposits believed to be up to approximately 100 feet thick. The site stratigraphy typically consists of four units: surficial fill, organic silt (floodplain alluvium), sandy gravel (delta deposits) and a gray silt/clay (lakebed deposits).

The surficial fill is a mostly contiguous layer that extends across the site and adjacent areas and is typically a few feet thick. The surficial fill is typically composed of brown to tan sand, with minor gravel, and traces of coal. In the former Still River and temporary diversion channels the fill is up to 14 feet thick and lies directly on the lower sandy gravel or silt/clay. The river channel fill consists mostly of brown to dark gray silt, sand, gravel, with minor coal, coal ash, brick, concrete, and wood and other debris. In some areas it includes large boulders.

A layer of dark gray, black to dark brown organic silt grading into brown fine–grained sand underlies the surficial fill across most of the site at a depth of about two to six feet.

Typically underlying the organic silt is a brown to gray, very coarse-grained, sandy gravel layer. This widespread unit ranges in thickness from less than two to at least ten feet and continues to the bottom of most borings.

At a few locations, the silt/clay unit was encountered instead of the sandy gravel layer. It consists of gray, thin laminae of silt, clay, and fine-grained sand.

Hydrogeology

The shallow groundwater at the site is under unconfined, water table conditions within the unconsolidated deposits described above and is typically about eight to ten feet deep and in the sandy gravel or silt/clay unit. The groundwater generally flows southward, with a westerly flow component near the Still River, which is the receptor for site groundwater (see Figure 2).

The gradient appears to be affected by the presence of the concrete lining that apparently restricts groundwater from discharging directly into the northern part of the river channel. The water table is nearly flat directly adjacent to the concrete channel, but has a steeper gradient of 0.025 at the southern end of the concrete channel where the groundwater flows around it into the river. The typical water table gradient north of Plant 1 is 0.0066, but lessens to 0.0017 south of Casper Street where groundwater discharges to the unlined part of the channel. The gradients are unaffected by the older backfilled river channels because their bottoms are just above the water table. The average hydraulic conductivity is 6.5 ft/day (0.0023 cm/sec) for the sand layer and 0.09 ft/day (0.000032 cm/sec) for the silt/clay layer.

<u>Pathways and Receptors</u>

Almost the entire site is impervious (buildings, concrete, engineered controls). Ground surfaces that are soil have been remediated or are uncontaminated. There are no AOCs that discharge waste liquids directly to the class B Still River or to the storm drain system. Leaching of SOCs to groundwater is the only pathway for these substances to migrate to the river, which borders the site to the southwest and is the final receiving stream for all drainage and groundwater discharge from the site and surrounding area.

The CTDEP classifies the area groundwater as GB. In April 2000, Malcolm Pirnie completed a groundwater use survey and found no known groundwater usage on-site or in the surrounding area. Volatilization of VOCs from the groundwater table, which is about ten feet deep, could migrate in the vadose zone and potentially into Plant 1, Building 8, or any new buildings. Therefore, the migration pathways for SOCs are via vapors in the vadose zone and dissolved in groundwater and the ultimate receptors are potential occupants of the buildings overlying VOC plumes and the Still River.

<u>Former Facility Operations</u>

Plant 1

Plant 1 is a two-story slab on grade masonry constructed building. Interior areas were utilized as a mixture of light manufacturing, assembly, and storage of suture materials and various medical products (such as surgical sponges and burn dressings), production support areas, and office space. Production support areas included: laboratory, printing shop, product distribution areas, machine shop, power room, maintenance room, and boiler room.

Production activities included needle dipping, coating, assembly, and sterilization. Suture needle manufacture operations primarily consisted of parts assembly and associated support activities to produce various sized suture needles. Suture thread was attached to variously sized suture needles at bench top style work stations. In some instances the suture thread was soaked in xylene and coated with nylon prior to attaching the needle. The suture needle and suture was then sterilized and packaged. Available information indicates that hazardous wastes were not generated during the production of other medical supplies in Plant 1. Process details are summarized below:

- End dip - suture fibers were wound onto a rack or drum, ends were dipped into a mixture of isopropyl alcohol (IPA) and nylon and then oven cured or air dried. Dipped ends were then cut
- Needle coating - off-site produced needles were sprayed in a small hood with a mixture of medical grade silicon, freon, and stoddard solvent, and then oven dried.
- Assembly - suture fibers were mechanically attached to needles by crimping.
- Sterilization IT solution - one type of suture was inserted into a package and a 2-gram solution of water, ethylene oxide, IPA, and triethanolamine was injected into the package prior to sealing.
- Alpha Process - product was placed in autoclave and subjected to an atmosphere of 12% ethylene oxide and 88% freon 12 to 22 hours. Product is removed from the autoclave and placed in a room to degas for 24 hours. The room is equipped with a catalytic combustor which decomposes the ethylene oxide.
- Other Medical Supplies/Devices - Off-site produced components are assembled by 'snap fit' or using an ultrasonic welder.

In 1997, raw materials used as part of production activities were stored in designated areas in Plant No. 1. In addition, one outdoor raw material storage area was also utilized and before 1992, three stainless-steel USTs were used for virgin liquid chemical storage.

The product distribution area was centrally located on the first floor and consisted of product storage prior to off-site shipment.

The machine shop, also located on the first floor, was used for light machining, grinding, and welding of aluminum and stainless steel. Metals dust and fragments are directed to a baghouse where the material is collected in a drum for off-site recycling. The shop had a self-contained, cold dip parts washer, owned by Safety Kleen, which utilized petroleum naphtha.

A wet chemistry laboratory was located on the second floor. The laboratory was used for bench scale chemistry work in support of production activities. Three laboratory hoods were identified in this area. Wastes were collected in 1-gallon containers located in the laboratory prior to off-site disposal.

The print shop produced all packaging with associated printed nomenclature. Paste, vegetable, and china oil inks (containing cellulose, mineral spirits, ethyl acetate, isopropanol, and a chlorinated solvent) were used. Clean-up of equipment was done with rags and a mixture of tetrachloroethylene, methyl and ethyl acetate. Spent rags were handled by Tri-state Industrial Laundry.

Plant 1 was heated by two fuel oil boilers rated at 4.2 million Btu/hr and 10.04 million Btu/hr. Fuel oil for the boilers was stored in a 12,000-gal AST located outdoors on the north side of the building. The boilers are blown down to a nearby floor drain approximately one time per week. Containers of fungicide, rust inhibitors, descale chemical, and lubricating oil were stored in the boiler room.

Floor drains were located throughout the production and storage areas; however, these drains discharged to the local municipal sewer system. KSD&G containerized waste chemicals at the point of origin; therefore, the quantity of hazardous materials entering the floor drain system, if any, would be small.

Plant 2

Plant 2 was a 2-story, wood and masonry constructed building with brick veneer. The majority of the building was concrete slab on grade. It was originally a hat factory before American Cyanamid use. Silk sutures were formerly prepared, washed, dyed, coated, dried, and inspected at this location. The braid preparation and silastic coating wet processes were conducted in the northwestern corner of the plant, most of the rest of the building was used for storage and support functions. However, these processes were discontinued in November 1992. Maintenance activities were consolidated to Plant 1. In 1992, a machining shop with two Safety Kleen units was also located in Plant 2. The units contained mineral spirits and petroleum naphtha in self-contained cleaning stations. A cyclonic separator collected grinding dust generated in the machining shop. The facility was later used for records retention and finished suture threads storage.

Building 9

Building 9 (now known as Building 8) is a 2-story masonry constructed building with brick facing. The building is concrete slab on grade and was utilized since built in 1986 to 1999 to primarily conduct research and development in support of manufacturing operations, quality assurance/quality control laboratories, offices, and general materials storage. Areas included: first floor needle lab, <90-day hazardous waste storage area, braider room, extruder area, and wet chemistry lab. Various laboratory instrumentation including ovens, electron microscope and extruders were located in the laboratory areas. Chemicals such as xylene, ethylene glycol, and trichlorofluoroethene were used in the wet chemistry areas.

Research and development operations consist of bench scale wet and dry chemistry and physical testing. It included extrusion of polymers for sutures (small amounts of xylene used for clean up) and grinding and buffing of needle points (area has one small vapor degreaser utilizing 1,1,1-trichloroethane). Needle research and development area had a small pilot electropolish line with baths of sulfuric & phosphoric acid, sodium hydroxide and stagnant water rinses.

Waste chemicals were placed in a 55-gal drum in the wet chemistry laboratory prior to temporary storage in the hazardous waste disposal area and shipment for off-site disposal.

<u>Waste Generation and Management</u>

Besides sanitary and non-hazardous solid waste, four principal waste streams were generated at the site before 1992:

1. Chromium dye waste (D007) from the silk dyeing process at Plant 2. 600 tons/year stored in the above-ground dye waste tanker.
2. Waste isopropanol mixture (D001) from the packaging process. 56,000 pounds/year stored in drums on the drum storage pads (before 1988, stored in a stainless-steel, 6,000-gallon UST).

3. Isopropanol/nylon waste mixture (D001) from the suture end dipping process. 10,000 pounds/year stored in drums on the drum storage pads.
4. Silastic rubber/xylene waste mixture (F003) from the suture coating process (5,000 pounds/year) was accumulated in a drum in the waste xylene accumulation area. When the drum was full, it was transferred to the drum storage pad.

Other wastes generated before 1992 were:

- Freon/silicone mixture (F002) 4,000 pounds/year.
- Mineral spirits and petroleum naptha (D001) in the self contained Safety-Kleen units 2,000 pounds/year.
- 1,1,1-Trichloroethane (F001) 1,000 pounds/year.
- Sulfuric, hydrochloric, phosphoric and nitric acids (D002) 300 pounds/year.
- Xylene (F003) 2,400 pounds/year.
- Various laboratory reagents quantity unknown.

All of the above wastes, except the waste acids, were stored on the drum storage pads. The waste acids were stored in drums on the waste acid storage pad.

No treatment or disposal of waste occured at the site.

After certain processes were discontinued in 1992 and the production rates of the facility had decreased, the facility wastes were collected in satellite storage drums at the point of origin and transferred to the loading dock area or central hazardous waste storage area for off-site disposal. Approximately 3,000 pounds of hazardous waste was generated every 90 days, primarily consisting of lab packs.

In 2001, after KSD&G left the site and the buildings were empty, the floors (typically tiled or coated concrete) were found to be in excellent condition. Only minor surficial staining was seen, some of these were due to rain water leaking through the roof. The only areas with any potential pathway for a release included some rooms in both Building 9 and Plant 2 that have floor drains. However, in all cases these existing floor drains discharge to the publicly owned treatment works (POTW) and any spillage would have been collected and processed through this facility. There were two floor drains in Plant 1 (north side interior drum storage area and label shop) that historically discharged to exterior "dry wells". Another floor drain in the silastic coating room in Plant 2 also reportedly led to an exterior "dry well". All of these dry wells have been removed, plugged, and/or built over and all of these floor drains were plugged.

In summary, there was little or no potential for any subsurface contamination beneath the buildings resulting from any of the interior building activities.

Former Hat Factories

The area encompassing the former hat factories is a 3.4-acre area located north of the drainage ditch. It was occupied by numerous hat making and fur cutting companies from at least 1880. Mercury was the primary substance of concern and although he locations where process activities took place are known from historic maps, there were no specific records of releases. The USACOE apparently removed the last hat making/fur cutting factories prior to 1975 and after the river rechanneling, this area became part of the site.

Until site remediation after 2005, the area was an empty field and was not utilized by the former facility.

AREAS OF CONCERN

There are 32 AOCs (Sheet 1):

No.	Name
1	Former Hat and Fur Cutting Companies[1]
2	Plant 1 Drum Storage Pad[2]
3	Raw Material Storage Pad[2]
4	Waste Acid Storage Pad[2]
5	22,000-gallon Fuel Oil UST[2]
6	Plant 1 Dry Well (North)[2]
7	Plant 1 Dry Well (East)[2]
8	Xylene Receptacle[2]
9	4 x 6,000-gallon USTs and piping[2]
10	Building 9 Waste Storage Pad[2]
11	Plant 2 Drum Storage Pad[2] and Underlying Hat Factory Residues[1]

AOCs North of Plant 2 (essentially combined into one AOC due to mutual proximity)

12	Waste Xylene Accumulation Area[2]
13	275 & 4,200-gallon USTs[2]
14	Plant 2 Dry Well[2]
15	Wastewater Holding Tanks[2] (formerly called Waste Dye AST)
16	5,600-Gallon Wastewater Tanker[2]
17	Wastewater Spills[2]

18	Plant 2 Sub-Slab Piping Network (initially called Floor Trenches)[3]
19	Plant 2 Fuel Oil USTs[2]
20	Plant 1 PCE Plume[4]
21	Hi-Temp (EMF) VOC Plume[4] (Off-site source)
22	Background PCE & MTBE Plumes[4] (Off-site source)
23	Closed Plant 1 Drum Storage Area[2]
24	No. 6 Fuel Oil Release[3]
25	Former Process Water Supply Wells[2]
26	Safety Kleen Units[3]
27	Cyclonic Separators[3]
28	Laboratory Wastes[3]
29	Waste Generation Areas[3]
30	Still River Channel Dredge Spoils[1] (earlier thought to be potential hat factory waste)
31	Former Still River Channel[1]
32	MannKind Plant Expansion[1]

These 32 AOCs can be divided into four groups as indicated by the numerical superscripts above:

1. Historical activities/releases such as the former hat and fur-cutting companies, river dredging by an unknown party, river flooding, and the USACOE rechanneling of the Still River. By volume, this category by far represents the bulk of SOC non-compliance.
2. Localized outdoor facilities/activities by KSD&G. These AOCs are typically small and although they had a relatively high potential to affect the environment, only a few have resulted in local non-compliance for only a few SOCs.
3. Localized indoor facilities/activities. Because they were contained or managed within building infrastructure, these AOCs had only a very low potential to cause releases to the environment. Other than the sub-slab piping network in Plant 2, which had a poorly understood history, these AOCs were ruled out as release areas to the environment after a review of the record information and facility inspections done by previous investigators and by Malcolm Pirnie during the RCRA closure process. They are not shown on the attached map.
4. Groundwater plumes. Two groundwater plumes unrelated to site activities are migrating onto the site from off-site sources: AOC #21, which is a PCE/TCA plume originating from the direction of Hi-Temp Properties (formerly EMF) and affects groundwater south of Casper Street, and AOC #22, which consists of background PCE and MTBE north of Casper Street.

CHARACTERIZATION AND REMEDATION

The following AOCs underwent extensive soil and groundwater characterization to determine the nature and extent of released substances and their compliance with CTDEP RSR criteria:

No.	Name
1	Former Hat and Fur Cutting Companies
2	Plant 1 Drum Storage Pad
3	Raw Material Storage Pad
4	Waste Acid Storage Pad
5	22,000-gallon Fuel Oil UST
6	Plant 1 Dry Well (North)
7	Plant 1 Dry Well (East)
8	Xylene Receptacle
9	4 x 6,000-gallon USTs and piping
10	Building 9 Waste Storage Pad
11	Plant 2 Drum Storage Pad and Underlying Hat Factory Residues
12	Waste Xylene Accumulation Area
13	275 & 4,200-gallon USTs
14	Plant 2 Dry Well
15	Wastewater Holding Tanks
16	5,600-Gallon Wastewater Tanker
17	Wastewater Spills
18	Plant 2 Sub-Slab Piping Network

19 Plant 2 Fuel Oil USTs
20 Plant 1 PCE Plume
21 Hi-Temp (EMF) VOC Plume (Off-site source)
22 Background PCE & MTBE Plumes (Off-site source)
23 Closed Plant 1 Drum Storage Area
30 Still River Channel Dredge Spoils
31 Former Still River Channel
32 MannKind Plant Expansion

Characterization involved a significant effort over seven years including:

- 336 Soil borings
- 43 Monitoring wells
- 846 Soil samples
- 178 Groundwater samples

Most AOCs were found to have caused little or no releases and/or were compliant with RSR criteria. The following AOCs underwent soil remediation:

1 Former Hat and Fur Cutting Companies – An engineered control cap covering 3 acres of Hg, As, and petroleum hydrocarbon contamination was approved by CTDEP and implemented in 2006-7. An additional area outside the cap was excavated and placed under the cap. An institutional control will be added.

2 Plant 1 Drum Storage Pad – A small area of xylene release residues was excavated. Eventually the entire pad area was excavated for geotechnical reasons for a new building.

3 Raw Material Storage Pad - A small area of petroleum release residues was excavated.

11 Plant 2 Drum Storage Pad and Underlying Hat Factory Residues – 1650 tons of soil contaminated by metals and petroleum was excavated from this area.

13 275 & 4,200-gallon USTs – A xylene spill was partially remediated in 1986, followed by an additional few cubic yards in 2002. Inaccessible (~14 feet deep) residual xylene remains and will have an institutional control.

19 Plant 2 Fuel Oil USTs - A fuel oil spill was partially remediated when the USTs were removed. Inaccessible (~14 feet deep) residual fuel oil remains and will have an institutional control.

30 Still River Channel Dredge Spoils – This historic dump was contaminated with metals and petroleum. 8300 tons was excavated during a complete remedy.

31 Former Still River Channel – Segments of this 1400-foot-long area of concern were contaminated with lead and PAHs from coal/coal ash in the fill used by USACOE in 1975. Segments 1 and 2 were excavated down to 2 feet deep, Segment 3 was completely excavated, and Segments 4 and 7 were excavated down to 4 feet deep, resulting in the removal of 3700 cubic yards of soil. Only the lower portions of the fill soil at Segments 6 and 8 were contaminated.

Therefore, institutional controls will be placed on the inaccessible contaminated soil remaining at Segments 1, 2, 4, 6, 7, and 8.

32 MannKind Plant Expansion – During the geotechnical excavation for its new facility, site owner MannKind encountered Hg residues that exceeded the residential direct exposure criterion. Some of the 29,000 cubic yards that were eventually removed was contaminated but none remain.

GROUNDWATER

Seven rounds of groundwater sampling and analyses were completed between May 1999 and June 2002. Figure 2 shows the original Phase III ESA (pre-remedial) monitoring well locations and typical pre-remedial groundwater contours and flow directions. Quarterly post-remedial monitoring was initiated in June 2009 and is ongoing. The site-wide monitoring well network was upgraded following completion of the AOC #01 engineered control/cap and the site re-development. Some of the older wells remain; however, some were replaced (designated by an "R" in the well ID), and several new wells were installed. The current post-remedial well network and resulting groundwater flow contours are shown on Figure 3.

The overall groundwater quality is slightly degraded but consistent with the GB groundwater classification and the site's and surrounding area's historic industrial use. Besides the known or potential releases of SOCs from AOCs, the generally degraded groundwater quality is potentially related to substances released and distributed throughout the valley during the catastrophic flood of 1955 (and other smaller floods) and nearby, upgradient, off-site land use (RCRA waste lagoon, auto maintenance, dry cleaning).

Phase III ESA Groundwater Data Summary

With the exception of one detection of mercury at AOC #30, the overall (pre-remediation) groundwater results from at least four consecutive rounds showed site-wide analyte concentrations from on-site AOCs that meet the applicable RSR groundwater criteria. These criteria are surface water protection criteria (SWPC) for wells near the river, and residential and industrial/commercial groundwater volatilization criteria (RGWVC and IGWVC) (CTDEP Proposed Revisions, March 2003) for all wells. Table 1 summarizes the range of detected substance concentrations between May 1999 (the initial Phase II groundwater monitoring event) and June 2002 (the final Phase III "compliance monitoring" event) for each monitored well in the original well network. A few VOCs associated with the off-site VOC plume emanating from the former EMF facility did not meet RGWVC in one well. The detected groundwater SOCs can be grouped into three general categories: metals, TPH, and VOCs.

Metals

The metals concentrations are low and are within or just above the range of upgradient concentrations. One detection of mercury above the SWPC was also found at MW-41 (AOC #30) during the December 2001 (Phase III) monitoring event, as shown in Table 1A. This result may be attributable to slightly elevated turbidity in the sample. This was the only mercury detection anywhere, even at the former hat factory area AOC #01, but otherwise none of the metals concentrations in downgradient wells exceeded SWPC during the Phase III "compliance monitoring" events. As shown in Table 1B, the arsenic concentration at well MW-14 (AOC #01) slightly exceeded the SWPC during the June 1999 (Phase II) monitoring event; however, arsenic was not detected in this well nor at any other well at this AOC (all results were ND<0.004 mg/l) during each of the four Phase III "compliance monitoring" events, which were conducted using low-flow sampling techniques to minimize sample turbidity.

Petroleum Hydrocarbons

Except for one trace detection of 0.13 mg/l at AOC #01, site-wide ETPH concentrations were below detection limits (<0.1 mg/l).

VOCs

The detected VOCs fall into four principal categories: chlorinated solvents (PCE, TCE, and related daughter products), trichlorofluoromethane (Freon-11), BTEX compounds (specifically xylene and ethylbenzene), and MTBE. A few other VOCs were detected sporadically at trace concentrations well below criteria.

The distribution of chlorinated solvents is exemplified by PCE, which was present at concentrations up to 61 μg/l in the background wells and was also found at similar concentrations up to 110 μg/l site-wide. Only very minor amounts of PCE were used at the facility, and no PCE source area was found by a soil vapor survey. The chlorinated VOC concentrations meet the SWPC (where applicable) and, with the exception of the off-site VOC plume (see below), the R/IGWVC. This includes daughter products of PCE degradation with very low volatilization criteria, namely vinyl chloride and 1,1-DCE.

PCE and other related VOCs characteristic of the plume emanating from the direction of Hi-Temp Products (AOC #21), formerly EMF, Inc., a RCRA corrective action site, have migrated onto the site south of Casper Street (southwest of Plant 2). 1,1-DCE and vinyl chloride concentrations at Hi-Temp and/or on the site immediately downgradient of Hi-Temp exceed the RGWVC and/or IGWVC. This upgradient VOC plume has been extensively characterized and delineated since formal RCRA closure of the EMF, Inc. wastewater surface impoundment in 1991.

Trichlorofluoromethane (Freon-11) was detected site-wide in soil at trace concentrations and was discovered during the soil gas survey north of Plant 1 (AOC #20). We know of no on-site or off-site source for this VOC and the trace concentrations detected in the groundwater appear to represent either ambient site-wide conditions (for which there is no reasonable release mechanism) or, more likely, analytical contamination. There is no established SWPC. The CTDEP-accepted R/IGWVC for Freon-11 are 1,300 μg/l and 4,200 μg/l, respectively. All Freon-11 concentrations detected in the groundwater are well below the RGWVC.

MTBE was detected at concentrations up to 19 μg/l in both the Plant 1 background wells and at other AOC-specific wells. It was detected during at least one round in 3 of the 5 Plant 1 background wells at trace concentrations up to 4.5 μg/l. This latter MTBE concentration (4.5 μg/l) was detected in well MW-23 during the September 2001 sampling round. This well is located immediately south and downgradient of Boston Garage, an auto body shop and a potential off-site source for the MTBE migrating to this well. In addition, MTBE was detected at trace concentrations at several AOCs (1, 5, 7-9, 11, area northwest of Plant 2, and 21). There are no known on-site industrial uses or releases of MTBE and its on-site occurrence is consistent with the GB groundwater classification and urbanized commercial/industrial use of the surrounding area. There is no SWPC for MTBE, and the RGWVC and IGWVC are both 50,000 μg/l. MTBE concentrations are well below these criteria.

Large quantities of xylene with some ethylbenzene impurity were used at Plant 2. There were release residues in soil at the Plant 1 Drum Storage Pad (AOC #02), and some still in place 10-12 feet deep near Plant 2, where it was detected in well MW-12. Table 1 shows a range of detected xylene concentrations in well MW-12 of <1 to 16,000 μg/l. As shown in the attached Table 1C, this maximum value was detected during the initial (May 1999) Phase II ESA monitoring event, and subsequent xylene concentrations are orders of magnitude lower. The high initial result is attributed the mobilization of xylene residues into the well screened interval during the well installation. Xylene was not detected (all results were <1.0 μg/l) in any of the local Plant 2 North wells during the final three Phase III ESA monitoring events in September and December 2001 and March 2002. Xylene is also present as a constituent in residues of fuel oil, particularly at Plant 2 Fuel Oil USTs (AOC #19) where is was detected at a trace concentration of 3.0 ug/l in only one well, and within the footprint of AOC #30. Xylene was not detected in the Plant 1 background wells. There is no SWPC for xylene. The RGWVC and IGWVC for xylene are 8,700 μg/l and 48,000 μg/l, respectively. The SWPC for ethylbenzene is 580,000 μg/l, and the R/IGWVC are 2,700 μg/l and 36,000 μg/l, respectively. No groundwater concentrations exceed these criteria.

The pre-remedial groundwater data demonstrate that there are no significant plumes caused by site releases; therefore, the site's groundwater is under control.

Post-Remedial Groundwater Data Summary

Post-remedial groundwater monitoring was initiated in June 2009. Four monitoring events have been conducted to date during June, September, and December 2009 and March 2010. The post-remedial monitoring well locations are shown on Figure 3, along with the resulting groundwater flow direction and contours from the September 2009 event. The analytical results from these four monitoring events are shown in Tables 2, 3, 4, and 5 respectively. A data quality assessment / data usability evaluation memorandum is attached and indicates that the data are usable as reported or as qualified.

The post-remedial groundwater data generated to date using the updated well network continue to demonstrate that there are no significant plumes caused by site releases. Specifically, mercury, arsenic, and xylene have not been detected in any site monitoring wells. The flow directions and analytical data correlate well with the results of the Phase III groundwater investigation discussed above. The post-remedial data continue to confirm the presence of upgradient plumes from off-site sources affecting groundwater quality both north and south of Casper Street. With respect to any on-site releases, the groundwater data are compliant with the RGWVC, and are also compliant with the default SWPC, with minor exceptions for PAHs discussed below.

Phenanthrene was detected in well MW-32R located at the Former Fuel Oil UST Area (AOC #19) at very low concentrations of 0.42 µg/l, 0.19 µg/l, and 0.1 µg/l during the first three events, respectively, and was not detected during the recent March 2010 event. The trace concentrations detected slightly exceed the numeric SWPC of 0.077 µg/l. However, this well is located in the southeast corner of the site more than 500 feet from the Still River along the downgradient flow path. Phenanthrene is considered insoluble in water; therefore, there is no threat to surface water based on these data. Nonetheless, a calculated Alternative SWPC based on the potential plume discharge to the Still River is several orders of magnitude above the trace concentrations detected.

Acenaphthylene was detected in well MW-47S during only the September event. The trace concentration detected (0.48 µg/l) slightly exceeds the numeric SWPC of 0.3 µg/l. However, based on the trace concentration detected during only 1 of the 4 events, the significant distance to the river, and the absence of this compound in any other wells, there is no threat to surface water. A calculated Alternative SWPC based on the potential plume discharge to the Still River is several orders of magnitude above the trace concentration detected. Phenanthrene was also detected in this well at a trace concentration of 0.11 ug/l during the March 2010 event. For the reasons described above, there is no significant threat to surface water from this trace detection.

Based on the cumulative pre- and post-remedial groundwater data generated to date, the site groundwater is under control.

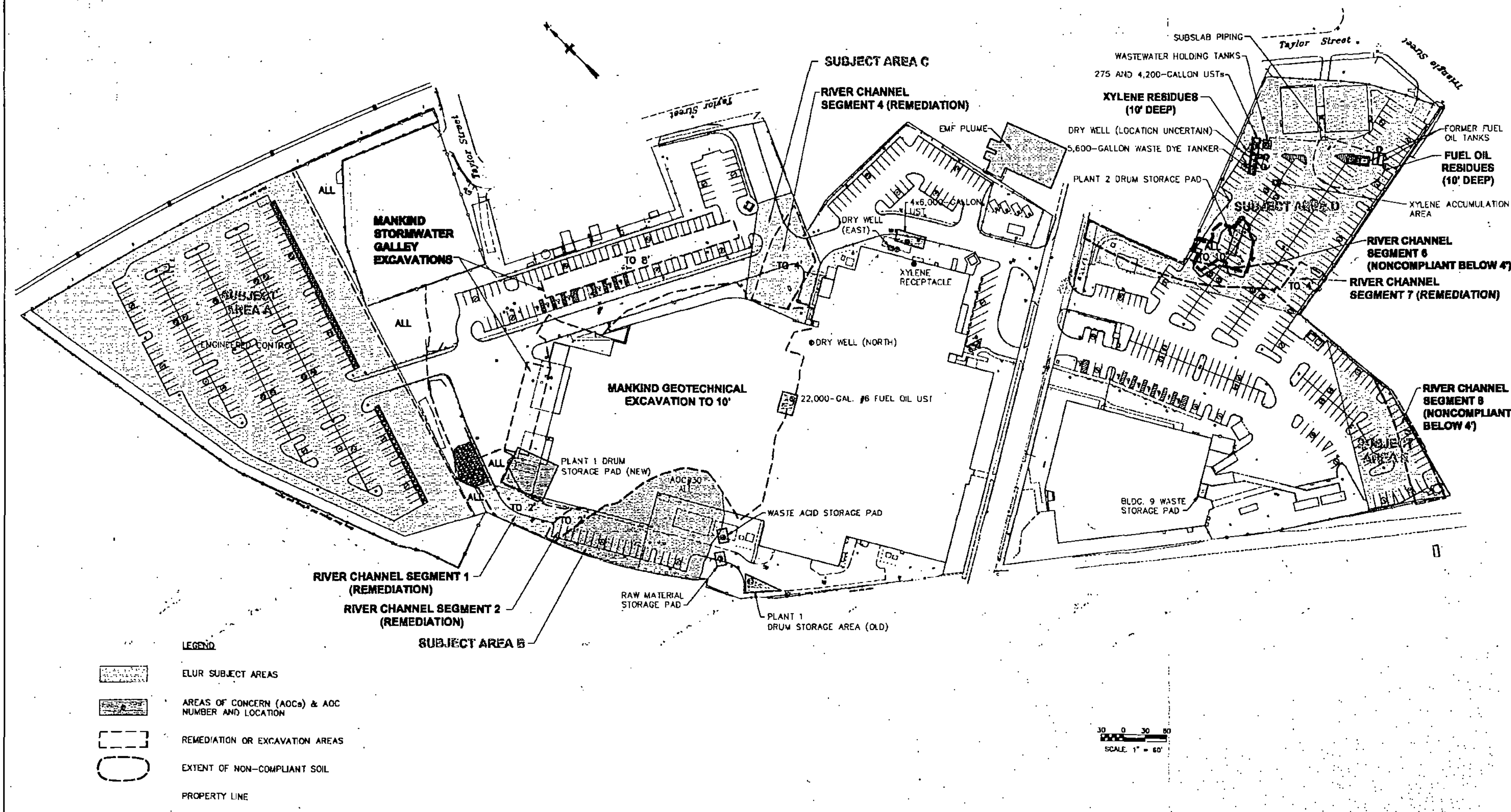

FIGURE 1

MALCOLM PIRNIE

REVISIONS			
DES	HM		
DRN	MVT, CW		
CKD	HM		

WYETH
DANBURY, CONNECTICUT

ENVIRONMENTAL INDICATORS DETERMINATION

KENDALL SHERWOOD DAVIS & GECK SITE

MANNKIND FACILITY MAP

DATE: FEBRUARY 2009
SHEET 1 OF 1
CAD REF. NO. 2254-095

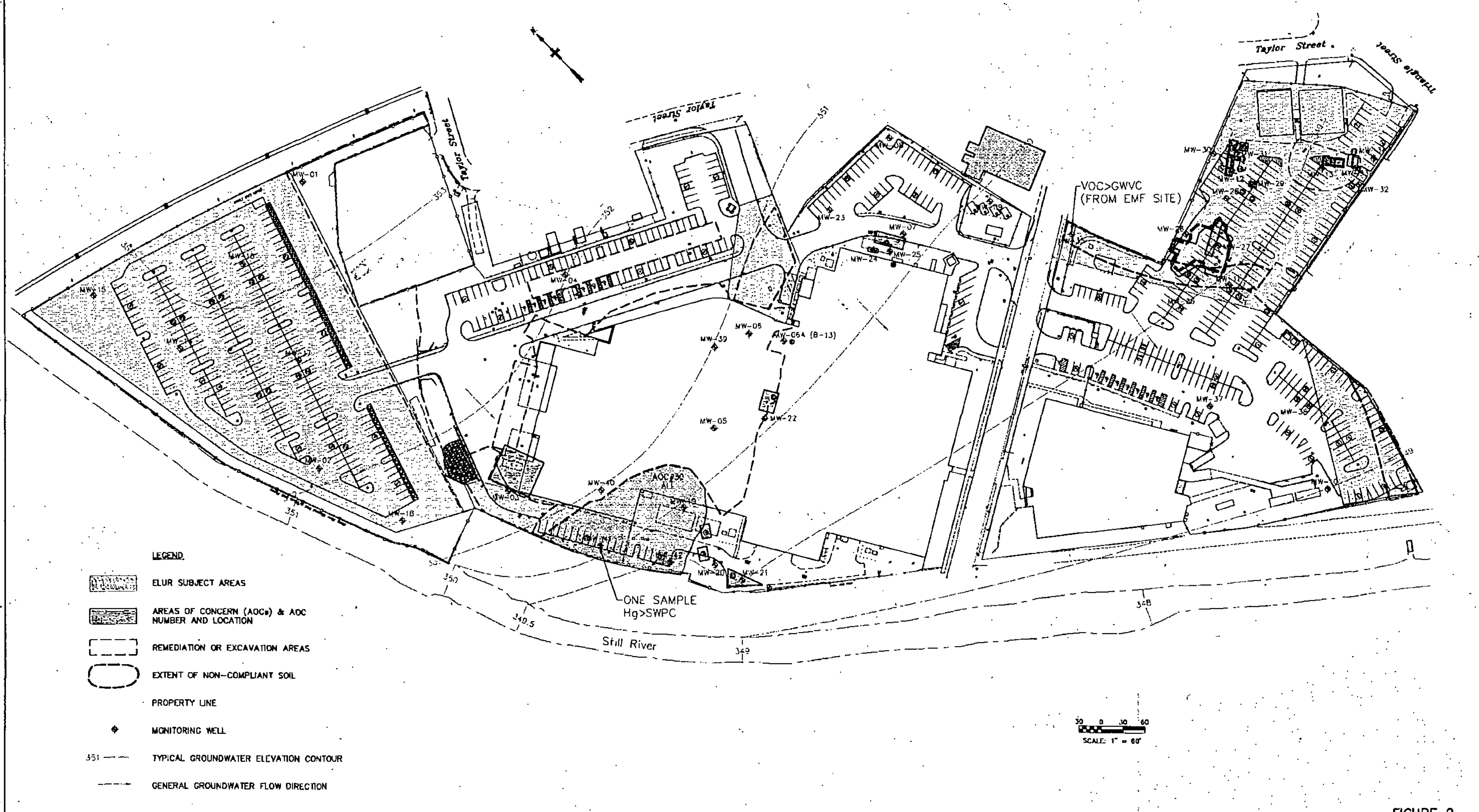

FIGURE 2

MALCOLM PIRNIE

DES	HM
DWN	MVT, CW
CKD	HM

WYETH
DANBURY, CONNECTICUT
ENVIRONMENTAL INDICATORS DETERMINATION

KENDALL SHERWOOD DAVIS & GECK SITE
TYPICAL GROUNDWATER FLOW MAP

DATE FEBRUARY 2009
SHEET 1 OF 1
CAD REF. NO. 2254-095

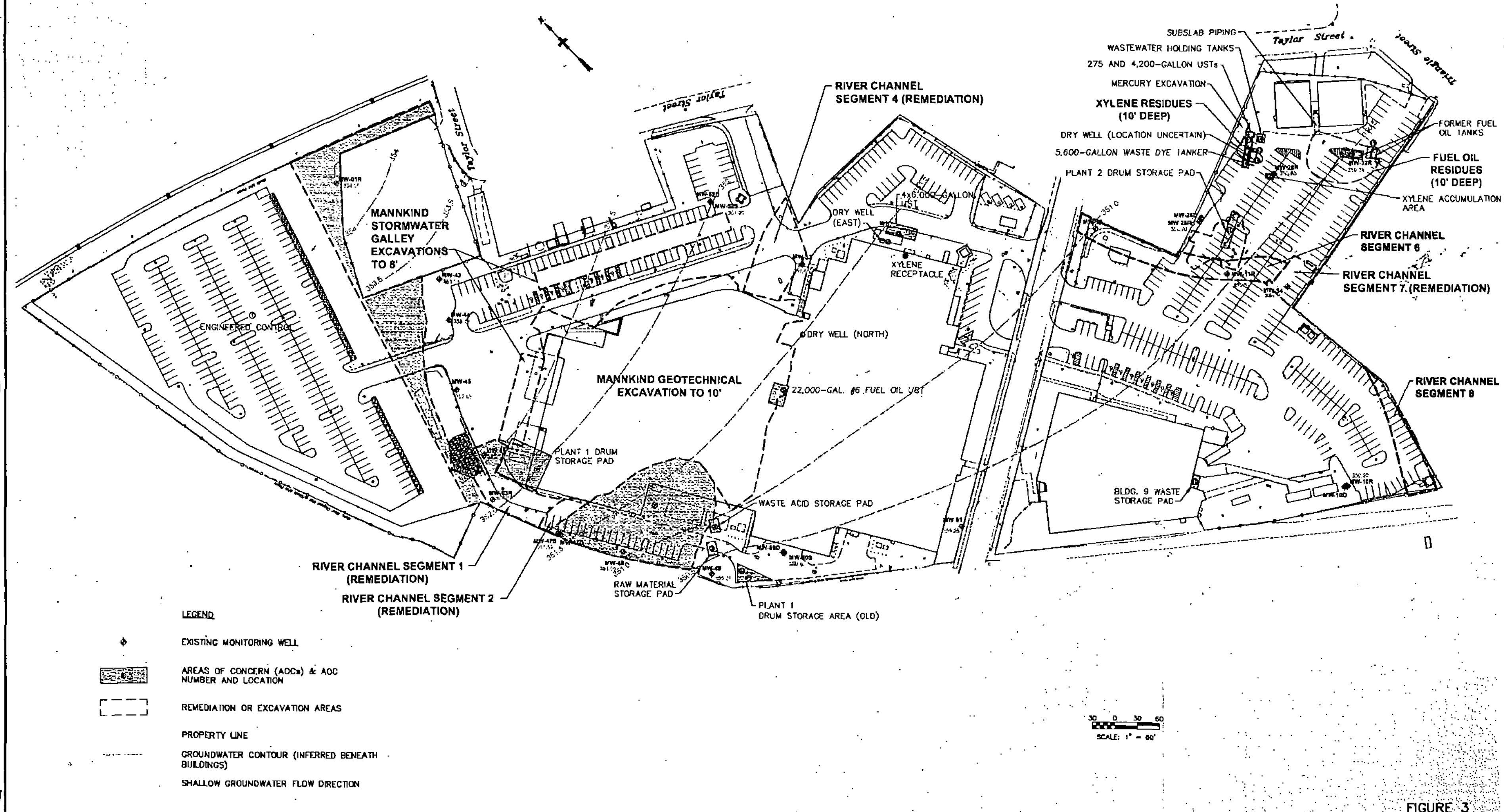

FIGURE 3

MALCOLM PIRNIE

REVISIONS

DES HM
DRN MVT
CKD LK

WYETH
DANBURY, CONNECTICUT

POST-REMEDIATION
GROUNDWATER MONITORING

KENDALL SHERWOOD DAVIS & GECK SITE
WATER TABLE CONTOUR MAP
SEPTEMBER 3, 2009

DATE OCTOBER 2009
SHEET 1 OF 1
CAD REF. NO. 2254-097

Table 1 - Summary of Substances Detected in Groundwater (Pre-Remediation, 1999 through 2002)
Former American Cyanamid (Davis & Geck, American Home Products, Wyeth) Facility
1 Casper Street, Danbury, CT

ANALYTE	MW-01	MW-02	MW-03	MW-04	MW-05	MW-06	MW-06A	MW-07	MW-08	MW-09	MW-10	MW-11	MW-12	MW-13
Methanol (mg/l)	<0.5	<0.5	<0.5	NA	NA	NA	<0.5	<0.5 to 3.5	NA	NA	NA	NA	<5.0	NA
Cyanide (mg/l)	<0.01 - 0.05	<0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TPH (mg/l)	<0.5 - 2.1	0.5 - 0.9	<0.5 - 1.3	<0.5 - 2.2	<0.5 - 1.6	<0.5 - 2.1	<0.5 - 0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 - 5.0	11.8 -98.8
ETPH (mg/l)	<0.1	<0.1 - 0.13	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
METALS (mg/l)														
Arsenic	<0.003 - 0.004	<0.003 - 0.004	<0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003 - 0.005	<0.003	<0.003	<0.004	<0.003 - 0.004	NA
Barium	0.025 - 0.05	0.077 - 0.09	0.08 - 0.142	0.04 - 0.06	0.06 - 0.07	0.05 - 0.06	0.07 - 0.08	0.09	0.10 - 0.11	0.08 - 0.11	0.10 - 0.12	0.091 - 0.10	0.06 - 0.11	NA
Chromium	0.001	<0.01	<0.001 - 0.002	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA
Lead	<0.001 - 0.002	<0.001	<0.001 - 0.002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA
Mercury	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA
Selenium	<0.01	<0.01	<0.005 - 0.01	<0.005 - 0.007	<0.005	<0.005	<0.005	<0.005	<0.005	0.005 - 0.006	<0.005	<0.005 - 0.016	0.005 - 0.006	NA
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA
PAHs (ug/l)														
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10 [illegible]
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10 - 18
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10 - 29
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10 - 21
VOCs (ug/l)														
1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 11	<1.0 - 2	<1.0 - 8.9	<1.0 - 28	<100	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 1.7	0.64 - 5.1	<1.0	<1.0 - 1.1	<1.0 - 1.9	<100	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 1.6	<1.0	<1.0 -1.2	2.3 -2.8	<1.0 - 9.6	<100	<1.0
2-Butanone (MEK)	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<2000	<1.0
Acetone	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<2000	4.8
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
Bromodichloromethane	<1.0 - 1.9	<1.0	< 1.0 - 1.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
Chloroform	<1.0 - 13	<1.0	<1.0 - 9.0	<1.0 - 2.8	<1.0 - 3.6	<1.0 - 5.4	<1.0	<1.0 - 3.0	<1.0	<1.0	<1.0	<1.0	<100	<1.0
cis-1,2-Dichloroethene	<1.0	1.1 -3.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 13	<1.0 - 11	<100	<1.0
Dichlorodifluoromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0	NA	<1.0 - 2.1	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 2.1	<1.0 - 2700	<1.0
Methyl tert-butyl ether	<1.0 - 1.2	<1.0	<1.0	<1.0	1.5 - 9.4	<1.0 - 19	<1.0	<1.0 - 7.9	<1.0 - 2.6	<1.0 - 4.5	<1.0	<1.0 - 10	<100	<1.0
Methylene chloride	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<200	<1.0
Naphthalene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0	<1.0	<1.0	<1.1	<1.0	NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0 - 2.5
Styrene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 170	<1.0
tert-Butylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0
Tetrachloroethene	5.6 - 61	4.2 - 18	<1.0 - 7.2	12 - 39	70 - 100	58 - 110	72 - 78	<1.0 - 1.3	<1.0	2.2 - 4.7	1.6 - 19	2.5 - 25	<1.0 - 2.6	<1.0
Trichloroethene	<1.0	<1.0 - 1.9	<1.0	<1.0	<1.0	<1.0	1.6 - 7.4	<1.0	<1.0 - 2.6	<1.0 - 1.3	<1.0 - 7.5	<1.0 - 8.2	<100	<1.0
Trichlorofluoromethane	12 - 15	<1.0 - 2.1	<1.0	6.3 - 9.4	7.4 - 10	10 - 14	NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0
Vinyl chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<500	<1.0
Xylene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0 - 16000	<1.0

Exceeded SWPC

Exceeded RGWVC

Table 1 - Summary of Substances Detected in Groundwater (Pre-Remediation, 1999 through 2002)
Former American Cyanamid (Davis & Geck, American Home Products, Wyeth) Facility
1 Casper Street, Danbury, CT

ANALYTE	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	MW-21	MW-22	MW-23	MW-24	MW-25	MW-26	MW-27	MW-28
Methanol (mg/l)	<0.5	NA	NA	NA	NA	<5.0	<10	<1.0 to 1.5	NA	<1.0	<1.0 to 2.0	<1.0	<5.0	<5.0	<1.0
Cyanide (mg/l)	<0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TPH (mg/l)	<0.5 - 0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ETPH (mg/l)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	NA	NA	NA	NA	NA
METALS (mg/l)															
Arsenic	<0.003 - 0.005	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	NA	NA	NA	NA	<0.004	<0.004	<0.004
Barium	0.034 - 0.05	0.08 - 0.082	0.042 - 0.05	0.049 - 0.06	0.072 - 0.09	0.104 - 0.14	0.09 - 0.119	0.065 - 0.07	NA	NA	NA	NA	0.062 - 0.082	0.07 - 0.095	0.08
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	<0.01	<0.01	<0.01
Lead	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	<0.01	<0.01	<0.01
Mercury	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NA	NA	NA	NA	<0.001	<0.001	<0.001
Selenium	<0.005 - 0.01	<0.01	<0.005 - 0.011	<0.005 - 0.01	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	<0.01	<0.01	<0.005
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	<0.01	<0.01	<0.01
PAHs (mg/l)															
Acenaphthene	NA	NA	NA	NA	NA	<10	<10	NA	<10	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	<10	<10	NA	<10	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	<10	<10	NA	<10	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	<10	<10	NA	<10	NA	NA	NA	NA	NA	NA
VOCs (ug/l)															
1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 1.5	<1.0 - 2.2	<1.0	<1.0 - 2.2	<1.0	<1.0	<1.0 - 6.5	1.6 - 14	2.3 - 6.9
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 1.3	<1.0 - 3.3	<1.0 - 2.3
2-Butanone (MEK)	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acetone	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0 - 1.1	<1.0	<1.0	<1.0	<1.0 - 1.0	<1.0	<1.0 - 2.6	1.0 - 2.9	2.2 - 3.1	<1.0	<1.0	<1.0	<0.5 - 5.5	<0.5 - 3.7	<1.0
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 1.8	<1.0	<1.0	<1.0	7.4 - 23	2.6 - 16	1.2 - 2.3
Dichlorodifluoromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 2.7	1.1 - 4.5	<1.0 - 5.3	<1.0 - 1.4	<1.0	<1.0	<1.0 - 1.3
Methylene chloride	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 3.0
Naphthalene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 66
n-Butylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 2.0
tert-Butylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	<1.0 - 60	<1.0	13 - 29	39 - 58	32 - 51	33 - 61	54 - 79	52 - 82	51 - 93	<1.0 - 3.5	4.6 - 16	2.6 - 8.3	29 - 38	13 - 29	2.0 - 5.1
Trichloroethene	<1.0	<1.0	<1.0 - 1.1	<1.0	1.0 - 1.5	<1.0 - 1.7	1.3 - 1.8	<1.0 - 1.3	3.1 - 10	<1.0	<1.0	<1.0	8.4 - 13	2.9 - 8.3	1 - 1.9
Trichlorofluoromethane	5.6 - 6.6	<1.0	<1.0 - 2.9	<1.0 - 6.4	3.8 - 6.3	1.7 - 4.1	7.9 - 10	4.8 - 8.0	6.6 - 9.4	<1.0	1.2 - 3.4	4.3 - 27	<1.0	<1.0	<1.0
Vinyl chloride	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 - 51

Exceeded SWPC

Exceeded RGWVC

Table 1 - Summary of Substances Detected in Groundwater (Pre-Remediation, 1999 through 2002)
Former American Cyanamid (Davis & Geck, American Home Products, Wyeth) Facility
1 Casper Street, Danbury, CT

														CTDEP	CTDEP	CTDEP
ANALYTE	MW-29	MW-30	MW-31	MW-32	MW-33	MW-34	MW-35	MW-36	MW-37	MW-38	MW-39	MW-40	MW-41	MW-42	SWPC	RGWVC	IGWVC
Methanol (mg/l)	<1.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Cyanide (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	52		
TPH (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
ETPH (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.1	<0.1	<0.1			
METALS (mg/l)																	
Arsenic	<0.004	<0.004	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	<0.004	<0.004	<0.004	0.004		
Barium	0.08	0.06	0.06	NA	NA	NA	NA	NA	NA	NA	NA	0.098 - 0.111	0.085 - 0.114	0.123 - 0.161			
Chromium	<0.01	0.009 - 0.012	<0.01	NA	NA	NA	NA	NA	NA	NA	NA	<0.005	<0.005	<0.005	1.2/0.11		
Lead	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA	NA	NA	NA	<0.001 - 0.002	<0.001 - 0.002	<0.001 - 0.002	0.013		
Mercury	<0.001	<0.001	<0.001	NA	NA	NA	NA	NA	NA	NA	NA	<0.0002	<0.0002 - 0.003	<0.0002	0.0004		
Selenium	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	<0.005 - 0.014	<0.01	<0.01	0.05		
Silver	<0.01	<0.01	<0.01	NA	NA	NA	NA	NA	NA	NA	NA	<0.001 - 0.001	<0.001 - 0.001	<0.001 - 0.002	0.012		
PAHs (mg/l)																	
Acenaphthene	NA	NA	NA	<10	<10	<10	NA	NA	NA	NA	NA	<10	<10	<10 - 17			
Fluorene	NA	NA	NA	<10	<10	<10	NA	NA	NA	NA	NA	<10	<10	<10	140000		
Naphthalene	NA	NA	NA	<10	<10	<10	NA	NA	NA	NA	NA	<10	<10	<10			
Phenanthrene	NA	NA	NA	<10	<10	<10	NA	NA	NA	NA	NA	<10	<10	<10	0.077		
VOCs (ug/l)																	
1,1,1-Trichloroethane	<1.0	<1.0 - 1.7	<1.0 - 2.	<1.0	<1.0	<1.0	<25	<2.5	<2.5	8.5	<10	<1.0	<1.0	<1.0	62000	6500	16000
1,1-Dichloroethane	<1.0 - 1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<2.2	<2.5	<0.5	<10	<1.0	<1.0	<1.0		3000	41000
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<2.5	<2.5	3.1	<10	<1.0	<1.0	<1.0	96	190	920
2-Butanone (MEK)	<1.0	<1.0	<1.0	1.1	1.1	<1.0	<50	<5.0	<5.0	<1.0	<1.0	NA	NA	NA		50000	50000
Acetone	<1.0	<1.0	<1.0	6.0	5.0	3.8	<50	<5.0	<5.0	<1.0	<1.0	NA	NA	NA		50000	50000
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<2.5	<2.5	<0.5	<10	<1.0	<1.0	1.1 - 1.4	710	130	310
Bromodichloromethane	<1.0	<1.0 - 2.3	<1.0 - 1.5	<1.0	<1.0	<1.0	<25	<2.5	<2.5	<0.5	<10	<1.0	<1.0	<1.0		2.3	73
Chloroform	<1.0	<1.0 - 11	1.5 - 8.9	<1.0	<1.0	<1.0	<25	<2.5	<2.5	<0.5	<10	<1.0 - 2.5	1	<1.0 - 1.2	14100	26	62
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	11	11	<0.5	<10	<1.0 - 3.5	1.9 - 4.3	<1.0 - 3.1		830	11000
Dichlorodifluoromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	<10	<1.0	<1.0	<1.0		93	1200
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<2.5	<2.5	<0.5	<10	<1.0	<1.0	<1.0	580000	2700	36000
Methyl tert-butyl ether	<1.0	<1.0 - 2.0	<1.0	<1.0	<1.0	<1.0	<25	<2.5	<2.5	<0.5	<10	<1.0	<1.0	<1.0		21000	50000
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<2.5	<2.5	<0.5	<10	<1.0	<1.0	<1.0	48000	160	2200
Naphthalene	<1.0 - 4.7	<1.0	<1.0	<1.0	<1.0 - 1.7	<1.0 - 1.1	NA	NA	NA	NA	<1.0 - 14	<1.0	<1.0	<1.0			
n-Butylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0 - 3.1	<1.0 - 1.6	NA	NA	NA	NA	<10	<1.0	<1.0	<1.0		1500	21000
n-Propylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	<10	<1.0	<1.0	<1.0			
p-Isopropyltoluene	<1.0	<1.0	<1.0	<1.0	<1.0 - 1.8	<1.0	NA	NA	NA	NA	<10	<1.0	<1.0	<1.0			
sec-Butylbenzene	<1.0	<1.0	<1.0	1.2 - 2.8	3.3 - 7.3	1.4 - 4.1	NA	NA	NA	NA	<10	<1.0	<1.0	<1.0		1500	20000
Styrene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<2.5	<2.5	<0.5	<10	<1.0	<1.0	<1.0		3100	42000
tert-Butylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	<10	<1.0	<1.0	<1.0			
Tetrachloroethene	<1.0 - 1.6	1.2 - 1.9	1.8 - 4.1	<1.0	<1.0	<1.0	240	34	38	1.4	69 - 100	51 - 90	56 - 82	<1.0	88	340	810
Trichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	38	7.6	11	0.92	<10	<1.0	<1.0 - 1.6	<1.0	2340	27	67
Trichlorofluoromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	<10 - 12	<1.0 - 11	<1.0 - 10	<1.0		1300	4200
Vinyl chloride	<1.0 - 1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<2.5	<2.5	<0.5	<10	<1.0	<1.0	<1.0 - 1.2	15750	1.6	52
Xylene	<1.0 - 6.3	<1.0	<1.0	<1.0	<1.0 - 3.0	<1.0	<25	<2.5	<2.5	<0.5	<0.5	<1.0	<1.0	<1.0		8700	48000

Exceeded SWPC   Exceeded RGWVC

O:\TECH\2254095\EI submittal\Updated CA-750 Deliverable\July 1 2010 revised excerpts\Table 1_GW Ranges_rev July 1 2010.xlsx

TABLE 1A
GROUNDWATER CONCENTRATIONS - AOC #30 – HAT FACTORY WASTE AREA
WYETH (FORMER KENDALL SHERWOOD DAVIS & GECK SITE

WELL:	MW-40				MW-41				MW-42				MW-19					SWPC	RGWVC
DATE:	09/11/01	12/11/01	03/18/02	06/05/02	09/11/01	12/11/01	03/18/02	06/05/02	09/11/01	12/11/01	03/18/02	06/05/02	05/16/01	09/11/01	12/11/01	03/18/02	06/05/02		
METALS (mg/L)																			
Barium	0.102	0.102	0.099	0.111	0.094	0.091	0.085	0.114	0.123	0.152	0.157	0.161	0.13	0.112	0.104	0.129	0.14	NC	NAC
Chromium	<0.005	<0.001	<0.001	0.001	<0.005	0.002	<0.001	0.001	<0.005	0.001	<0.001	0.002	<0.01	<0.005	0.001	<0.001	<0.001	1.2	NAC
Mercury	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	NAC
Lead	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.002	<0.01	<0.001	<0.001	<0.001	<0.001	0.013	NAC
Cadmium	<0.005	<0.001	0.001	<0.001	<0.005	<0.001	0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	0.006	NAC
Selenium	<0.005	<0.005	0.014	<0.01	<0.005	<0.005	<0.01	<0.01	<0.005	<0.005	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.01	0.05	NAC
Silver	<0.01	<0.001	<0.001	0.001	<0.01	<0.001	<0.001	0.001	<0.01	<0.001	<0.001	0.002	<0.01	<0.01	<0.001	<0.001	0.002	0.012	NAC
VOCs (µg/L)																			
Tetrachloroethene	86	58	90	51	74	62	82	56	<1.0	<1.0	<1.0	<1.0	33	58	59	61	46	88	340
Trichloroethene	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	1.7	1.7	1.7	<1.0	2,340	27
cis-1,2-Dichloroethene	2.7	3.5	<1.0	2.8	4.3	1.9	2.5	1.9	3.1	2.1	1.6	<1.0	0.54	<1.0	<1.0	<1.0	<1.0	NC	830
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	15,750	1.6
Chloroform	1.7	1.7	<1.0	1.5	1.0	1.0	1.0	1.0	1.2	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	14,100	26
Trichlorofluoromethane	11	5.9	<1.0	5.2	<1.0	7.8	10	6.2	<1.0	<1.0	<1.0	<1.0	NA	3.5	4.1	2.9	1.7	NC	1,300
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	1.2	1.3	1.1	<0.5	<1.0	<1.0	<1.0	<1.0	710	130

NA Not analyzed
NC No established criterion
NAC No appliable criterion

SWPC surface water protection criteria
RGWVC residential groundwater volatilization criteria
Exceeds background concentrations.
Exceeds SWPC. However, only wells adjacent to Still R. are subject to these criteria.

TABLE 1B
GROUNDWATER CONCENTRATIONS - AOC #01 – FORMER HAT AND FUR CUTTING COMPANIES
WYETH (FORMER KENDALL SHERWOOD DAVIS & GECK SITE
DANBURY, CONNECTICUT

WELL:	**MW-01**						**MW-02**						**MW-14**					
DATE:	**05/25/99**	**06/30/99**	**05/16/01**	**09/11/01**	**12/11/01**	**03/18/02**	**05/25/99**	**06/30/99**	**05/16/01**	**09/11/01**	**12/11/01**	**03/18/02**	**05/25/99**	**06/30/99**	**05/16/01**	**09/11/01**	**12/11/01**	**03/18/02**
INORGANICS (mg/L)																		
Cyanide	<0.01	0.05	NA	NA	NA	NA	<0.01	<0.01	NA	NA	NA	NA	<0.01	<0.01	NA	NA	NA	NA
Arsenic	<0.003	0.004	<0.004	<0.004	<0.004	<0.004	<0.003	<0.003	<0.004	<0.004	0.004	<0.004	<0.003	0.005	<0.004	<0.004	<0.004	<0.004
Barium	0.03	0.05	0.04	0.033	0.025	0.035	0.08	0.09	0.08	0.079	0.087	0.077	0.05	0.05	0.04	0.041	0.034	0.044
Cadmium	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001
Chronium	<0.01	<0.01	<0.01	<0.005	0.001	<0.001	<0.01	<0.01	<0.01	<0.005	<0.001	<0.001	<0.01	<0.01	<0.01	<0.005	<0.001	<0.001
Lead	<0.01	<0.01	<0.01	<0.001	0.002	<0.001	<0.01	<0.01	<0.01	<0.001	0.001	<0.001	<0.01	<0.01	<0.01	0.001	0.006	0.001
Selenium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	0.007	<0.005	<0.005	<0.005	<0.005	0.01
Silver	<0.01	<0.01	<0.01	0.0012	0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001
TPH (mg/L)	2.1	<0.5	NA	NA	NA	NA	0.9	0.5	NA	NA	NA	NA	0.8	<0.5	NA	NA	NA	NA
ETPH (mg/L)	NA	NA	<0.1	<0.1	<0.1	<0.1	NA	NA	0.13	<0.1	<0.1	<0.1	NA	NA	<0.1	<0.1	<0.1	<0.1
VOCs (µg/L)																		
Tetrachloroethene	5.6	61	42	45	35	31	4.2	5.1	13	11	18	21	<1.0	60	1.7	2.5	2.0	1.4
Trichloroethene	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	1.1	<1.0	1.9	1.2	1.3	1.5	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	1.6	1.1	3.2	2.6	2.7	2.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0
Trichlorofluoromethane	NA	NA	NA	15	12	15	NA	NA	NA	<1.0	<1.0	2.1	NA	NA	NA	6.6	5.6	6.3
Vinyl chloride	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<5.0	<5.0	<0.5	2.7	1.5	<1.0	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0
Chloroform	<1.0	1.1	10	13	8.0	8.3	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	1.1	0.63	<1.0	<1.0	<1.0
Acetone	<5.0	<5.0	<1.0	NA	NA	NA	<5.0	<5.0	1.9	NA	NA	NA	<5.0	<5.0	<1.0	NA	NA	NA
Bromodichloromethane	<1.0	<1.0	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0
Methyl tert-butyl ether	1.2	<1.0	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<0.5	<2.0	<1.0	<1.0	<1.0	<1.0	<0.5	<2.0	<1.0	<1.0

WELL:	**MW-15**				**MW-16**				**MW-17**				**MW-18**				**SWPC**	**RGWVC**
DATE:	**05/16/01**	**09/11/01**	**12/11/01**	**03/18/02**	**05/16/01**	**09/11/01**	**12/11/01**	**03/18/02**	**05/16/01**	**09/11/01**	**12/11/01**	**03/18/02**	**05/16/01**	**09/11/01**	**12/11/01**	**03/18/02**		
INORGANICS (mg/L)																		
Cyanide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.052	NAC
Arsenic	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.004	NAC
Barium	0.08	0.08	0.081	0.082	0.05	0.042	0.042	0.045	0.06	0.049	0.049	0.057	0.09	0.075	0.073	0.072	NC	NAC
Cadmium	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.001	0.001	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	0.006	NAC
Chromium	<0.01	<0.005	0.001	<0.001	<0.01	<0.005	<0.001	0.001	<0.01	<0.005	0.001	<0.001	<0.01	<0.005	<0.001	<0.001	1.2	NAC
Lead	<0.01	0.002	<0.001	<0.001	<0.01	0.001	<0.001	<0.001	<0.01	<0.001	0.001	<0.0041	<0.01	0.001	0.001	<0.001	0.013	NAC
Selenium	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.005	0.01	<0.005	<0.005	<0.005	<0.01	0.05	NAC
Silver	<0.01	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.01	<0.001	<0.001	<0.001	0.012	NAC
TPH (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NC	NAC
ETPH (mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NC	NAC
VOCs (µg/L)																		
Tetrachloroethene	<0.5	<1.0	<1.0	<1.0	19	29	14	13	40	58	39	46	37	36	32	51	88	340
Trichloroethene	<0.5	<1.0	<1.0	<1.0	0.56	1.1	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	1.3	1.5	1.0	1.5	2,340	27
cis-1,2-Dichloroethene	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	0.53	<1.0	<1.0	<1.0	NC	830
Trichlorofluoromethane	NA	<1.0	<1.0	<1.0	NA	2.9	<1.0	2.5	NA	6.4	4.7	<1.0	NA	4.5	3.8	6.3	NC	1,300
Vinyl chloride	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	15,750	1.6
Chloroform	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	0.53	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	14,100	26
Acetone	<1.0	NA	NA	NA	<1.0	NA	NA	NA	<1.0	NA	NA	NA	<1.0	NA	NA	NA	NC	50,000
Bromodichloromethane	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	NC	2.3
Methyl tert-butyl ether	<0.5	<2.0	<1.0	<1.0	<0.5	<2.0	<1.0	<1.0	<0.5	<2.0	<1.0	<1.0	<0.5	<2.0	<1.0	<1.0	NC	21,000

NA Not analyzed
NC No established criterion
NAC No appliable criterion
SWPC surface water protection criteria

RGWVC residential groundwater volatilization criteria
Exceeds SWPC However, only wells adjacent to the Still R. are subject to these criteria.
Exceeds background concentrations.
BOLD Exceeds RGWVC

TABLE 1C

GROUNDWATER CONCENTRATIONS - AOC #s 12-17 -- PLANT 2 NORTH
WYETH (FORMER KENDALL SHERWOOD DAVIS & GECK SITE
DANBURY, CONNECTICUT

WELL:	MW-30				MW-12						MW-28			
DATE:	05/16/01	09/11/01	12/11/01	03/18/02	05/25/99	06/30/99	05/16/01	09/11/01	12/11/01	03/18/02	05/16/01	09/11/01	12/11/01	03/18/02
METALS (mg/L)														
Arsenic	NA	NA	NA	NA	<0.003	0.004	NA	NA	NA	NA	NA	NA	NA	NA
Barium	NA	NA	NA	NA	0.11	0.06	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	0.006	<0.005	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	<0.01	NA	0.009	0.012	<0.01	<0.01	<0.01	<0.005	<0.001	<0.001	<0.01	<0.005	<0.001	<0.001
TPH (mg/L)	NA	NA	NA	NA	5.0	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
VOCs (µg/L)														
Xylene	<0.5	<1.0	<1.0	<1.0	16,000	30	36	<1.0	<1.0	<1.0	51	<1.0	<1.0	<1.0
Ethylbenzene	<0.5	<1.0	<1.0	<1.0	2,700	6.8	27	<1.0	<1.0	<1.0	3.2	<1.0	<1.0	<1.0
Styrene	<0.5	<1.0	<1.0	<1.0	170	<1.0	<0.5	<1.0	<1.0	<1.0	2.0	<1.0	<1.0	<1.0
Tetrachloroethene	1.2	1.9	1.5	1.9	<100	<1.0	0.90	1.2	1.3	5.6	2.0	4	5.1	3.4
Trichloroethene	<0.5	<1.0	<1.0	<1.0	<100	2.0	1.9	1.1	<1.0	1.0	1.9	1.8	1.4	1.0
1,1-Dichloroethene	<0.5	<1.0	<1.0	<1.0	<100	<1.0	<0.5	<1.0	<1.0	<1.0	0.54	<1.0	2.3	2.0
cis-1,2-Dichloroethene	<0.5	<1.0	<1.0	<1.0	<100	<1.0	0.96	1.7	1.7	<1.0	1.5	2.3	2	1.2
Vinyl chloride	<0.5	<1.0	<1.0	<1.0	<500	<5.0	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	1.7	1.7	1.0	<1.0	<100	<1.0	<0.5	<1.0	1.4	<1.0	2.3	2.6	6.9	6.6
1,1-Dichloroethane	<0.5	<1.0	<1.0	<1.0	<100	<1.0	<0.5	1.0	1.5	<1.0	<0.5	<1.0	<1.0	<1.0
Chloroform	11	7.4	2.9	<1.0	<100	<1.0	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0
Methylene Chloride	<0.5	<1.0	<1.0	<1.0	<200	<2.0	<0.5	<1.0	<1.0	4.9	<0.5	<1.0	<1.0	3.0
Bromodichloromethane	2.3	<1.0	<1.0	<1.0	<100	<1.0	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0
Dichlorodifluoromethane	NA	<1.0	<1.0	<1.0	NA	NA	NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0
[illegible]thalene	NA	<1.0	<1.0	<1.0	NA	NA	NA	<1.0	<1.0	<1.0	NA	<1.0	<1.0	66
[illegible] tert-butyl ether	2.0	<1.0	<1.0	<1.0	<100	<1.0	<0.5	<1.0	<1.0	<1.0	0.52	<1.0	1.3	<1.0

WELL:	MW-29				MW-31				SWPC	RGWVC
DATE:	05/16/01	09/11/01	12/11/01	03/18/02	05/16/01	09/11/01	12/11/01	03/18/02		
METALS (mg/L)										
Arsenic	NA	NA	NA	NA	NA	NA	NA	NA	0.004	NAC
Barium	NA	NA	NA	NA	NA	NA	NA	NA	NC	NAC
Selenium	NA	NA	NA	NA	NA	NA	NA	NA	0.05	NAC
Chromium	<0.01	<0.005	<0.001	<0.001	<0.01	<0.005	0.003	0.005	1.2	NAC
TPH (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NC	NAC
VOCs (µg/L)									–	
Xylene	6.3	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	NC	8,700
Ethylbenzene	1.7	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	580,000	2,700
Styrene	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	NC	3,100
Tetrachloroethene	<0.5	1.6	<1.0	<1.0	1.8	1.9	1.9	4.1	88	340
Trichloroethene	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	2,340	27
1,1-Dichloroethene	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	96	190
cis-1,2-Dichloroethene	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	NC	830
Vinyl chloride	<0.5	<1.0	1.0	<1.0	<0.5	<1.0	<1.0	<1.0	15,750	1.6
1,1,1-Trichloroethane	<0.5	<1.0	<1.0	<1.0	1.6	2	1.4	<1.0	62,000	6,500
1,1-Dichloroethane	<0.5	<1.0	1.6	1.3	<0.5	<1.0	<1.0	<1.0	NC	3,000
Chloroform	<0.5	<1.0	<1.0	<1.0	5.8	7	8.9	1.5	14,100	26
Methylene Chloride	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	48,000	160
Bromodichloromethane	<0.5	<1.0	<1.0	<1.0	1.0	1.5	1.4	<1.0	NC	2.3
Dichlorodifluoromethane	NA	<1.0	<1.0	<1.0	NA	1.4	<1.0	<1.0	NC	93
Naphthalene	NA	<1.0	<1.0	4.7	NA	<1.0	<1.0	<1.0	NC	NC
Methyl tert-butyl ether	<0.5	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	NC	21,000

NA Not analyzed
[illegible] No established criterion
[illegible] No appliable criterion

SWPC surface water protection criteria
RGWVC residential groundwater volatilization criteria
BOLD Exceeds RGWVC
Exceeds background concentrations.

Table 2
Groundwater Monitoring Results
Former KSDG Facility, Danbury, CT
June 10 and 11, 2009

				Wells North of Casper Street												Wells South of Casper Street									
	CT RSR Criteria			Bkgrnd	AOC 2, R.C.	AOC 30, R.C.		AOC 30, MannKind Excavation				downgrad	Site bkgrnd wells		R.C.	Site downgrad wells		Site/AOC 11 bkground wells			AOC 11	Plant 2 North	AOC 19	AOC 21	R.C.
ANALYTE	SWPC	RGWVC	IGWVC	MW-43	MW-03R	MW-47S	MW-47D	MW-48	MW-49	MW-50D	MW-50S	MW-51	MW-52S	MW-52D	MW-53	MW-10R	MW-10D	MW-26R	MW-26D	MW-26J	MW-11R	MW-28R	MW-32R	MW-35	MW-54
Metals (mg/l)																				dup					
Arsenic	0.004			< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	NA	NA	NA	< 0.004
Beryllium	0.004			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.001	< 0.001	< 0.001	< 0.001	NA	NA	NA	< 0.001
Chromium	1.2/0.11			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.001	NA	NA	NA
Lead	0.013			< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.003	< 0.002	< 0.002	< 0.002	NA	NA	NA	< 0.002
Mercury	0.0004			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.0002	< 0.0002	< 0.0002	NA	NA	< 0.0002
PAHs (µg/l)																									
2-Methylnaphthalene				< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10
Acenaphthene				< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10
Acenaphthylene	0.3			< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	NA	< 0.3	NA	< 0.3
Anthracene	1,100,000			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10
Benz(a)anthracene	0.3			< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	NA	< 0.06	NA	< 0.06
Benzo(a)pyrene	0.3			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NA	< 0.2	NA	< 0.2
Benzo(b)fluoranthene	0.3			< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	NA	< 0.08	NA	< 0.08
Benzo(ghi)perylene				< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	< 4	NA	< 4
Benzo(k)fluoranthene	0.3			< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	NA	< 0.3	NA	< 0.3
Chrysene				< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	< 2	NA	< 2
Dibenz(a,h)anthracene				< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NA	< 0.2	NA	< 0.2
Fluoranthene	3,700			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10
Fluorene	140,000			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10
Indeno(1,2,3-cd)pyrene				< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NA	< 0.2	NA	< 0.2
Naphthalene				< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10
Phenanthrene	0.077			< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	NA	0.42	NA	< 0.07
Pyrene	110,000			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10
VOCs (µg/l)																									
1,1,1,2-Tetrachloroethane		2	64	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	62,000	6,500	16,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.3	< 1.0	< 1.0	< 1.0	< 1.0	1.7	< 1.0	5.3	< 1.0	5.8	< 1.0	< 1.0	< 1.0	< 1.0	58
1,1,2,2-Tetrachloroethane	110	1.8	54	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-Trichloroethane	1,260	220	2,900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane		3,000	41,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	96	190	920	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.6	2.4	< 1.0	2.6	< 1.0	< 1.0	< 1.0	< 1.0	33
1,1-Dichloropropene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene		360	4,800	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	170,000	5,100	50,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	2,970	6.5	68	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane		7.4	58	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		280	3,900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	26,000	4,300	50,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	26,000	1,400	3,400	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Hexanone				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2-Isopropyltoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Methyl-2-pentanone		13,000	50,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Acetone		50,000	50,000	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50
Acrylonitrile	20			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	710	130	310	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Table 2
Groundwater Monitoring Results
Former KSDG Facility, Danbury, CT
June 10 and 11, 2009

	CT RSR Criteria			Wells North of Casper Street												Wells South of Casper Street									
				Bkgrnd	AOC 2, R.C.	AOC 30, R.C.		AOC 30, MannKind Excavation				downgrad	Site bkgrnd wells		R.C.	Site downgrad wells		Site/AOC 11 bkground wells			AOC 11	Plant 2 North	AOC 19	AOC 21	R.C.
ANALYTE	SWPC	RGWVC	IGWVC	MW-43	MW-03R	MW-47S	MW-47D	MW-48	MW-49	MW-50D	MW-50S	MW-51	MW-52S	MW-52D	MW-53	MW-10R	MW-10D	MW-26R	MW-26D	MW-26J	MW-11R	MW-28R	MW-32R	MW-35	MW-54
Bromochloromethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane		2.3	73	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	10,800	75	2,300	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon tetrachloride	132	5.3	14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	420,000	1,800	23,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane		12,000	29,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	14,100	26	62	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.4
Chloromethane		390	5,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene		830	11,000	< 1.0	1.5	< 1.0	< 1.0	< 1.0	16	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.1	< 1.0	3.5	< 1.0	< 1.0	< 1.0	25	1.1
cis-1,3-Dichloropropene	34,000	11	360	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromochloromethane	1,020			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromoethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane		93	1,200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 J	< 1.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	580,000	2,700	36,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene				< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40
Isopropylbenzene		2,800	6,800	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 J	< 1.0	< 1.0 J	< 1.0 J
m&p-Xylene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl ethyl ketone		50,000	50,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methyl t-butyl ether (MTBE)		21,000	50,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	48,000	160	2,200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene				< 1.0	< 1.0	8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Butylbenzene		1,500	21,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene		1,500	20,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.0	< 1.0	< 1.0
Styrene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	88	340	810	94	28	4.2	85	10	3.8	71	73	63	18	29	17	1.4	6.4	24	< 1.0	24	1.9	< 1.0	< 1.0	280	6.2
Tetrahydrofuran (THF)				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	4,000,000	7,100	41,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes		8,700	48,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene		1,000	13,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene				< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
trans-1,4-dichloro-2-butene				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	2,340	27	67	4.8	< 1.0	< 1.0	< 1.0	< 1.0	2.0	1.1	1.1	1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0	2.5	< 1.0	2.5	< 1.0	< 1.0	< 1.0	40	1.8
Trichlorofluoromethane		1,300	4,200	14 H	2.9	< 1.0	10	< 1.0	< 1.0	16	12 H	11 H	2.9	14	2.7	< 1.0	< 1.0	< 1.0	< 1.0 H	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorotrifluoroethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	15,750	1.6	52	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

NA - Not analyzed
VOC - Volatile organic compounds
PAH - Polynuclear aromatic hydrocarbons
R.C. - River channel
RGWVC - Residential groundwater volatilization criteria (Proposed Revisions, CTDEP March 2003)
IGWVC - Industrial/commercial groundwater volatilization criteria (Proposed Revisions, CTDEP March 2003)
SWPC - Surface water protection criteria (CT RSRs, 1996), applies only to groundwater along the line of discharge to a receiveing surface water body.

94 Shaded cells exceed the numeric SWPC
Bold values exceed RGWVC
J - Estimted concentration
B - Indicates laboratory blank contamination
H - Potential high bias based on lab QA/QC

Table 3
Groundwater Monitoring Results
Former KSDG Facility, Danbury, CT
September 2 and 3, 2009

	CT RSR Criteria			Wells North of Casper Street												Wells South of Casper Street									
				Bkgrnd	AOC 2, R.C.	AOC 30, R.C.		AOC 30, MannKind Excavation				downgrad	Site bkgrnd wells		R.C.	Site downgrad wells		Site/AOC 11 bkground wells		AOC 11	Plant 2 North	AOC 19	AOC 21	R.C.	
ANALYTE	**SWPC**	**RGWVC**	**IGWVC**	**MW-43**	**MW-03R**	**MW-47S**	**MW-47D**	**MW-48**	**MW-49**	**MW-50D**	**MW-50S**	**MW-51**	**MW-52S**	**MW-52D**	**MW-53**	**MW-10R**	**MW-10D**	**MW-26R**	**MW-26D**	**MW-11R**	**MW-28R**	**MW-32R**	**MW-35**	**MW-54**	**MW-54D**
Metals (mg/l)																									
Arsenic	0.004			< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	NA	NA	NA	< 0.004	< 0.004
Beryllium	0.004			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.001	< 0.001	< 0.001	NA	NA	NA	< 0.001	< 0.001
Chromium	1.2/0.11			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.001	NA	NA	NA	NA
Lead	0.013			< 0.002	0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	NA	NA	NA	< 0.002	< 0.002
Mercury	0.0004			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	NA	NA	< 0.0002	< 0.0002
PAHs (µg/l)																									
2-Methylnaphthalene				< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10	< 10
Acenaphthene				< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10	< 10
Acenaphthylene	0.30			< 0.3	< 0.3	0.48	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	NA	< 0.3	NA	< 0.3	< 0.3
Anthracene	1,100,000			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10	< 10
Benz(a)anthracene	0.30			< 0.06	0.08	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	NA	0.12 BH	NA	< 0.06	< 0.06
Benzo(a)pyrene	0.30			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NA	< 0.2	NA	< 0.2	< 0.2
Benzo(b)fluoranthene	0.30			< 0.08	0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	NA	< 0.08	NA	< 0.08	< 0.08
Benzo(ghi)perylene				< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	< 4	NA	< 4	< 4
Benzo(k)fluoranthene	0.30			< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	NA	< 0.3	NA	< 0.3	< 0.3
Chrysene				< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	< 2	NA	< 2	< 2
Dibenz(a,h)anthracene				< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NA	< 0.2	NA	< 0.2	< 0.2
Fluoranthene	3,700			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10	< 10
Fluorene	140,000			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10	< 10
Indeno(1,2,3-cd)pyrene				< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NA	< 0.2	NA	< 0.2	< 0.2
Naphthalene				< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10	< 10
Phenanthrene	0.077			< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	0.07	< 0.07	NA	0.19 BH	NA	< 0.07	< 0.07
Pyrene	110,000			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	NA	< 10	< 10
VOCs (µg/l)																									
1,1,1,2-Tetrachloroethane		2	64	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	62,000	6,500	16,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	31	30
1,1,2,2-Tetrachloroethane	110	1.8	54	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-Trichloroethane	1,260	220	2,900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane		3,000	41,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	96	190	920	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.4	5.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	18	22
1,1-Dichloropropene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene				< 1.0	< 1.0	< 1.0 J	< 1.0	< 1.0 J	< 1.0	< 1.0	< 1.0 J	< 1.0 J	< 1.0	< 1.0 J	< 1.0	< 1.0	< 1.0 J	< 1.0	< 1.0 J	< 1.0	< 1.0	< 1.0	< 1.0 J	< 1.0 J	< 1.0 J
1,2,3-Trichloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene				< 1.0	< 1.0	< 1.0 J	< 1.0	< 1.0 J	< 1.0	< 1.0	< 1.0 J	< 1.0 J	< 1.0	< 1.0 J	< 1.0	< 1.0	< 1.0 J	< 1.0	< 1.0 J	< 1.0	< 1.0	< 1.0	< 1.0 J	< 1.0 J	< 1.0 J
1,2,4-Trimethylbenzene		360	4,800	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	170,000	5,100	50,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	2,970	6.5	68	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane		7.4	58	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		280	3,900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	26,000	4,300	50,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	26,000	1,400	3,400	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Hexanone				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2-Isopropyltoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Methyl-2-pentanone		13,000	50,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Acetone		50,000	50,000	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50
Acrylonitrile	20			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	710	130	310	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Table 3
Groundwater Monitoring Results
Former KSDG Facility, Danbury, CT
September 2 and 3, 2009

	CT RSR Criteria			Wells North of Casper Street												Wells South of Casper Street									
				Bkgrnd	AOC 2, R.C.	AOC 30, R.C.		AOC 30, MannKind Excavation				downgrad	Site bkgrnd wells		R.C.	Site downgrad wells		Site/AOC 11 bkground wells		AOC 11	Plant 2 North	AOC 19	AOC 21	R.C.	
ANALYTE	SWPC	RGWVC	IGWVC	MW-43	MW-03R	MW-47S	MW-47D	MW-48	MW-49	MW-50D	MW-50S	MW-51	MW-52S	MW-52D	MW-53	MW-10R	MW-10D	MW-26R	MW-26D	MW-11R	MW-28R	MW-32R	MW-35	MW-54	MW-54D
Bromochloromethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane		2.3	73	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	10,800	75	2,300	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon tetrachloride	132	5.3	14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.1 H	< 1.0
Chlorobenzene	420,000	1,800	23,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane		12,000	29,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	14,100	26	62	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane		390	5,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene		830	11,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	13	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.2	< 1.0	1.1	< 1.0	< 1.0	16	1.3	1.3
cis-1,3-Dichloropropene	34,000	11	360	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromochloromethane	1,020			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromoethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane		93	1,200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	580,000	2,700	36,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene				< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40
Isopropylbenzene		2,800	6,800	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m&p-Xylene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl ethyl ketone		50,000	50,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methyl t-butyl ether (MTBE)		21,000	50,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	48,000	160	2,200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene				< 1.0	< 1.0	1.1 J	< 1.0	< 1.0 J	< 1.0	< 1.0	< 1.0 J	< 1.0 J	< 1.0	< 1.0 J	< 1.0	< 1.0	< 1.0 J	< 1.0	< 1.0 J	< 1.0	< 1.0	< 1.0	< 1.0 J	< 1.0 J	< 1.0 J
n-Butylbenzene		1,500	21,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene		1,500	20,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.9	< 1.0	< 1.0	< 1.0
Styrene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	88	340	810	140	27	24	100	13	5.4	86	89	66	4.8	58	18	130	6.6	29	< 1.0	4.2	< 1.0	< 1.0	310	8.6	7.8
Tetrahydrofuran (THF)				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	4,000,000	7,100	41,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes		8,700	48,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene		1,000	13,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene				< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
trans-1,4-dichloro-2-butene				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	2,340	27	67	9.0	< 1.0	1.0	2.4	< 1.0	1.9	2.0	2.0	1.2	< 1.0	< 1.0	< 1.0	< 1.0	1.0	3.4	< 1.0	1.9	< 1.0	< 1.0	36	1.6	1.7
Trichlorofluoromethane		1,300	4,200	17	2.3	1.7	13	< 1.0	< 1.0	19	12	12	< 1.0	24	2.6	18	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorotrifluoroethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	15,750	1.6	52	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

NA - Not analyzed
VOC - Volatile organic compounds
PAH - Polynuclear aromatic hydrocarbons
R.C. - River channel
RGWVC - Residential groundwater volatilization criteria (Proposed Revisions, CTDEP March 2003)
IGWVC - Industrial/commercial groundwater volatilization criteria (Proposed Revisions, CTDEP March 2003)
SWPC - Surface water protection criteria (CT RSRs, 1996), applies only to groundwater along the line of discharge to a receiveing surface water body.

94 - Shaded cells exceed the numeric SWPC
Bold values exceed RGWVC
J - Estimted concentration
D - Indicates laboratory blank contamination
H - Potential high bias based on lab QA/QC

Table 4
Groundwater Monitoring Results
Former KSDG Facility, Danbury, CT
December 8 and 9, 2009

				Wells North of Casper Street												Wells South of Casper Street									
	CT RSR Criteria			Bkgrnd	AOC 2, R.C.	AOC 30, R.C.		AOC 30, MannKind Excavation				downgrad	Site background wells		R.C.	Site downgradient wells		Site/AOC 11 bkground wells		AOC 11	Plant 2 North	AOC 19		AOC 21	R.C.
ANALYTE	SWPC	RGWVC	IGWVC	MW-43	MW-03R	MW-47S	MW-47D	MW-48	MW-49	MW-50D	MW-50S	MW-51	MW-52S	MW-52D	MW-53	MW-10R	MW-10D	MW-26R	MW-26D	MW-11R	MW-28R	MW-32D	MW-32R	MW-35	MW-54
Metals (mg/l)																						dup			
Arsenic	0.004			< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	NA	NA	NA	NA	< 0.004
Beryllium	0.004			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.001	< 0.001	< 0.001	NA	NA	NA	NA	< 0.001
Chromium	1.2/0.11			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.011	NA	NA	NA	NA
Lead	0.013			< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.002	< 0.002	0.003	0.003	< 0.002	0.003	NA	NA	NA	NA	< 0.002
Mercury	0.0004			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	NA	NA	NA	< 0.0002
PAHs (µg/l)																									
2-Methylnaphthalene				< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	< 10	NA	< 10
Acenaphthene				< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	< 10	NA	< 10
Acenaphthylene	0.3			< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	NA	< 0.3
Anthracene	1,100,000			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	< 10	NA	< 10
Benz(a)anthracene	0.3			< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	NA	< 0.06	< 0.06	NA	< 0.06
Benzo(a)pyrene	0.3			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NA	< 0.2	< 0.2	NA	< 0.2
Benzo(b)fluoranthene	0.3			< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	NA	< 0.08	< 0.08	NA	< 0.08
Benzo(ghi)perylene				< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	NA	< 4	< 4	NA	< 4
Benzo(k)fluoranthene	0.3			< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	NA	< 0.3
Chrysene				< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	< 2	< 2	NA	< 2
Dibenz(a,h)anthracene				< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NA	< 0.2	< 0.2	NA	< 0.2
Fluoranthene	3,700			< 10 J	< 10 J	< 10 J	< 10 J	< 10 J	< 10 J	< 10 J	< 10 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	< 10	NA	< 10
Fluorene	140,000			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	< 10	NA	< 10
Indeno(1,2,3-cd)pyrene				< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	NA	< 0.2	< 0.2	NA	< 0.2
Naphthalene				< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 1.0	< 10	< 10	< 1.0	< 10
Phenanthrene	0.077			< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	NA	0.1	< 0.07	NA	< 0.07
Pyrene	110,000			< 10 J	< 10 J	< 10 J	< 10 J	< 10 J	< 10 J	< 10 J	< 10 J	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	< 10	NA	< 10
VOCs (µg/l)																									
1,1,1,2-Tetrachloroethane		2	64	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	62,000	6,500	16,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.4	< 1.0	< 1.0	< 1.0	< 1.0	1.4	< 1.0	1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	27
1,1,2,2-Tetrachloroethane	110	1.8	54	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-Trichloroethane	1,260	220	2,900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane		3,000	41,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	96	190	920	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	20
1,1-Dichloropropene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene				< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H
1,2,3-Trichloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene				< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H
1,2,4-Trimethylbenzene		360	4,800	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	170,000	5,100	50,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	2,970	6.5	68	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane		7.4	58	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		280	3,900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	26,000	4,300	50,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	26,000	1,400	3,400	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Hexanone				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2-Isopropyltoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Methyl-2-pentanone		13,000	50,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Acetone		50,000	50,000	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25
Acrylonitrile	20			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	710	130	310	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Table 4
Groundwater Monitoring Results
Former KSDG Facility, Danbury, CT
December 8 and 9, 2009

	CT RSR Criteria			Wells North of Casper Street												Wells South of Casper Street									
				Bkgrnd	AOC 2, R.C.	AOC 30, R.C.		AOC 30, MannKind Excavation				downgrad	Site background wells		R.C.	Site downgradient wells		Site/AOC 11 bkground wells		AOC 11	Plant 2 North	AOC 19		AOC 21	R.C.
ANALYTE	SWPC	RGWVC	IGWVC	MW-43	MW-03R	MW-47S	MW-47D	MW-48	MW-49	MW-50D	MW-50S	MW-51	MW-52S	MW-52D	MW-53	MW-10R	MW-10D	MW-26R	MW-26D	MW-11R	MW-28R	MW-32D	MW-32R	MW-35	MW-54
Bromochloromethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane		2.3	73	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	10,800	75	2,300	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon tetrachloride	132	5.3	14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	420,000	1,800	23,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane		12,000	29,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	14,100	26	62	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane		390	5,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene		830	11,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	9.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.5	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	15	< 1.0
cis-1,3-Dichloropropene	34,000	11	360	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromochloromethane	1,020			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromoethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane		93	1,200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	580,000	2,700	36,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene				< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40
Isopropylbenzene		2,800	6,800	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m&p-Xylene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl ethyl ketone		50,000	50,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methyl t-butyl ether (MTBE)		21,000	50,000	< 1.0 J	< 1.0 J	< 1.0 J	< 1.0 J	< 1.0 J	< 1.0 J	< 1.0 J	< 1.0 J	< 1.0	< 1.0 J	< 1.0 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	48,000	160	2,200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene				< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H	< 1.0 H
n-Butylbenzene		1,500	21,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene		1,500	20,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.6	1.6	< 1.0	< 1.0
Styrene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	88	340	810	56	23	3.7	72	10	2.6	68	75	65	16	56	24	1.2	4.0	21	< 1.0	1.1	< 1.0	< 1.0	< 1.0	320	5.1
Tetrahydrofuran (THF)				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	4,000,000	7,100	41,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes		8,700	48,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene		1,000	13,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene				< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
trans-1,4-dichloro-2-butene				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	2,340	27	67	2.6	< 1.0	< 1.0	2.9	< 1.0	1.2	2.2	2.6	1.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	35	1.4
Trichlorofluoromethane		1,300	4,200	7.0	1.0	< 1.0	7.6	< 1.0	< 1.0	10	8.0	6.6	1.8	15	2.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorotrifluoroethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	15,750	1.6	52	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

NA - Not analyzed
VOC - Volatile organic compounds
PAH - Polynuclear aromatic hydrocarbons
R.C. - River channel
RGWVC - Residential groundwater volatilization criteria (Proposed Revisions, CTDEP March 2003)
IGWVC - Industrial/commercial groundwater volatilization criteria (Proposed Revisions, CTDEP March 2003)
SWPC - Surface water protection criteria (CT RSRs, 1996), applies only to groundwater along the line of discharge to a receiveing surface water body.

94 Shaded cells exceed the numeric SWPC
Bold values exceed RGWVC
J - Estimted concentration
H - Potential high bias based on lab QA/QC

Table 5
Groundwater Monitoring Results
Former KSDG Facility, Danbury, CT
March 9 and 10, 2010

				Wells North of Casper Street												Wells South of Casper Street									
	CT RSR Criteria			Bkgrnd	AOC 2, R.C.	AOC 30, R.C.		AOC 30, MannKind Excavation				downgrad	Site bkgrnd wells		R.C.	Site downgrad wells		Site/AOC 11 bkground wells		AOC 11	Plant 2 North	AOC 19		AOC 21	R.C.
ANALYTE	SWPC	RGWVC	IGWVC	MW-43	MW-03R	MW-47S	MW-47D	MW-48	MW-49	MW-50D	MW-50S	MW-51	MW-52S	MW-52D	MW-53	MW-10R	MW-10D	MW-26R	MW-26D	MW-11R	MW-28R	MW-32R	MW-32D	MW-35	MW-54
Metals (mg/l)																									
Arsenic	0.004			< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004					< 0.004
Beryllium	0.004																	< 0.001	< 0.001	< 0.001					< 0.001
Chromium	1.2/0.11																				< 0.001				
Lead	0.013			< 0.002	< 0.002	< 0.002	< 0.002	0.003	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002					< 0.002
Mercury	0.0004			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002				< 0.0002
PAHs (µg/l)																									
2-Methylnaphthalene				< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10		< 10	< 10		< 5
Acenaphthene				< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10		< 10	< 10		< 5
Acenaphthylene	0.30			< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3		< 0.3	< 0.3		< 0.3
Anthracene	1,100,000			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10		< 10	< 10		< 5
Benz(a)anthracene	0.30			< 0.06	< 0.06	0.09	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06		< 0.06	< 0.06		< 0.06
Benzo(a)pyrene	0.30			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2		< 0.2	< 0.2		< 0.2
Benzo(b)fluoranthene	0.30			< 0.08	< 0.08	0.11	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08		< 0.08	< 0.08		< 0.08
Benzo(ghi)perylene				< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4	< 4		< 4	< 4		< 4
Benzo(k)fluoranthene	0.30			< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3		< 0.3	< 0.3		< 0.3
Chrysene				< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2		< 2	< 2		< 2
Dibenz(a,h)anthracene				< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2		< 0.2	< 0.2		< 0.2
Fluoranthene	3,700			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10		< 10	< 10		< 5
Fluorene	140,000			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10		< 10	< 10		< 5
Indeno(1,2,3-cd)pyrene				< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2		< 0.2	< 0.2		< 0.2
Naphthalene				< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10		< 10	< 10		< 5
Phenanthrene	0.077			< 0.07	< 0.07	0.11	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07	< 0.07		< 0.07	< 0.07		< 0.07
Pyrene	110,000			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10	< 5	< 10	< 10	< 10	< 10		< 10	< 10		< 5
VOCs (µg/l)																									
1,1,1,2-Tetrachloroethane		2	64	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	62,000	6,500	16,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	7.1	< 1.0	< 1.0	< 1.0	< 1.0	1.5	< 1.0	3.9	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	61
1,1,2,2-Tetrachloroethane	110	1.8	54	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-Trichloroethane	1,260	220	2,900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane		3,000	41,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.2
1,1-Dichloroethene	96	190	920	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0	2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	45
1,1-Dichloropropene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene		360	4,800	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	170,000	5,100	50,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	2,970	6.5	68	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane		7.4	58	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		280	3,900	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	26,000	4,300	50,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	26,000	1,400	3,400	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Hexanone				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2-Isopropyltoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Methyl-2-pentanone		13,000	50,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Acetone		50,000	50,000	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 25	< 25
Acrylonitrile	20			< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	710	130	310	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Table 5
Groundwater Monitoring Results
Former KSDG Facility, Danbury, CT
March 9 and 10, 2010

	CT RSR Criteria			Wells North of Casper Street												Wells South of Casper Street									
				Bkgrnd	AOC 2, R.C.	AOC 30, R.C.		AOC 30, MannKind Excavation				downgrnd	Site bkgrnd wells		R.C.	Site downgrnd wells		Site/AOC 11 bkground wells		AOC 11	Plant 2 North	AOC 19		AOC 21	R.C.
ANALYTE	SWPC	RGWVC	IGWVC	MW-43	MW-03R	MW-47S	MW-47D	MW-48	MW-49	MW-50D	MW-50S	MW-51	MW-52S	MW-52D	MW-53	MW-10R	MW-10D	MW-26R	MW-26D	MW-11R	MW-28R	MW-32R	MW-32D	MW-35	MW-54
Bromochloromethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane		2.3	73	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bromoform	10,800	75	2,300	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Disulfide				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Carbon tetrachloride	132	5.3	14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	420,000	1,800	23,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane		12,000	29,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	14,100	26	62	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.8
Chloromethane		390	5,500	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene		830	11,000	< 1.0	3.9	< 1.0	< 1.0	< 1.0	12	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	11	< 1.0
cis-1,3-Dichloropropene	34,000	11	360	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromochloromethane	1,020			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibromoethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane		93	1,200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	580,000	2,700	36,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene				< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.80	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40	< 0.40
Isopropylbenzene		2,800	6,800	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m&p-Xylene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl ethyl ketone		50,000	50,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Methyl t-butyl ether (MTBE)		21,000	50,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride	48,000	160	2,200	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Butylbenzene		*1,500*	*21,000*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 2.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*	*< 1.0*
n-Propylbenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene		1,500	20,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	1.1	1.4	< 1.0	< 1.0
Styrene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	88	340	810	81	47	33	70	5.4	5.8	62	59	52	20	19	13	1.3	4.5	23	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	290	4.6
Tetrahydrofuran (THF)				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	4,000,000	7,100	41,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Xylenes		8,700	48,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene		1,000	13,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene				< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
trans-1,4-dichloro-2-butene				< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	2,340	27	67	6.4	3.0	2.2	3.6	< 1.0	2.7	2.5	3.3	1.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.6	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	29	2.1
Trichlorofluoromethane		1,300	4,200	8.5	2.4	1.9	8.1	< 1.0	< 1.0	9.4	6.9	5.7	17	5.7	1.4	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorotrifluoroethane				< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride	15,750	1.6	52	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

NA - Not analyzed
VOC - Volatile organic compounds
PAH - Polynuclear aromatic hydrocarbons
R.C. - River channel
RGWVC - Residential groundwater volatilization criteria (Proposed Revisions, CTDEP March 2003)
IGWVC - Industrial/commercial groundwater volatilization criteria (Proposed Revisions, CTDEP March 2003)
SWPC - Surface water protection criteria (CT RSRs, 1996), applies only to groundwater along the line of discharge to a receiving surface water body.

0.11 Shaded cells exceed the numeric SWPC
Bold values exceed RGWVC
J - Estimted concentration
B - Indicates laboratory blank contamination
H - Potential high bias based on lab QA/QC

MALCOLM PIRNIE

MEMORANDUM

Date: March 24, 2010

From: Lance Kazzi
Project Manager

Re: Data Quality Assessment / Data Usability Evaluation
Post-Remedial Groundwater Monitoring
Former Wyeth (KSD&G) Site – Danbury, CT

Phoenix Environmental Laboratories, Inc. (Phoenix) prepared the following laboratory data reports for the post-remedial groundwater monitoring program at the above-referenced site.

- AR83852 June 25, 2009
- AS20752 September 15, 2009
- AS58251 December 23, 2009
- AS82748 March 22, 2010

The laboratory analyses were performed in accordance with CTDEP's Reasonable Confidence Protocols (RCPs). Malcolm Pirnie Inc. (Pirnie) reviewed the analytical laboratory data reports and the laboratory quality assurance/quality control (QA/QC) data, the laboratory QC reports and the associated case narratives for conformance with method requirements and the project data quality objectives (DQOs).

The following factors have been considered in reviewing the above reports:

- Holding times.
- Analytical methods.
- Reporting limits.
- Laboratory instrument calibration.
- Method blank contamination.
- Laboratory control sample (LCS) recoveries.
- Site-Specific Matrix spikes (MS) and MS duplicate (MSD) recoveries.
- Surrogate recoveries.
- Continuing calibration (CC) results.
- Laboratory duplicate samples.

The relevant QC data/values are provided in the laboratory QC report, and the RCP case narrative highlights and describes any QC values that are outside of control limits (e.g., LCS, MS, and/or surrogate recoveries; continuing calibration results) and any other potential issues regarding the validity of the data.

The following summary discusses these outlying QC values and Pirnie's evaluations regarding the usability of such data. The tabulated analytical data have been flagged as appropriate based on this DQA/DUE. Unless otherwise discussed below, the data are considered valid and usable as reported.

Arsenic and mercury were the primary substances of concern (SOCs) driving the soil remediation at most areas of concern (AOCs). Soil remediation for PAHs and/or VOCs was also conducted at select AOCs.

AR83852 (June 2009)
This lab report presents the results from the initial (June 2009) post-remedial groundwater monitoring event. Groundwater samples were analyzed for select metals, polynuclear aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs) by typical USEPA methods as outlined in the laboratory data report.

As noted in the RCP QA/QC Certification Form, all QA/QC performance criteria specified in the RCP documents was achieved, and the data meet the requirements for "Reasonable Confidence". Arsenic and mercury were not detected in any samples, and the metals analyses did not indicate any QC variances as noted on pages 1 and 2 of the RCP Certification Report. Minor variances were noted for the PAH and VOC analyses, as described below.

The PAH surrogate recoveries experienced low-level laboratory blank contamination, which indicates potential high bias in the associated sample data. However, given the near complete absence of PAHs (only 1 detection of phenanthrene in well MW-32R), the blank contamination is not considered significant and does not affect the project DQOs or data usability. The phenanthrene detection was analyzed in a batch that did not experience blank contamination, so that detection appears to be valid. Therefore, no qualifications are necessary, and these data are usable as reported.

The VOCs were analyzed in multiple batches, some of which experienced minor QC variances that overall do not affect the project DQOs or data usability, although limited data qualification is warranted as described below. The site-specific MS/MSD data are within control limits, with the exception of dichlorodifluoromethane, which is not an SOC but exhibited MS/MSD recoveries of 126% and 56%, respectively. The low MSD recovery indicates potential low bias due to a matrix effect; therefore, the associated sample data for this compound have been J-qualified. The other VOCs variances consisted of high percent recoveries above control limits for several VOCs in LCS/LCSD from the other bathes. These typically included common laboratory contaminants or "difficult" compounds such as acetone, chloromethane, dichlorodifluoromethane (Freon

12), and trichlorofluoromethane (Freon 11) – a background contaminant for the site. Most of these compounds were not detected, so the high LCS/LCSD recoveries do not affect the DQOs or the data usability. For trichlorofluoromethane, which was detected, the associated sample data have been H-qualified indicating potential high bias. Given the overall low VOC concentrations well below the SWPC, these data are usable for compliance demonstration as reported or as qualified.

The field duplicate values are in general agreement, and no VOCs were detected in the trip blank.

<u>AS20752 (September 2009)</u>
This lab report presents the results from the second (September 2009) post-remedial groundwater monitoring event. Groundwater samples were analyzed for the same SOCs as in the previous June 2009 monitoring event.

As noted in the RCP QA/QC Certification Form, all QA/QC performance criteria specified in the RCP documents was achieved, and the data meet the requirements for "Reasonable Confidence". Arsenic and mercury were not detected in any samples, and the metals analyses did not indicate any QC variances as noted on page 1 of the RCP Certification Report. Minor variances were again noted for the PAH and VOC analyses, as described below.

Similar to the previous event, the PAH surrogate recoveries for two separate sample batches experienced low-level laboratory blank contamination, which indicates potential high bias in the associated sample data. Therefore, detected values for the associated samples have been B-qualified, indicating potential high bias due to laboratory blank contamination. Select values exceed the respective numeric SWPC; however, calculated Alternative SWPC values based on potential plume discharges to the adjacent Still River are roughly 4 to 6 orders of magnitude above the detected concentrations. Thus, the data are considered usable as reported or as qualified.

The VOCs were analyzed in a few different batches, some of which experienced minor QC variances that overall do not affect the project DQOs or data usability, although limited data qualification is warranted as described below. As noted on page 3 of 9 of the QA/QC report, the following VOCs in QA/QC batch 135367 experienced low MS or MSD recoveries: 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene and naphthalene. The associated sample data have been J-qualified as estimated. Aside from a trace of naphthalene in one sample, these VOCs were not detected. In the same batch, high MS or MSD recoveries were recorded for carbon tetrachloride and dichlorodifluoromethane. The one trace detection of carbon tetrachloride (4.1 µg/l) therefore has been H-qualified to indicate potential high bias. Dichlorodifluoromethane was not detected in any samples, so no qualifications are necessary.

The field duplicate values are in general agreement, and no VOCs were detected in the trip blank.

AS58251 (December 2009)

This lab report presents the results from the third (December 2009) post-remedial groundwater monitoring event. Groundwater samples were analyzed for the same SOCs as in the previous monitoring events.

As noted in the RCP QA/QC Certification Form, all QA/QC performance criteria specified in the RCP documents was achieved, and the data meet the requirements for "Reasonable Confidence". Arsenic and mercury were not detected in any samples, and the metals analyses did not indicate any QC variances as noted on pages 1 and 2 of the RCP Certification Report. Minor variances were noted for the PAH and VOC analyses, as described below.

Two PAHs (pyrene and fluoranthene) experienced low recovery in the LCS or LCSD in 1 of the 2 batches (batch 143734). Therefore, the associated sample data have been J-qualified as estimates. These PAHs have not been detected in any post-remedial well samples collected to date. They also have very high regulatory criteria compared to most other PAHs. Therefore, these deviations do not affect the DQOs, and the data are considered usable for the intended purpose. No other QC variances were noted in the PAH analyses.

The VOCs were analyzed in multiple batches, some of which experienced minor QC variances, as described below. In batches 143695 and 143703, MTBE was recovered below control limits in the LCS and LCSD. The associated sample data have been J-qualified as estimates. Other non-target compounds, many of which are classified as poorly performing by CTDEP were recovered slightly low in select LCS or LCSD samples. These include 2,2-chloropropane, acrylonitrile, bromoform, dichlorodifluoromethane, and trans-1,4-dichloro-2-butene. None of these VOCs are SOCs for the site. Therefore, no further data qualifications are necessary and the data are considered usable as reported. In batch 143816, the site-specific MS/MSD recoveries were above control limits for 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, and naphthalene. The associated sample data has been H-qualified to indicate potential high bias in the reported values. As these are not primary SOCs for the site, these minor deviations do not affect the project DQOs, and the data are considered usable as reported or as qualified.

The field duplicate values are in general agreement, with the exception of phenanthrene, which was detected in 1 of the 2 duplicates. No VOCs were detected in the trip blank.

AS82748 (March 2010)

This lab report presents the results from the fourth (March 2010) post-remedial groundwater monitoring event. Groundwater samples were analyzed for the same SOCs as in the previous monitoring events.

As noted in the RCP QA/QC Certification Form, all QA/QC performance criteria specified in the RCP documents was achieved, and the data meet the requirements for "Reasonable Confidence". Arsenic and mercury were not detected in any samples, and the metals analyses did not indicate any QC variances as noted on pages 1 and 2 of the RCP Certification Report. Minor variances were again noted for the PAH and VOC analyses, as described below.

Benzo(a)pyrene experienced a slightly high RPD of 25.6% in batch 148953. The associated values have been J-qualified as estimates. This compound was not detected in any well samples during this event. The LCS and LCSD values were within control limits; therefore, the reported concentrations are considered valid and usable as reported or as qualified. No other QC variances were noted in the PAH analyses.

The VOCs were analyzed in multiple batches, some of which experienced minor QC variances that overall do not affect the project DQOs or data usability, although limited data qualification is warranted as described below. Select VOCs including 1,1-DCE, carbon tetrachloride, hexachlorobutadiene, and trans-1,4-dichloro-2-butene were recovered below control limits in select LCS or LCSD. The associated sample data have been J-qualified as estimates. Other non-target VOCs identified as "poorly performing compounds" by CTDEP experienced similar low recovery in select batches. None of these VOCs are primary SOCs for the site, although 1,1-DCE is an SOC for off-site plumes affecting the site. Therefore, these minor deviations do not affect the project DQOs, and the data are usable for the intended purpose.

The field duplicate values are in close agreement, and no VOCs were detected in the trip blank.