



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF AIR AND WASTE MANAGEMENT
391 LUKENS DRIVE
NEW CASTLE, DELAWARE 19720-2774

WASTE MANAGEMENT SECTION
SITE INVESTIGATION &
RESTORATION BRANCH

TELEPHONE: (302) 395-2600
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May 8, 2007

Honorable Timothy P. Sheldon
Councilman - Ninth District
New Castle County Government
800 N. French Street, 8th Floor
Wilmington, DE 19801

Re: Response to your letter on March 22nd regarding the Remediation Plan for Hercules
Golf Course (aka Delaware National) Site

Dear Councilman ^{TIM}~~Sheldon~~:

I am writing in response to your March 22nd letter regarding the Hercules Golf Course/Delaware National Technical Assistance Site ("Hercules"). As outlined in my January 19, 2007 letter to New Castle County (NCC), DNREC has limited legal jurisdiction over this Site; however, DNREC is providing technical assistance to NCC under a Memorandum of Understanding (MOU) to ensure that any remediation is protective of human health and the environment. In doing so, DNREC will be following the substantive requirements of the Hazardous Substance Cleanup Act (HSCA) and we are confident that the MOU provides an effective mechanism for protection of human health and the environment. As part of the MOU, the Department concurred on the technical merits of the Proposed Remedial Action plan (PRA) and facilitated the public comment period. The specifics of the remediation are not found in the PRA but they will be reviewed by the Department once the remedial option is selected and a remedial action work plan prepared. Your letter outlined eight comments you have regarding PRA. Some of your comments deal specifically with items that are part of the work plan, which is not a part of the PRA. The Department does understand your concerns on this Site and will answer those comments that are part of the PRA at this time. Your other concerns will be addressed in future work plans for the Site.

Your first comment deals with dioxins at the Hercules site. The Department and Toll Brothers, Inc. has looked into the merit of this concern and concluded that sampling for dioxin compounds are not technically warranted at this site. This conclusion was reached only after extensive review of published documents in addition to direct communication with other federal and state cleanup programs. The attached memorandum, dated May 1, 2007, summarizes this conclusion.

Delaware's good nature depends on you!

Honorable Timothy P. Sheldon
May 8, 2007

Your second comment is in regards to the onsite well(s). To the Departments' knowledge there are no wells on this Site that currently draw water. During the Remedial Investigation (RI), Brightfields, Toll Brothers' environmental consultant, tested the groundwater at Hercules using temporary wells. This investigation found no compounds in excess of applicable drinking water standards. There is a potable water system on the nearby Hercules Research Facility. As with other potable water systems, this system is tested annually and the most recent results indicate low levels of a solvent used in industry and dry cleaning application (tetrachloroethene or PCE); however, the Research Facility treatment system removes this compound prior to potable use. In addition, PCE can not be directly related to the former golf course site. The 2006 analytical results for this water system are attached to this letter. Additional information regarding this nearby water system can be obtained from the Delaware Department of Health and Human Services (DHSS) - Office of Drinking Water at 741-8630.

Comment three deals specifically with Green #8 at Hercules. Brightfields sampled the edge on Green #8. Due to the detections at this area, the impacted soil in Green#8 is proposed to be completely excavated. The second part of this question deals with the nearby forested area. No information has been made available to the Department that any "dumping" has occurred in this area. If you, or any of your constituents, can provide any information that would indicate otherwise, the Department would greatly appreciate obtaining that information as soon as possible. If citizens are worried about self disclosure, reports can be made anonymously 24/7 by calling (800) 662-8802. DNREC, at this time, does not have any substantial reasoning to recommend additional sampling within the forested area.

In comments four and five, your concerns are dealing with impacted soil removal and transportation. Although these comments are not specially related to the PRA, the Department will consider these comments when DNREC reviews the remedial action work plan. Again, all remedial activities will not only meet the technical requirements of HSCA but they will also conform to all other applicable federal, state and local regulations.

Your sixth comment addresses parcel number five, which is currently a part of the Hercules Research Facility and is being addressed under a separate "corrective action" under hazardous waste (i.e. RCRA, not hazardous substances) regulations (7 Del. C., chapter 63 not chapter 91). After extensive analysis and staff cooperation, we are confident the contamination on the former golf course is not the result of activities at the Research Center, which is subject to the RCRA Corrective Action. If you have any questions dealing with the specifics of this parcel, please contact Bryan Ashby at our Solid and Hazardous Management Branch at 739-9403.

Your seventh comment deals with DNREC oversight of this project. As stated previously, Hercules will follow the same technical and substantive requirements of the HSCA process. This includes DNREC oversight work at the Hercules golf course. As with a HSCA regulated site, DNREC will provide oversight at Hercules golf course as the site Project Officer sees fit.

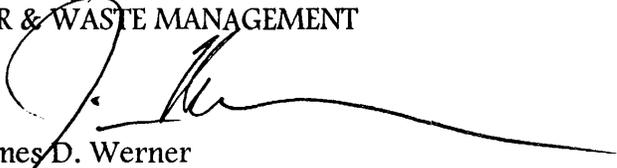
Your last concern deals with traffic issues during construction activities at Hercules golf course. The Department understands these concerns; however, Delaware Department of Transportation (DelDOT) has jurisdiction over this issue. In a response to your comment DelDOT has stated the following "*We restrict trucks on some roadways if there is a load limit on a bridge. We restrict trucks to local deliveries only on some residential roadways. It is difficult to restrict construction vehicles from using roadways of a certain functional*

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classifications and above. Hercules Road is a major connector and therefore should allow trucks to perform normal business activity and make deliveries to construction projects.” For further clarifications or questions regarding traffic concerns, please direct them to DelDOT public relations at (302) 760-2080.

Thank you for expressing your concerns over this process and if you have any other questions or concerns with the proposed remedial action at Hercules golf course, please feel free to contact the Site Investigation and Restoration Branch at (302)395-2600.

Sincerely,
AIR & WASTE MANAGEMENT



James D. Werner
Director

TTR:vdc
TTR07010.doc
DE 1323 II I 1

Enclosures

pc: John A. Hughes, Secretary
Kathleen Stiller-Banning, SIRB – Program Manager II
Timothy T. Ratsep, SIRB – Program Manager I
Stephen Johnson, SIRB – Project Officer
Bryan Ashby, SHWMB – Program Manager I
Anita Beckel, DHSS-ODW
Bob King, DelDOT

Memorandum

To: James D. Werner, Director of Air & Waste Management

Through Kathy Stiller Banning, Program Manager II
Tim Ratsep, Program Manger I

RE: Recommendation concerning sampling for dioxin¹ at Hercules Golf Course

From: Stephen F. Johnson, PE

Date: May 1, 2007

The purpose of this memo is to respond to questions and comments presented to the Site Investigation and Restoration Branch (SIRB) at the public meeting held on March 21, 2007. The meeting concerned the cleanup and development of the Hercules Golf Course in New Castle County. A copy of the comment regarding dioxin sampling is attached to this memo.

After an extensive review of the existing literature and information, the SIRB recommends against sampling for dioxin. The SIRB's reasoning is summarized in the *Findings* and *Conclusions* below.

The SIRB recognizes that decisions of this nature are not made on a purely technical basis and that there may be other reasons to proceed with a sampling program. Dioxin is frequently "featured" in the news media and has extreme negative associations for most people. Three examples are the recent dioxin poisoning of Viktor Yushchenko, the industrial accident at Seveso, Italy and, notoriously, dioxin in Agent Orange used by the US Air Force in Vietnam.

Dioxin is also in the news because it is controversial in the scientific world. There is a wide range of expert opinion on its toxicity and carcinogenicity. Judging by information available on the world wide web, new dioxin studies are frequently greeted with charges of "junk science" by those who have formed differing conclusions. The dioxin debate combined with the strong feeling against the re-development of the Hercules site makes for a contentious issue. Therefore, the SIRB recognizes that there unusual public relations aspects to both dioxin and this specific project that may support sampling.

A caution: if the decision is made to sample for dioxin, then it should not establish a precedent to perform similar sampling at other sites. Sampling for dioxin should always be a site by site decision. If sampling does occur, the sampling plan should consider that dioxin is ubiquitous in the environment. Care should be taken to establish a background data set to which the site information can be usefully compared.

¹ Dioxin is the name of a family of over 200 related compounds which vary significantly in toxicity. The most toxic form is 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Concentrations of complex mixtures of dioxins are usually stated as Total Toxic Equivalentcy (TEQ) to TCDD.

Findings

The SIRB pursued two lines of inquiry to address the comments concerning dioxin:

- First the SIRB examined available published documents on the chemical dioxin, its environmental persistence, presence in herbicide and presence in soil as a result of herbicide application. Among other sources, the SIRB relied on a summary document compiled by its contractor, the environmental consulting company, CDM. The CDM report is attached as a useful and readable summary. It is also thoroughly referenced.
- Second, the SIRB inquired through an extensive network of federal and state site cleanup programs as to the regulatory practice in other jurisdictions pertaining to testing for dioxin at golf courses and other herbicide application sites.

Dioxin contamination in commercial weed killer

Various authorities confirm that dioxin compounds may be present in 2,4,-D. Its presence in 2,4,5-T has been repeatedly confirmed and contributed to the ban of 2,4,5-T. The process used to produce 2,4,5-T was apparently more likely to produce dioxin as a by-product. Since 1990, the presence of dioxin in 2,4-D has been limited to 1 ppm by federal regulation.

Weed killer use at Hercules Golf Course

2,4-D application is noted in Hercules Golf Course pesticide application logs that go back to 1970. The logs do not show any use of 2,4,5-T. However, 2,4,5-T was banned for use on turf grass in 1970, so logs do not cover the period when it could have been legally used. The SIRB found one turf management magazine recommending use of 2,4,5-T to control clover (Daniel). If 2,4,5-T were ever applied to the golf course, it was prior to 1970.

Dioxin persistence

Dioxin is frequently described as a persistent compound. However, there is a difference between dioxin accumulation in the food chain and dioxin in the environment. When a herbicide is applied to green plants, most of the dioxin that may be present in it sticks to plant matter where it is photo-degraded and never reaches the soil (Nathan). Soil tests taken over a ten year period in an Agent Orange test area showed a 99% reduction in dioxin concentrations in soil (Young).

The SIRB reviewed a report on dioxin sampling along a pipeline in Alaska that received documented treatment with 2,4,5-T containing herbicides between 1955 and 1970 (USACE). Sampling occurred in 2003. None of the 23 sample results exceeded the State of Alaska's risk based cleanup of 39 ng/kg. Four were between 3.9 ng/kg and 39 ng/kg. (The SIRB's guidance gives a screening concentration of 4 ng/kg [parts per trillion]).

Mr. James Werner
May 1, 2007

Practices in other states

The SIRB has not found a single instance in which a state or federal cleanup program required testing for dioxin at a golf course site due to herbicide application. Several experts and experienced program managers explicitly stated that they had never heard of this being done. This is significant given that inorganic contaminants in golf course soil are receiving heightened attention in the site cleanup field. However it should also be noted that agricultural chemicals are excluded from most state cleanup programs.

The commenter referred specifically to the State of Oregon's "Guidance for Evaluating Residual Pesticides on Lands Formerly Used for Agricultural Production" as requiring dioxin testing (Oregon). In fact, the guidance recommends sampling for dioxins in cases where 2,4,5-T is known to have been applied. Known applications of 2,4-D are reviewed individually. The Oregon web page does not list any cleanup sites where dioxin contamination in soil was caused by herbicide application, either 2,4-D or 2,4,5-T.

The SIRB did find two instances of dioxin testing on golf courses at US Air Force bases, but both had suspected dioxin sources off the golf course and were not related to the usual application of herbicides.

Conclusions

In the opinion of the SIRB, the weight of evidence is that dioxin released during the application of herbicide would not persist at significant levels in soil for the 37 years since 1970. More recent applications of 2,4-D (rather than 2,4,5-T) would have had very little or no contamination by dioxin.

The remedial action proposed for the inorganic contaminants, soil removal and blending, would be reasonably expected to reduce the volume and concentrations of any dioxins that might be present on the site.

The SIRB found no regulatory precedent in other jurisdictions to require sampling for dioxin at a golf course due to herbicide application.

References

Daniel WH, 1953. *The use of 2,4,5-T for clover control in turf*. Southern California Turf Culture Volume 3, Number 3. July 1953.

Karch NJ, DK Watkins, AL Young and ME Ginevan, 2004. *Environmental fate of TCDD and Agent Orange and bioavailability to troops in Vietnam*. Organohalogen Compounds 66:3689-3694.

Oregon Department of Environmental Quality Land Quality Division. 2006. Guidance for Evaluating Residual Pesticides on Lands Formerly Used for Agricultural Production. DEQ-06-LQ011.

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May 1, 2007

Young AL and M Newton. *Long overlooked historical information on Agent Orange and TCDD following massive applications of 2,4,5-T-containing herbicides, Eglin Air Force Base, Florida.* Environ Sci Pollut Res Int 2004;11(4):209-21.
<http://www.ncbi.nlm.nih.gov>

US Army Corps of Engineers (USACE) Alaska District Materials Section Engineering Services Branch. 2004. *Chemical Data Report: Herbicide Residue Survey, Haines-Fairbanks Pipeline, Alaska.* January 2004.

SFJ:ebg
SFJ07012
DE 1323 I II

CCR Fact Sheet

HERCULES INCORPORATED

| | | | | | |
|------------------|-----------------|-------------------|------------------------------|--------------------------------|-----------------------|
| SYSTEM ID | PWS TYPE | POPULATION | PRINCIPAL CITY SERVED | PRINCIPAL COUNTY SERVED | PRIMARY SOURCE |
| DE0000017 | NTNC | 650 | WILMINGTON | NEW CASTLE | SWP |

Points Of Contact - Individuals

| TYPE | NAME | PHONE | FAX | ADDRESS | EMAIL ADDRESS |
|------|-------------------|----------|--------------|--|-----------------|
| OP | BOB DEAN | 302-995- | | 500 Hercules Road WILMINGTON, DE 19808 | |
| AC | SOL PELTZ | 302-995- | 302-995-4101 | 500 Hercules Ave WILMINGTON, DE 19808 | spetlz@herc.com |
| OP | RICHARD J. SUIDAK | 302-995- | | 500 HERCULES ROAD WILMINGTON, DE 19808 | |

Points Of Contact - Non Individuals

| TYPE | NAME | PHONE | ADDRESS |
|------|--------------------------|-------|---|
| OW | HERCULES RESEARCH CENTER | | 500 HERCULES ROAD WILMINGTON, DE 19808-1599 |

Fact Sheet - Water System Facilities (WSF) Section

| TYPE | STATE ID | FED ID | NAME | ACTIVITY DATE | OPERATING STATUS (2) | SOURCE TYPE | LOCATION |
|------|----------|--------|---------------------|---------------|----------------------|-------------|----------|
| DS | DS001 | 2554 | DISTRIBUTION SYSTEM | 1/1/2000 | P | | |
| ST | ST001 | 503 | STORAGE01 | 1/1/2000 | P | | |
| ST | ST002 | 15 | STORAGE02 | 1/1/2000 | P | | |
| TP | TP001 | 885 | TREATMENT | 1/1/2000 | P | | |
| WL | 10062 | 1088 | WELL 6 | 5/9/2002 | P | GW | |
| WL | 10063 | 1089 | WELL 7 | 5/9/2002 | P | GW | |
| WL | 10065 | 1091 | WELL 9 | 5/9/2002 | P | GW | |
| WL | 10067 | 1093 | WELL 13 | 5/9/2002 | P | GW | |
| WL | 10464 | 1099 | WELL 21 | 5/9/2002 | P | GW | |
| WL | 10465 | 1098 | WELL 20 | 5/9/2002 | P | GW | |
| WL | 10466 | 1097 | WELL 19 | 5/9/2002 | P | GW | |
| WL | 10467 | 1096 | WELL 18 | 5/9/2002 | P | GW | |
| WL | 10468 | 1095 | WELL 15 | 5/9/2002 | P | GW | |
| WL | 10469 | 1094 | WELL 14 | 5/9/2002 | P | GW | |
| WL | 10470 | 1092 | WELL 10 | 5/9/2002 | P | GW | |

HERCULES INCORPORATED

SYSTEM ID DE000017
PWS TYPE NTNC
POPULATION 650
PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Water System Facilities (WSF) Section

| TYPE | STATE ID | FED ID | NAME | ACTIVITY DATE | OPERATING STATUS (2) | SOURCE TYPE | LOCATION |
|------|----------|--------|---------|---------------|----------------------|-------------|----------|
| WL | 10471 | 1090 | WELL 8 | 5/9/2002 | P | GW | |
| WL | 45047 | 1100 | WELL 23 | 5/9/2002 | P | GW | |

NOTES:

- CH = common header; CS = cistern; CW = clear well; DS = distribution system; IG = infiltration gallery; IN = intake; OT = other; PC = pressure control; PF = pump facility; RC = roof catchment; RS = reservoir; SI = surface impoundment; SP = spring; SS = sampling station; ST = storage facility; TM = transmission main; TP = treatment plant; WH = well head; WL = well.
- E = emergency use only; I = Intermittent use; O = Other; P = permanent or regular use; S = seasonal use (only available during a given season).

Fact Sheet - Consecutive Connection Section

| TYPE | STATE ID | FED ID | NAME | ACTIVITY DATE | OPERATING STATUS (2) | SOURCE TYPE | TREATED BY SELLER | LOCATION |
|------|----------|--------|-------------------|---------------|----------------------|-------------|-------------------|----------|
| CC | CC001 | 4401 | ARTESIAN WATER CO | 1/1/2001 | P | SW | F | |

NOTES:

- CC = consecutive connection; NP = non-piped source of water.
- E = emergency use only; I = Intermittent use; O = Other; P = permanent or regular use; S = seasonal use (only available during a given season).

Fact Sheet - Summary Results

| MONITORING PRD | | COLLECTION PERIOD | | CONTAMINANT | TYPE OF SUMMARY | | NO. of SAMPLES | DATE RECEIVED | FACILITY SAMPLED (ID) |
|----------------|------------|-------------------|-----------|---------------------|-----------------|--------|----------------|---------------|-----------------------------|
| BEGIN | END | BEGIN | END | | LEVEL | LEVEL | | | |
| 1/1/2004 | 12/31/2006 | 9/14/2006 | 10/26/200 | COPPER 90TH % VALUE | 90 | 0.0741 | 10 | 11/8/2006 | DISTRIBUTION SYSTEM (DS001) |
| 1/1/2004 | 12/31/2006 | 9/14/2006 | 10/26/200 | LEAD 90TH % VALUE | 90 | 0.0054 | 10 | 11/8/2006 | DISTRIBUTION SYSTEM (DS001) |

Fact Sheet - Total Coliform Rule (TCR) Results

| MONITORING PRD | | SAMPLE ID | SAMPLE ID | SAMPLE LOCATION DESCRIPTION | INDICATOR ORGANISM | RESULT |
|----------------|-----|-----------|-----------|-----------------------------|--------------------|--------|
| BEGIN | END | | | | | |

HERCULES INCORPORATED

SYSTEM ID DE0000017
PWS TYPE NTNC
POPULATION 650
PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Total Coliform Rule (TCR) Results

| MONITORING PRD | | SAMPLE | | SAMPLE | | SAMPLE LOCATION | INDICATOR ORGANISM | RESULT |
|----------------|------------|------------|--------|-------------|----------------------|-----------------|-----------------------|--------|
| BEGIN | END | SAMPLE ID | ID | DESCRIPTION | | P/A (C) | | |
| 4/1/2007 | 6/30/2007 | 4/9/2007 | S55421 | RT SP-13 | POWER HOUSE | | COLIFORM, TOTAL (TCR) | A |
| 1/1/2007 | 3/31/2007 | 1/11/2007 | S39273 | RT SP-12 | VISITOR CENTER | | COLIFORM, TOTAL (TCR) | A |
| 10/1/2006 | 12/31/2006 | 12/13/2006 | S38995 | RT SP-12 | VISITOR CENTER | | COLIFORM, TOTAL (TCR) | A |
| 7/1/2006 | 9/30/2006 | 8/16/2006 | S20273 | RT SP4 | GUARD SHACK | | COLIFORM, TOTAL (TCR) | A |
| 4/1/2006 | 6/30/2006 | 4/4/2006 | 334943 | RT SP5 | HERCULES, INCORPORAT | | COLIFORM, TOTAL (TCR) | A |
| 1/1/2006 | 3/31/2006 | 1/10/2006 | 336403 | RT SP3 | GATE HOUSE | | COLIFORM, TOTAL (TCR) | A |

Notes: 1. "A" means the indicator organism was not found in the sample of water; "P" means the indicator organism was present in the sample.

Fact Sheet - Other Chemical Results

| RESULT (C) | | SAMPLE LOCATION | | | | | SAMPLE | |
|------------|-----------|-----------------|-----|-------------|----|--------------------------|-----------|------------------------------|
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | RT | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT |
| 3/21/2002 | 109970 | DS001 | SP4 | GUARD SHACK | RT | ALKALINITY, TOTAL (1927) | 58 MG/L | |
| | | | | | | CHLORIDE (1017) | 23.7 MG/L | |
| | | | | | | FLUORIDE (1025) | | Y 0.1 MG/L |

HERCULES INCORPORATED

SYSTEM ID DE0000017
PWS TYPE NTNC
POPULATION 650
PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Other Chemical Results

| RESULT (C) | | SAMPLE LOCATION | | | | | SAMPLE | |
|------------|-----------|-----------------|-------|--------------|----|--------------------------------------|-----------|------------------------------|
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | RT | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT |
| 3/21/2002 | 109970 | DS001 | SP4 | GUARD SHACK | RT | HARDNESS, TOTAL (AS CaCO3) (1915) | 58 MG/L | |
| | | | | | | IRON (1028) | 0.3 MG/L | |
| | | | | | | NITRATE (AS N) (1040) | 2.9 MG/L | |
| | | | | | | PH (1925) | 8.8 PH | |
| | | | | | | SODIUM (1052) | 19 MG/L | |
| | | | | | | SOLIDS, TOTAL DISSOLVED (TDS) (1930) | 174 MG/L | |
| 5/8/2002 | 109969 | TP001 | DEP00 | DEP HERCULES | RT | 1,1,1,2-TETRACHLOROETHANE (2986) | | Y |
| | | | | | | 1,1,1-TRICHLOROETHANE (2981) | | Y |
| | | | | | | 1,1,2,2-TETRACHLOROETHANE (2988) | | Y |
| | | | | | | 1,1,2-TRICHLOROETHANE (2985) | | Y |
| | | | | | | 1,1-DICHLOROETHANE (2978) | | Y |
| | | | | | | 1,1-DICHLOROETHYLENE (2977) | | Y |
| | | | | | | 1,1-DICHLOROPROPENE (2410) | | Y |
| | | | | | | 1,2,3-TRICHLOROBENZENE (2420) | | Y |
| | | | | | | 1,2,3-TRICHLOROPROPANE (2414) | | Y |
| | | | | | | 1,2,4-TRICHLOROBENZENE (2378) | | Y |
| | | | | | | 1,2,4-TRIMETHYLBENZENE (2418) | | Y |
| | | | | | | 1,2-DICHLOROETHANE (2980) | | Y |
| | | | | | | 1,2-DICHLOROPROPANE (2983) | | Y |
| | | | | | | 1,3,5-TRIMETHYLBENZENE (2424) | | Y |
| | | | | | | 1,3-DICHLOROPROPANE (2412) | | Y |
| | | | | | | 2,2-DICHLOROPROPANE (2416) | | Y |
| | | | | | | BENZENE (2990) | | Y |
| | | | | | | BROMOBENZENE (2993) | | Y |
| | | | | | | BROMOCHLOROMETHANE (2430) | | Y |
| | | | | | | BROMODICHLOROMETHANE (2943) | 0.88 UG/L | N |
| | | | | | | BROMOFORM (2942) | 3.76 UG/L | N |
| | | | | | | BROMOMETHANE (2214) | | Y |

HERCULES INCORPORATED

SYSTEM ID DE0000017 **PWS TYPE** NTNC **POPULATION** 650 **PRINCIPAL CITY SERVED** WILMINGTON **PRINCIPAL COUNTY SERVED** NEW CASTLE **PRIMARY SOURCE** SWP

Fact Sheet - Other Chemical Results

| RESULT (D) | | | | | SAMPLE LOCATION | | SAMPLE | |
|-------------------|------------------|---------------|-----------|--------------------|---------------------------------------|--------------|---------------------|------------------------|
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | LEVEL | LESS THAN DL | DETECTION LIMIT |
| 5/8/2002 | 109969 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | CARBON TETRACHLORIDE (2982) | | Y | |
| | | | | | CHLORINE RESIDUAL, FREE (1013) | 1.0 MG/L | N | |
| | | | | | CHLORODIBROMOMETHANE (2944) | 3.01 UG/L | N | |
| | | | | | CHLOROETHANE (2216) | | Y | |
| | | | | | CHLOROFORM (2941) | | Y | |
| | | | | | CHLOROMETHANE (2210) | | Y | |
| | | | | | CIS-1,2-DICHLOROETHYLENE (2380) | 1.26 UG/L | N | |
| | | | | | CIS-1,3-DICHLOROPROPENE (2228) | | Y | |
| | | | | | DIBROMOCHLOROPROPANE (DBCP) (2931) | | Y | |
| | | | | | DIBROMOMETHANE (2408) | | Y | |
| | | | | | DICHLORODIFLUOROMETHANE (2212) | | Y | |
| | | | | | DICHLOROMETHANE (2964) | | Y | |
| | | | | | ETHYLBENZENE (2992) | | Y | |
| | | | | | ETHYLENE DIBROMIDE (EDB) (2946) | | Y | |
| | | | | | HEXACHLOROBUTADIENE (2246) | | Y | |
| | | | | | ISOPROPYLBENZENE (2994) | | Y | |
| | | | | | M-DICHLOROBENZENE (2967) | | Y | |
| | | | | | METHYL TERT-BUTYL ETHER (MTBE) (2251) | | Y | |
| | | | | | MONOCHLOROBENZENE (2989) | | Y | |
| | | | | | NAPHTHALENE (2248) | | Y | |
| | | | | | N-BUTYLBENZENE (2422) | | Y | |
| | | | | | N-PROPYLBENZENE (2998) | | Y | |
| | | | | | O-CHLOROTOLUENE (2965) | | Y | |
| | | | | | O-DICHLOROBENZENE (2968) | | Y | |
| | | | | | P-CHLOROTOLUENE (2966) | | Y | |
| | | | | | P-DICHLOROBENZENE (2969) | | Y | |
| | | | | | P-ISOPROPYLTOLUENE (2030) | | Y | |

HERCULES INCORPORATED

SYSTEM ID DE0000017
PWS TYPE NTNC
POPULATION 650
PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | | SAMPLE | |
|-----------------|-----------|--------|-------|--------------|----|-----------------------------------|-----------|------------------------------|
| RESULT (D) | | | | | | | LEVEL | LESS THAN DL DETECTION LIMIT |
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | RT | CONTAMINANT (CODE) | | |
| 5/8/2002 | 109969 | TP001 | DEP00 | DEP HERCULES | RT | SEC-BUTYLBENZENE (2428) | 0.99 UG/L | Y |
| | | | | | | STYRENE (2996) | | Y |
| | | | | | | TERT-BUTYLBENZENE (2426) | | Y |
| | | | | | | TETRACHLOROETHYLENE (2987) | | N |
| | | | | | | TOLUENE (2991) | | Y |
| | | | | | | TRANS-1,2-DICHLOROETHYLENE (2979) | | Y |
| | | | | | | TRANS-1,3-DICHLOROPROPENE (2224) | | Y |
| | | | | | | TRICHLOROETHYLENE (2984) | 0.77 UG/L | N |
| | | | | | | TRICHLOROFLUOROMETHANE (2218) | | Y |
| | | | | | | VINYL CHLORIDE (2976) | | Y |
| | | | | | | XYLENE, META AND PARA (2963) | | Y |
| | | | | | | XYLENE, ORTHO (2997) | | Y |
| | | | | | | XYLENES (2955) | | Y |
| 8/5/2002 | 109080 | TP001 | DEP00 | DEP HERCULES | RT | 1,1,1,2-TETRACHLOROETHANE (2986) | | Y |
| | | | | | | 1,1,1-TRICHLOROETHANE (2981) | | Y |
| | | | | | | 1,1,2,2-TETRACHLOROETHANE (2988) | | Y |
| | | | | | | 1,1,2-TRICHLOROETHANE (2985) | | Y |
| | | | | | | 1,1-DICHLOROETHANE (2978) | | Y |
| | | | | | | 1,1-DICHLOROETHYLENE (2977) | | Y |
| | | | | | | 1,1-DICHLOROPROPENE (2410) | | Y |
| | | | | | | 1,2,3-TRICHLOROBENZENE (2420) | | Y |
| | | | | | | 1,2,3-TRICHLOROPROPANE (2414) | | Y |
| | | | | | | 1,2,4-TRICHLOROBENZENE (2378) | | Y |
| | | | | | | 1,2,4-TRIMETHYLBENZENE (2418) | | Y |
| | | | | | | 1,2-DICHLOROETHANE (2980) | | Y |
| | | | | | | 1,2-DICHLOROPROPANE (2983) | | Y |
| | | | | | | 1,3,5-TRIMETHYLBENZENE (2424) | | Y |
| | | | | | | 1,3-DICHLOROPROPANE (2412) | | Y |

HERCULES INCORPORATED

SYSTEM ID DE0000017 **PWS TYPE** NTNC **POPULATION** 650 **PRINCIPAL CITY SERVED** WILMINGTON **PRINCIPAL COUNTY SERVED** NEW CASTLE **PRIMARY SOURCE** SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | SAMPLE | |
|-----------------|-----------|--------|-------|--------------|---------------------------------------|-----------|------------------------------|
| RESULT (D) | | | | | | | |
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT |
| 8/5/2002 | 109080 | TP001 | DEP00 | DEP HERCULES | RT | | |
| | | | | | 2,2-DICHLOROPROPANE (2416) | | Y |
| | | | | | BENZENE (2990) | | Y |
| | | | | | BROMOBENZENE (2993) | | Y |
| | | | | | BROMOCHLOROMETHANE (2430) | | Y |
| | | | | | BROMODICHLOROMETHANE (2943) | 1.70 UG/L | N |
| | | | | | BROMOFORM (2942) | 3.62 UG/L | N |
| | | | | | BROMOMETHANE (2214) | | Y |
| | | | | | CARBON TETRACHLORIDE (2982) | | Y |
| | | | | | CHLORINE RESIDUAL, FREE (1013) | 1.5 MG/L | N |
| | | | | | CHLORODIBROMOMETHANE (2944) | 4.25 UG/L | N |
| | | | | | CHLOROETHANE (2216) | | Y |
| | | | | | CHLOROFORM (2941) | 0.50 UG/L | N |
| | | | | | CHLOROMETHANE (2210) | | Y |
| | | | | | CIS-1,2-DICHLOROETHYLENE (2380) | 0.52 UG/L | N |
| | | | | | CIS-1,3-DICHLOROPROPENE (2228) | | Y |
| | | | | | DIBROMOCHLOROPROPANE (DBCP) (2931) | | Y |
| | | | | | DIBROMOMETHANE (2408) | | Y |
| | | | | | DICHLORODIFLUOROMETHANE (2212) | | Y |
| | | | | | DICHLOROMETHANE (2964) | | Y |
| | | | | | ETHYLBENZENE (2992) | | Y |
| | | | | | ETHYLENE DIBROMIDE (EDB) (2946) | | Y |
| | | | | | HEXACHLOROBUTADIENE (2246) | | Y |
| | | | | | ISOPROPYLBENZENE (2994) | | Y |
| | | | | | M-DICHLOROBENZENE (2967) | | Y |
| | | | | | METHYL TERT-BUTYL ETHER (MTBE) (2251) | | Y |
| | | | | | MONOCHLOROBENZENE (2989) | | Y |
| | | | | | NAPHTHALENE (2248) | | Y |

HERCULES INCORPORATED

SYSTEM ID DE0000017
PWS TYPE NTNC
POPULATION 650
PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | SAMPLE | | | |
|-----------------|-----------|--------|-------|--------------|----|-----------------------------------|--------------|-----------------|----------|
| RESULT (1) | | | | | | LEVEL | LESS THAN DL | DETECTION LIMIT | |
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | RT | CONTAMINANT (CODE) | | | |
| 8/5/2002 | 109080 | TP001 | DEP00 | DEP HERCULES | RT | N-BUTYLBENZENE (2422) | | Y | |
| | | | | | | N-PROPYLBENZENE (2998) | | Y | |
| | | | | | | O-CHLOROTOLUENE (2965) | | Y | |
| | | | | | | O-DICHLOROBENZENE (2968) | | Y | |
| | | | | | | P-CHLOROTOLUENE (2966) | | Y | |
| | | | | | | P-DICHLOROBENZENE (2969) | | Y | |
| | | | | | | P-ISOPROPYLTOLUENE (2030) | | Y | |
| | | | | | | SEC-BUTYLBENZENE (2428) | | Y | |
| | | | | | | STYRENE (2996) | | Y | |
| | | | | | | TERT-BUTYLBENZENE (2426) | | Y | |
| | | | | | | TETRACHLOROETHYLENE (2987) | | Y | |
| | | | | | | TOLUENE (2991) | | Y | |
| | | | | | | TRANS-1,2-DICHLOROETHYLENE (2979) | | Y | |
| | | | | | | TRANS-1,3-DICHLOROPROPENE (2224) | | Y | |
| | | | | | | TRICHLOROETHYLENE (2984) | | Y | |
| | | | | | | TRICHLOROFUOROMETHANE (2218) | | Y | |
| | | | | | | VINYL CHLORIDE (2976) | | Y | |
| | | | | | | XYLENE, META AND PARA (2963) | | Y | |
| | | | | | | XYLENE, ORTHO (2997) | | Y | |
| | | | | | | XYLENES (2955) | | Y | |
| 3/4/2003 | 114487 | TP001 | DEP00 | DEP HERCULES | RT | 1,1,1,2-TETRACHLOROETHANE (2986) | | Y | 0.5 UG/L |
| | | | | | | 1,1,1-TRICHLOROETHANE (2981) | | Y | 0.5 UG/L |
| | | | | | | 1,1,2,2-TETRACHLOROETHANE (2988) | | Y | 0.5 UG/L |
| | | | | | | 1,1,2-TRICHLOROETHANE (2985) | | Y | 0.5 UG/L |
| | | | | | | 1,1-DICHLOROETHANE (2978) | | Y | 0.5 UG/L |
| | | | | | | 1,1-DICHLOROETHYLENE (2977) | | Y | 0.5 UG/L |
| | | | | | | 1,1-DICHLOROPROPENE (2410) | | Y | 0.5 UG/L |
| | | | | | | 1,2,3-TRICHLOROBENZENE (2420) | | Y | 0.5 UG/L |

HERCULES INCORPORATED

SYSTEM ID DE0000017
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PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | SAMPLE | | | |
|-----------------|-----------|--------|-------|--------------|------------------------------------|------------------------------|---|----------|
| RESULT (1) | | | | | LEVEL | LESS THAN DL DETECTION LIMIT | | |
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | RT | | |
| 3/4/2003 | 114487 | TP001 | DEP00 | DEP HERCULES | | | | |
| | | | | | 1,2,3-TRICHLOROPROPANE (2414) | | Y | 0.5 UG/L |
| | | | | | 1,2,4-TRICHLOROBENZENE (2378) | | Y | 0.5 UG/L |
| | | | | | 1,2,4-TRIMETHYLBENZENE (2418) | | Y | 0.5 UG/L |
| | | | | | 1,2-DICHLOROETHANE (2980) | | Y | 0.5 UG/L |
| | | | | | 1,2-DICHLOROPROPANE (2983) | | Y | 0.5 UG/L |
| | | | | | 1,3,5-TRIMETHYLBENZENE (2424) | | Y | 0.5 UG/L |
| | | | | | 1,3-DICHLOROPROPANE (2412) | | Y | 0.5 UG/L |
| | | | | | 2,2-DICHLOROPROPANE (2416) | | Y | 0.5 UG/L |
| | | | | | BENZENE (2990) | | Y | 0.5 UG/L |
| | | | | | BROMOBENZENE (2993) | | Y | 0.5 UG/L |
| | | | | | BROMOCHLOROMETHANE (2430) | | Y | 0.5 UG/L |
| | | | | | BROMODICHLOROMETHANE (2943) | 1.08 UG/L | N | 0.5 UG/L |
| | | | | | BROMOFORM (2942) | 2.35 UG/L | N | 0.5 UG/L |
| | | | | | BROMOMETHANE (2214) | | Y | 0.5 UG/L |
| | | | | | CARBON TETRACHLORIDE (2982) | | Y | 0.5 UG/L |
| | | | | | CHLORINE RESIDUAL, FREE (1013) | 1.0 MG/L | N | |
| | | | | | CHLORODIBROMOMETHANE (2944) | 3.02 UG/L | N | 0.5 UG/L |
| | | | | | CHLOROETHANE (2216) | | Y | 0.5 UG/L |
| | | | | | CHLOROFORM (2941) | | Y | 0.5 UG/L |
| | | | | | CHLOROMETHANE (2210) | | Y | 0.5 UG/L |
| | | | | | CIS-1,2-DICHLOROETHYLENE (2380) | | Y | 0.5 UG/L |
| | | | | | CIS-1,3-DICHLOROPROPENE (2228) | | Y | 0.5 UG/L |
| | | | | | DIBROMOCHLOROPROPANE (DBCP) (2931) | | Y | 0.5 UG/L |
| | | | | | DIBROMOMETHANE (2408) | | Y | 0.5 UG/L |
| | | | | | DICHLORODIFLUOROMETHANE (2212) | | Y | 0.5 UG/L |
| | | | | | DICHLOROMETHANE (2964) | | Y | 0.5 UG/L |
| | | | | | ETHYLBENZENE (2992) | | Y | 0.5 UG/L |
| | | | | | ETHYLENE DIBROMIDE (EDB) (2946) | | Y | 0.5 UG/L |

HERCULES INCORPORATED

SYSTEM ID DE0000017
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Fact Sheet - Other Chemical Results

| RESULT (1) | | | | | | SAMPLE | |
|-----------------|-----------|--------|-------|--------------|---------------------------------------|-----------|------------------------------|
| SAMPLE LOCATION | | | | | | | |
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT |
| 3/4/2003 | 114487 | TP001 | DEP00 | DEP HERCULES | RT | | |
| | | | | | HEXACHLOROBUTADIENE (2246) | | Y 0.5 UG/L |
| | | | | | ISOPROPYLBENZENE (2994) | | Y |
| | | | | | M-DICHLOROBENZENE (2967) | | Y 0.5 UG/L |
| | | | | | METHYL TERT-BUTYL ETHER (MTBE) (2251) | | Y 1 UG/L |
| | | | | | MONOCHLOROBENZENE (2989) | | Y 0.5 UG/L |
| | | | | | NAPHTHALENE (2248) | | Y 0.5 UG/L |
| | | | | | N-BUTYLBENZENE (2422) | | Y 0.5 UG/L |
| | | | | | N-PROPYLBENZENE (2998) | | Y 0.5 UG/L |
| | | | | | O-CHLOROTOLUENE (2965) | | Y 0.5 UG/L |
| | | | | | O-DICHLOROBENZENE (2968) | | Y 0.5 UG/L |
| | | | | | P-CHLOROTOLUENE (2966) | | Y 0.5 UG/L |
| | | | | | P-DICHLOROBENZENE (2969) | | Y 0.5 UG/L |
| | | | | | P-ISOPROPYLTOLUENE (2030) | | Y 0.5 UG/L |
| | | | | | SEC-BUTYLBENZENE (2428) | | Y 0.5 UG/L |
| | | | | | STYRENE (2996) | | Y 0.5 UG/L |
| | | | | | TERT-BUTYLBENZENE (2426) | | Y 0.5 UG/L |
| | | | | | TETRACHLOROETHYLENE (2987) | 0.66 UG/L | N 0.5 UG/L |
| | | | | | TOLUENE (2991) | | Y 0.5 UG/L |
| | | | | | TRANS-1,2-DICHLOROETHYLENE (2979) | | Y 0.5 UG/L |
| | | | | | TRANS-1,3-DICHLOROPROPENE (2224) | | Y 0.5 UG/L |
| | | | | | TRICHLOROETHYLENE (2984) | | Y 0.5 UG/L |
| | | | | | TRICHLOROFUOROMETHANE (2218) | | Y 0.5 UG/L |
| | | | | | VINYL CHLORIDE (2976) | | Y 0.5 UG/L |
| | | | | | XYLENE, META AND PARA (2963) | | Y 0.5 UG/L |
| | | | | | XYLENE, ORTHO (2997) | | Y 0.5 UG/L |
| | | | | | XYLENES (2955) | | Y 0.0005 |
| 5/1/2003 | 114596 | TP001 | DEP00 | DEP HERCULES | RT | | |
| | | | | | 1,1,1,2-TETRACHLOROETHANE (2986) | | Y |

HERCULES INCORPORATED

SYSTEM ID DE0000017
PWS TYPE NTNC
POPULATION 650
PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Other Chemical Results

| RESULT (1) | | | | | | SAMPLE LOCATION | | SAMPLE | |
|------------|-----------|--------|-------|--------------|----|----------------------------------|-----------|------------------------------|--|
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | RT | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT | |
| 5/1/2003 | 114596 | TP001 | DEP00 | DEP HERCULES | | 1,1,1-TRICHLOROETHANE (2981) | | Y | |
| | | | | | | 1,1,2,2-TETRACHLOROETHANE (2988) | | Y | |
| | | | | | | 1,1,2-TRICHLOROETHANE (2985) | | Y | |
| | | | | | | 1,1-DICHLOROETHANE (2978) | | Y | |
| | | | | | | 1,1-DICHLOROETHYLENE (2977) | | Y | |
| | | | | | | 1,1-DICHLOROPROPENE (2410) | | Y | |
| | | | | | | 1,2,3-TRICHLOROBENZENE (2420) | | Y | |
| | | | | | | 1,2,3-TRICHLOROPROPANE (2414) | | Y | |
| | | | | | | 1,2,4-TRICHLOROBENZENE (2378) | | Y | |
| | | | | | | 1,2,4-TRIMETHYLBENZENE (2418) | | Y | |
| | | | | | | 1,2-DICHLOROETHANE (2980) | | Y | |
| | | | | | | 1,2-DICHLOROPROPANE (2983) | | Y | |
| | | | | | | 1,3,5-TRIMETHYLBENZENE (2424) | | Y | |
| | | | | | | 1,3-DICHLOROPROPANE (2412) | | Y | |
| | | | | | | 2,2-DICHLOROPROPANE (2416) | | Y | |
| | | | | | | BENZENE (2990) | | Y | |
| | | | | | | BROMOBENZENE (2993) | | Y | |
| | | | | | | BROMOCHLOROMETHANE (2430) | | Y | |
| | | | | | | BROMODICHLOROMETHANE (2943) | 1.15 UG/L | N | |
| | | | | | | BROMOFORM (2942) | 6.05 UG/L | N | |
| | | | | | | BROMOMETHANE (2214) | | Y | |
| | | | | | | CARBON TETRACHLORIDE (2982) | | Y | |
| | | | | | | CHLORINE RESIDUAL, FREE (1013) | 1.5 MG/L | N | |
| | | | | | | CHLORODIBROMOMETHANE (2944) | 0.46 UG/L | N | |
| | | | | | | CHLOROETHANE (2216) | | Y | |
| | | | | | | CHLOROFORM (2941) | | Y | |
| | | | | | | CHLOROMETHANE (2210) | | Y | |
| | | | | | | CIS-1,2-DICHLOROETHYLENE (2380) | | Y | |
| | | | | | | CIS-1,3-DICHLOROPROPENE (2228) | | Y | |

HERCULES INCORPORATED

SYSTEM ID DE0000017 **PWS TYPE** NTNC **POPULATION** 650 **PRINCIPAL CITY SERVED** WILMINGTON **PRINCIPAL COUNTY SERVED** NEW CASTLE **PRIMARY SOURCE** SWP

Fact Sheet - Other Chemical Results

| RESULT (1) | | | | | | SAMPLE LOCATION | | SAMPLE | |
|-------------------|------------------|---------------|-----------|--------------------|-----------|---------------------------------------|--------------|-------------------------------------|---|
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | RT | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT | |
| 5/1/2003 | 114596 | TP001 | DEP00 | DEP HERCULES | | DIBROMOCHLOROPROPANE (DBCP) (2931) | | | Y |
| | | | | | | DIBROMOMETHANE (2408) | | | Y |
| | | | | | | DICHLORODIFLUOROMETHANE (2212) | | | Y |
| | | | | | | DICHLOROMETHANE (2964) | | | Y |
| | | | | | | ETHYLBENZENE (2992) | | | Y |
| | | | | | | ETHYLENE DIBROMIDE (EDB) (2946) | | | Y |
| | | | | | | HEXACHLOROBUTADIENE (2246) | | | Y |
| | | | | | | ISOPROPYLBENZENE (2994) | | | Y |
| | | | | | | M-DICHLOROENZENE (2967) | | | Y |
| | | | | | | METHYL TERT-BUTYL ETHER (MTBE) (2251) | | | Y |
| | | | | | | MONOCHLOROENZENE (2989) | | | Y |
| | | | | | | NAPHTHALENE (2248) | | | Y |
| | | | | | | N-BUTYLBENZENE (2422) | | | Y |
| | | | | | | N-PROPYLBENZENE (2998) | | | Y |
| | | | | | | O-CHLOROTOLUENE (2965) | | | Y |
| | | | | | | O-DICHLOROENZENE (2968) | | | Y |
| | | | | | | P-CHLOROTOLUENE (2966) | | | Y |
| | | | | | | P-DICHLOROENZENE (2969) | | | Y |
| | | | | | | P-ISOPROPYLTOLUENE (2030) | | | Y |
| | | | | | | SEC-BUTYLBENZENE (2428) | | | Y |
| | | | | | | STYRENE (2996) | | | Y |
| | | | | | | TERT-BUTYLBENZENE (2426) | | | Y |
| | | | | | | TETRACHLOROETHYLENE (2987) | 0.50 UG/L | | N |
| | | | | | | TOLUENE (2991) | | | Y |
| | | | | | | TRANS-1,2-DICHLOROETHYLENE (2979) | | | Y |
| | | | | | | TRANS-1,3-DICHLOROPROPENE (2224) | | | Y |
| | | | | | | TRICHLOROETHYLENE (2984) | | | Y |

HERCULES INCORPORATED

SYSTEM ID DE0000017
PWS TYPE NTNC
POPULATION 650
PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | SAMPLE | |
|-----------------|-----------|--------|-------|--------------|--------------------------------------|-----------|------------------------------|
| RESULT (D) | | | | | | | |
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT |
| 5/1/2003 | 114596 | TP001 | DEP00 | DEP HERCULES | RT | | |
| | | | | | TRICHLOROFUOROMETHANE (2218) | | Y |
| | | | | | VINYL CHLORIDE (2976) | | Y |
| | | | | | XYLENE, META AND PARA (2963) | | Y |
| | | | | | XYLENE, ORTHO (2997) | | Y |
| | | | | | XYLENES (2955) | | Y |
| 5/1/2003 | 114597 | TP001 | DEP00 | DEP HERCULES | RT | | |
| | | | | | ALKALINITY, TOTAL (1927) | 50 MG/L | N |
| | | | | | CHLORIDE (1017) | 33.2 MG/L | N |
| | | | | | CHLORINE RESIDUAL, FREE (1013) | 1.5 MG/L | N |
| | | | | | FLUORIDE (1025) | | Y 0.1 MG/L |
| | | | | | HARDNESS, TOTAL (AS CaCO3) (1915) | 67 MG/L | N |
| | | | | | IRON (1028) | | Y 0.05 MG/L |
| | | | | | NITRATE (AS N) (1040) | 3.2 MG/L | N |
| | | | | | PH (1925) | 6.8 PH | N |
| | | | | | SODIUM (1052) | 20 MG/L | N |
| | | | | | SOLIDS, TOTAL DISSOLVED (TDS) (1930) | 193 MG/L | N |
| 8/13/2003 | 115892 | TP001 | DEP00 | DEP HERCULES | RT | | |
| | | | | | 1,1,1,2-TETRACHLOROETHANE (2986) | | Y 0.5 UG/L |
| | | | | | 1,1,1-TRICHLOROETHANE (2981) | | Y 0.5 UG/L |
| | | | | | 1,1,2,2-TETRACHLOROETHANE (2988) | | Y 0.5 UG/L |
| | | | | | 1,1,2-TRICHLOROETHANE (2985) | | Y 0.5 UG/L |
| | | | | | 1,1-DICHLOROETHANE (2978) | | Y 0.5 UG/L |
| | | | | | 1,1-DICHLOROETHYLENE (2977) | | Y 0.5 UG/L |
| | | | | | 1,1-DICHLOROPROPENE (2410) | | Y 0.5 UG/L |
| | | | | | 1,2,3-TRICHLOROBENZENE (2420) | | Y 0.5 UG/L |
| | | | | | 1,2,3-TRICHLOROPROPANE (2414) | | Y 0.5 UG/L |
| | | | | | 1,2,4-TRICHLOROBENZENE (2378) | | Y 0.5 UG/L |
| | | | | | 1,2,4-TRIMETHYLBENZENE (2418) | | Y 0.5 UG/L |
| | | | | | 1,2-DICHLOROETHANE (2980) | | Y 0.5 UG/L |

HERCULES INCORPORATED

SYSTEM ID DE0000017
PWS TYPE NTNC
POPULATION 650
PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Other Chemical Results

| RESULT (1) | | | | | | SAMPLE LOCATION | | SAMPLE | |
|------------|-----------|--------|-------|--------------|----|------------------------------------|-----------|------------------------------|----------|
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | RT | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT | |
| 8/13/2003 | 115892 | TP001 | DEP00 | DEP HERCULES | | 1,2-DICHLOROPROPANE (2983) | | Y | 0.5 UG/L |
| | | | | | | 1,3,5-TRIMETHYLBENZENE (2424) | | Y | 0.5 UG/L |
| | | | | | | 1,3-DICHLOROPROPANE (2412) | | Y | 0.5 UG/L |
| | | | | | | 2,2-DICHLOROPROPANE (2416) | | Y | 0.5 UG/L |
| | | | | | | BENZENE (2990) | | Y | 0.5 UG/L |
| | | | | | | BROMOBENZENE (2993) | | Y | 0.5 UG/L |
| | | | | | | BROMOCHLOROMETHANE (2430) | | Y | 0.5 UG/L |
| | | | | | | BROMODICHLOROMETHANE (2943) | 2.27 UG/L | N | 0.5 UG/L |
| | | | | | | BROMOFORM (2942) | 5.56 UG/L | N | 0.5 UG/L |
| | | | | | | BROMOMETHANE (2214) | | Y | 0.5 UG/L |
| | | | | | | CARBON TETRACHLORIDE (2982) | | Y | 0.5 UG/L |
| | | | | | | CHLORINE RESIDUAL, FREE (1013) | 1.5 MG/L | N | |
| | | | | | | CHLORODIBROMOMETHANE (2944) | 6.00 UG/L | N | 0.5 UG/L |
| | | | | | | CHLOROETHANE (2216) | | Y | 0.5 UG/L |
| | | | | | | CHLOROFORM (2941) | 0.68 UG/L | N | 0.5 UG/L |
| | | | | | | CHLOROMETHANE (2210) | | Y | 0.5 UG/L |
| | | | | | | CIS-1,2-DICHLOROETHYLENE (2380) | | Y | 0.5 UG/L |
| | | | | | | CIS-1,3-DICHLOROPROPENE (2228) | | Y | 0.5 UG/L |
| | | | | | | DIBROMOCHLOROPROPANE (DBCP) (2931) | | Y | 0.5 UG/L |
| | | | | | | DIBROMOMETHANE (2408) | | Y | 0.5 UG/L |
| | | | | | | DICHLORODIFLUOROMETHANE (2212) | | Y | 0.5 UG/L |
| | | | | | | DICHLOROMETHANE (2964) | | Y | 0.5 UG/L |
| | | | | | | ETHYLBENZENE (2992) | | Y | 0.5 UG/L |
| | | | | | | ETHYLENE DIBROMIDE (EDB) (2946) | | Y | 0.5 UG/L |
| | | | | | | HEXACHLOROBUTADIENE (2246) | | Y | 0.5 UG/L |
| | | | | | | ISOPROPYLBENZENE (2994) | | Y | |
| | | | | | | M-DICHLOROBENZENE (2967) | | Y | 0.5 UG/L |

HERCULES INCORPORATED

SYSTEM ID DE0000017 **PWS TYPE** NTNC **POPULATION** 650 **PRINCIPAL CITY SERVED** WILMINGTON **PRINCIPAL COUNTY SERVED** NEW CASTLE **PRIMARY SOURCE** SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | SAMPLE | |
|------------------------|------------------|---------------|-----------|--------------------|-----------|---------------------------------------|-------------------------------------|
| RESULT (1) | | | | | | LEVEL | LESS THAN DL DETECTION LIMIT |
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | RT | | |
| 8/13/2003 | 115892 | TP001 | DEP00 | DEP HERCULES | RT | METHYL TERT-BUTYL ETHER (MTBE) (2251) | Y 1 UG/L |
| | | | | | | MONOCHLOROBENZENE (2989) | Y 0.5 UG/L |
| | | | | | | NAPHTHALENE (2248) | Y 0.5 UG/L |
| | | | | | | N-BUTYLBENZENE (2422) | Y 0.5 UG/L |
| | | | | | | N-PROPYLBENZENE (2998) | Y 0.5 UG/L |
| | | | | | | O-CHLOROTOLUENE (2965) | Y 0.5 UG/L |
| | | | | | | O-DICHLOROBENZENE (2968) | Y 0.5 UG/L |
| | | | | | | P-CHLOROTOLUENE (2966) | Y 0.5 UG/L |
| | | | | | | P-DICHLOROBENZENE (2969) | Y 0.5 UG/L |
| | | | | | | P-ISOPROPYLTOLUENE (2030) | Y 0.5 UG/L |
| | | | | | | SEC-BUTYLBENZENE (2428) | Y 0.5 UG/L |
| | | | | | | STYRENE (2996) | Y 0.5 UG/L |
| | | | | | | TERT-BUTYLBENZENE (2426) | Y 0.5 UG/L |
| | | | | | | TETRACHLOROETHYLENE (2987) | Y 0.5 UG/L |
| | | | | | | TOLUENE (2991) | Y 0.5 UG/L |
| | | | | | | TRANS-1,2-DICHLOROETHYLENE (2979) | Y 0.5 UG/L |
| | | | | | | TRANS-1,3-DICHLOROPROPENE (2224) | Y 0.5 UG/L |
| | | | | | | TRICHLOROETHYLENE (2984) | Y 0.5 UG/L |
| | | | | | | TRICHLOROFLUOROMETHANE (2218) | Y 0.5 UG/L |
| | | | | | | VINYL CHLORIDE (2976) | Y 0.5 UG/L |
| | | | | | | XYLENE, META AND PARA (2963) | Y 0.5 UG/L |
| | | | | | | XYLENE, ORTHO (2997) | Y 0.5 UG/L |
| | | | | | | XYLENES (2955) | Y 0.0005 |
| 10/7/2003 | 116781 | TP001 | DEP00 | DEP HERCULES | RT | 1,1,1,2-TETRACHLOROETHANE (2986) | Y 0.5 UG/L |
| | | | | | | 1,1,1-TRICHLOROETHANE (2981) | Y 0.5 UG/L |
| | | | | | | 1,1,2,2-TETRACHLOROETHANE (2988) | Y 0.5 UG/L |
| | | | | | | 1,1,2-TRICHLOROETHANE (2985) | Y 0.5 UG/L |

HERCULES INCORPORATED

SYSTEM ID DE0000017
PWS TYPE NTNC
POPULATION 650
PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | | SAMPLE | | |
|-----------------|-----------|--------|-------|--------------|----|------------------------------------|-----------|--------------|-----------------|
| RESULT (C) | | | | | | | | | |
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | RT | CONTAMINANT (CODE) | LEVEL | LESS THAN DL | DETECTION LIMIT |
| 10/7/2003 | 116781 | TP001 | DEP00 | DEP HERCULES | | | | | |
| | | | | | | 1,1-DICHLOROETHANE (2978) | | Y | 0.5 UG/L |
| | | | | | | 1,1-DICHLOROETHYLENE (2977) | | Y | 0.5 UG/L |
| | | | | | | 1,1-DICHLOROPROPENE (2410) | | Y | 0.5 UG/L |
| | | | | | | 1,2,3-TRICHLOROBENZENE (2420) | | Y | 0.5 UG/L |
| | | | | | | 1,2,3-TRICHLOROPROPANE (2414) | | Y | 0.5 UG/L |
| | | | | | | 1,2,4-TRICHLOROBENZENE (2378) | | Y | 0.5 UG/L |
| | | | | | | 1,2,4-TRIMETHYLBENZENE (2418) | | Y | 0.5 UG/L |
| | | | | | | 1,2-DICHLOROETHANE (2980) | | Y | 0.5 UG/L |
| | | | | | | 1,2-DICHLOROPROPANE (2983) | | Y | 0.5 UG/L |
| | | | | | | 1,3,5-TRIMETHYLBENZENE (2424) | | Y | 0.5 UG/L |
| | | | | | | 1,3-DICHLOROPROPANE (2412) | | Y | 0.5 UG/L |
| | | | | | | 2,2-DICHLOROPROPANE (2416) | | Y | 0.5 UG/L |
| | | | | | | BENZENE (2990) | | Y | 0.5 UG/L |
| | | | | | | BROMOBENZENE (2993) | | Y | 0.5 UG/L |
| | | | | | | BROMOCHLOROMETHANE (2430) | | Y | 0.5 UG/L |
| | | | | | | BROMODICHLOROMETHANE (2943) | 3.01 UG/L | N | 0.5 UG/L |
| | | | | | | BROMOFORM (2942) | 2.78 UG/L | N | 0.5 UG/L |
| | | | | | | BROMOMETHANE (2214) | | Y | 0.5 UG/L |
| | | | | | | CARBON TETRACHLORIDE (2982) | | Y | 0.5 UG/L |
| | | | | | | CHLORINE RESIDUAL, FREE (1013) | 1.0 MG/L | N | |
| | | | | | | CHLORODIBROMOMETHANE (2944) | 4.60 UG/L | N | 0.5 UG/L |
| | | | | | | CHLOROETHANE (2216) | | Y | 0.5 UG/L |
| | | | | | | CHLOROFORM (2941) | 2.66 UG/L | N | 0.5 UG/L |
| | | | | | | CHLOROMETHANE (2210) | | Y | 0.5 UG/L |
| | | | | | | CIS-1,2-DICHLOROETHYLENE (2380) | | Y | 0.5 UG/L |
| | | | | | | CIS-1,3-DICHLOROPROPENE (2228) | | Y | 0.5 UG/L |
| | | | | | | DIBROMOCHLOROPROPANE (DBCP) (2931) | | Y | 0.5 UG/L |
| | | | | | | DIBROMOMETHANE (2408) | | Y | 0.5 UG/L |

HERCULES INCORPORATED

SYSTEM ID DE0000017
PWS TYPE NTNC
POPULATION 650
PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Other Chemical Results

| RESULT (1) | | SAMPLE LOCATION | | | | SAMPLE | |
|------------|-----------|-----------------|-------|--------------|---------------------------------------|--------|------------------------------|
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT |
| 10/7/2003 | 116781 | TP001 | DEP00 | DEP HERCULES | RT | | |
| | | | | | DICHLORODIFLUOROMETHANE (2212) | | Y 0.5 UG/L |
| | | | | | DICHLOROMETHANE (2964) | | Y 0.5 UG/L |
| | | | | | ETHYLBENZENE (2992) | | Y 0.5 UG/L |
| | | | | | ETHYLENE DIBROMIDE (EDB) (2946) | | Y 0.5 UG/L |
| | | | | | HEXACHLOROBUTADIENE (2246) | | Y 0.5 UG/L |
| | | | | | ISOPROPYLBENZENE (2994) | | Y |
| | | | | | M-DICHLOROBENZENE (2967) | | Y 0.5 UG/L |
| | | | | | METHYL TERT-BUTYL ETHER (MTBE) (2251) | | Y 1 UG/L |
| | | | | | MONOCHLOROBENZENE (2989) | | Y 0.5 UG/L |
| | | | | | NAPHTHALENE (2248) | | Y 0.5 UG/L |
| | | | | | N-BUTYLBENZENE (2422) | | Y 0.5 UG/L |
| | | | | | N-PROPYLBENZENE (2998) | | Y 0.5 UG/L |
| | | | | | O-CHLOROTOLUENE (2965) | | Y 0.5 UG/L |
| | | | | | O-DICHLOROBENZENE (2968) | | Y 0.5 UG/L |
| | | | | | P-CHLOROTOLUENE (2966) | | Y 0.5 UG/L |
| | | | | | P-DICHLOROBENZENE (2969) | | Y 0.5 UG/L |
| | | | | | P-ISOPROPYLTOLUENE (2030) | | Y 0.5 UG/L |
| | | | | | SEC-BUTYLBENZENE (2428) | | Y 0.5 UG/L |
| | | | | | STYRENE (2996) | | Y 0.5 UG/L |
| | | | | | TERT-BUTYLBENZENE (2426) | | Y 0.5 UG/L |
| | | | | | TETRACHLOROETHYLENE (2987) | | Y 0.5 UG/L |
| | | | | | TOLUENE (2991) | | Y 0.5 UG/L |
| | | | | | TRANS-1,2-DICHLOROETHYLENE (2979) | | Y 0.5 UG/L |
| | | | | | TRANS-1,3-DICHLOROPROPENE (2224) | | Y 0.5 UG/L |
| | | | | | TRICHLOROETHYLENE (2984) | | Y 0.5 UG/L |
| | | | | | TRICHLOROFLUOROMETHANE (2218) | | Y 0.5 UG/L |
| | | | | | VINYL CHLORIDE (2976) | | Y 0.5 UG/L |
| | | | | | XYLENE, META AND PARA (2963) | | Y 0.5 UG/L |

HERCULES INCORPORATED

SYSTEM ID DE0000017
 PWS TYPE NTNC
 POPULATION 650
 PRINCIPAL CITY SERVED WILMINGTON
 PRINCIPAL COUNTY SERVED NEW CASTLE
 PRIMARY SOURCE SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | | SAMPLE | | |
|-----------------|-----------|-----------|--------|-------|--------------|--------------------------------------|-----------|--------------|-----------------|
| RESULT (1) | SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | LEVEL | LESS THAN DL | DETECTION LIMIT |
| | 10/7/2003 | 116781 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | | XYLENE, ORTHO (2997) | | Y | 0.5 UG/L |
| | | | | | | XYLENES (2955) | | Y | 0.0005 |
| | 12/2/2003 | 116857 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | | ANTIMONY (1074) | | Y | 0.0005 |
| | | | | | | ARSENIC (1005) | .0007 | N | |
| | | | | | | BARIUM (1010) | .4313 | N | |
| | | | | | | BERYLLIUM (1075) | | Y | 0.0005 |
| | | | | | | CADMIUM (1015) | | Y | 0.0005 |
| | | | | | | CHLORINE RESIDUAL, FREE (1013) | 1.0 MG/L | N | |
| | | | | | | CHROMIUM (1020) | .0009 | N | |
| | | | | | | LEAD (1030) | .0006 | N | |
| | | | | | | MERCURY (1035) | | Y | 0.0005 |
| | | | | | | NICKEL (1036) | .0036 | N | |
| | | | | | | SELENIUM (1045) | | Y | 0.01 MG/L |
| | | | | | | THALLIUM (1085) | | Y | 0.0005 |
| | 3/25/2004 | 116106 | DS001 | SP2 | POWER PLANT | RT | | | |
| | | | | | | ALKALINITY, TOTAL (1927) | 55 MG/L | N | |
| | | | | | | CHLORIDE (1017) | 30.0 MG/L | N | |
| | | | | | | CHLORINE RESIDUAL, FREE (1013) | 1.5 MG/L | N | |
| | | | | | | FLUORIDE (1025) | | Y | 0.1 MG/L |
| | | | | | | HARDNESS, TOTAL (AS CaCO3) (1915) | 51 MG/L | N | |
| | | | | | | IRON (1028) | | Y | 0.05 MG/L |
| | | | | | | NITRATE (AS N) (1040) | 3.5 MG/L | N | |
| | | | | | | PH (1925) | 7.6 PH | N | |
| | | | | | | SODIUM (1052) | 18 MG/L | N | |
| | | | | | | SOLIDS, TOTAL DISSOLVED (TDS) (1930) | 182 MG/L | N | |
| | 3/25/2004 | 116107 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | | BROMODICHLOROMETHANE (2943) | 1.25 MG/L | N | |
| | | | | | | BROMOFORM (2942) | 2.30 MG/L | N | |

HERCULES INCORPORATED

SYSTEM ID DE000017
PWS TYPE NTNC
POPULATION 650
PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | | SAMPLE | | | |
|-----------------|-----------|-----------|--------|------------|--------------------|--------------------|--------------------------------------|------------------------------|---|----------|
| RESULT (1) | SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT | | |
| | 3/25/2004 | 116107 | TP001 | DEP00 | DEP HERCULES | RT | CHLORINE RESIDUAL, FREE (1013) | 1.5 MG/L | N | |
| | | | | | | | CHLORODIBROMOMETHANE (2944) | 2.95 MG/L | N | |
| | | | | | | | TETRACHLOROETHYLENE (2987) | 0.59 MG/L | N | |
| | 5/6/2004 | 264727003 | TP001 | DEP00 | DEP HERCULES | RT | 3-HYDROXYCARBOFURAN (2066) | | Y | |
| | | | | | | | ALDICARB (2047) | | Y | 0.0005 |
| | | | | | | | ALDICARB SULFONE (2044) | | Y | 0.0005 |
| | | | | | | | ALDICARB SULFOXIDE (2043) | | Y | 0.0008 |
| | | | | | | | CARBARYL (2021) | | Y | |
| | | | | | | | CARBOFURAN (2046) | | Y | 0.0009 |
| | | | | | | | METHIOCARB (2024) | | Y | |
| | | | | | | | METHOMYL (2022) | | Y | |
| | | | | | | | OXAMYL (VYDATE) (2036) | | Y | 0.002 |
| | | | | | | | PROPOXUR (BAYGON) (2023) | | Y | |
| | 5/6/2004 | 264729007 | TP001 | DEP00 | DEP HERCULES | RT | 1,2,3-TRICHLOROPROPANE (2414) | | Y | 0.5 UG/L |
| | | | | | | | DIBROMOCHLOROPROPANE (DBCP) (2931) | | Y | 0.5 UG/L |
| | | | | | | | ETHYLENE DIBROMIDE (EDB) (2946) | | Y | 0.5 UG/L |
| | 6/30/2004 | 270344002 | DS001 | MRT00 1 | MAIN GATE HOUSE | RT | BROMOCHLOROACETIC ACID (2455) | | Y | |
| | | | | | | | DIBROMOACETIC ACID (2454) | | Y | |
| | | | | | | | DICHLOROACETIC ACID (2451) | | Y | |
| | | | | | | | MONOBROMOACETIC ACID (2453) | | Y | |
| | | | | | | | MONOCHLOROACETIC ACID (2450) | | Y | |
| | | | | | | | TOTAL HALOACETIC ACIDS (HAA5) (2456) | | Y | |
| | | | | | | | TRICHLOROACETIC ACID (2452) | | Y | |

HERCULES INCORPORATED

SYSTEM ID DE0000017
PWS TYPE NTNC
POPULATION 650
PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | SAMPLE | | |
|-----------------|-----------|--------|------------|--------------------|-------------------------------------|------------|------------------------------|-----------|
| RESULT (1) | | | | | | | | |
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT | |
| 7/21/2004 | 272498007 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | 1,2,3-TRICHLOROPROPANE (2414) | | Y | 0.5 UG/L |
| | | | | | DIBROMOCHLOROPROPANE (DBCP) (2931) | | Y | 0.5 UG/L |
| | | | | | ETHYLENE DIBROMIDE (EDB) (2946) | | Y | 0.5 UG/L |
| 8/5/2004 | 122020 | DS001 | MRT00 1 | MAIN GATE HOUSE | RT | | | |
| | | | | | CHLORINE RESIDUAL, FREE (1013) | | N | |
| | | | | | TOTAL TRIHALOMETHANES (TTHM) (2950) | 19.01 UG/L | N | |
| 9/16/2004 | 278437002 | DS001 | SP2 | POWER PLANT | RT | | | |
| | | | | | 3-HYDROXYCARBOFURAN (2066) | | Y | |
| | | | | | ALDICARB (2047) | | Y | 0.0005 |
| | | | | | ALDICARB SULFONE (2044) | | Y | 0.0005 |
| | | | | | ALDICARB SULFOXIDE (2043) | | Y | 0.0008 |
| | | | | | CARBARYL (2021) | | Y | |
| | | | | | CARBOFURAN (2046) | | Y | 0.0009 |
| | | | | | METHIOCARB (2024) | | Y | |
| | | | | | METHOMYL (2022) | | Y | |
| | | | | | OXAMYL (VYDATE) (2036) | | Y | 0.002 |
| | | | | | PROPOXUR (BAYGON) (2023) | | Y | |
| 9/16/2004 | 278437003 | DS001 | SP2 | POWER PLANT | RT | | | |
| | | | | | 2,4,5-TP (SILVEX) (2110) | | Y | 0.09 UG/L |
| | | | | | 2,4-D (2105) | | Y | 0.1 UG/L |
| | | | | | ACIFLUORFEN (2108) | | Y | |
| | | | | | DALAPON (2031) | | Y | 0.1 MG/L |
| | | | | | DICAMBA (2440) | | Y | |
| | | | | | DINOSEB (2041) | | Y | 0.0002 |
| | | | | | PENTACHLOROPHENOL (2326) | | Y | 0.00004 |
| | | | | | PICLORAM (2040) | | Y | 0.0001 |

HERCULES INCORPORATED

SYSTEM ID **PWS TYPE** **POPULATION** **PRINCIPAL CITY SERVED** **PRINCIPAL COUNTY SERVED** **PRIMARY SOURCE**
 DE0000017 NTNC 650 WILMINGTON NEW CASTLE SWP

Fact Sheet - Other Chemical Results

| RESULT (1) | | SAMPLE LOCATION | | | | SAMPLE | |
|------------|-----------|-----------------|-------|--------------|------------------------------------|--------|------------------------------|
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT |
| 12/9/2004 | 286528004 | TP001 | DEP00 | DEP HERCULES | RT | | |
| | | | | | 1,2,3-TRICHLOROPROPANE (2414) | | Y 0.5 UG/L |
| | | | | | DIBROMOCHLOROPROPANE (DBCP) (2931) | | Y 0.5 UG/L |
| | | | | | ETHYLENE DIBROMIDE (EDB) (2946) | | Y 0.5 UG/L |
| 12/9/2004 | 286528005 | TP001 | DEP00 | DEP HERCULES | RT | | |
| | | | | | 2,4,5-TRICHLOROPHENOL (2242) | | Y |
| | | | | | 2,4-DINITROTOLUENE (2270) | | Y |
| | | | | | 2,6-DINITROTOLUENE (2266) | | Y |
| | | | | | 2-METHYL NAPHTHALENE (2241) | | Y |
| | | | | | ACENAPHTHENE (2261) | | Y |
| | | | | | ACENAPHTHYLENE (2260) | | Y |
| | | | | | ACTEHLOR (2027) | | Y |
| | | | | | ALACHLOR (LASSO) (2051) | | Y 0.2 UG/L |
| | | | | | ALDRIN (2356) | | Y |
| | | | | | ANTHRACENE (2280) | | Y |
| | | | | | ATRAZINE (2050) | | Y 0.0001 |
| | | | | | BENZO (A) ANTHRACENE (2300) | | Y |
| | | | | | BENZO (A) PYRENE (2306) | | Y 0.0001 |
| | | | | | BENZO (B) FLUORANTHENE (2302) | | Y |
| | | | | | BENZO (G,H,I) PERYLENE (2312) | | Y |
| | | | | | BENZO (K) FLUORANTHENE (2304) | | Y |
| | | | | | BHC-GAMMA (LINDANE) (2010) | | Y 0.00002 |
| | | | | | BIS(2-ETHYLHEXYL) PHTHALATE (2298) | | Y |
| | | | | | BUTACHLOR (MACHETE) (2076) | | Y |
| | | | | | BUTYLBENZYL PHTHALATE (2294) | | Y |
| | | | | | CHRYSENE (2296) | | Y |
| | | | | | DDE, PARA-PARA (2069) | | Y |
| | | | | | DI(2-ETHYLHEXYL) - ADIPATE (2035) | | Y 0.0006 |
| | | | | | DIBENZO (A,H) ANTHRACENE (2310) | | Y |

HERCULES INCORPORATED

SYSTEM ID **PWS TYPE** **POPULATION** **PRINCIPAL CITY SERVED** **PRINCIPAL COUNTY SERVED** **PRIMARY SOURCE**
 DE0000017 NTNC 650 WILMINGTON NEW CASTLE SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | SAMPLE | |
|-----------------|-----------|--------|-------|--------------|----|----------------------------------|------------------------------|
| RESULT (D) | | | | | | LEVEL | LESS THAN DL DETECTION LIMIT |
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | RT | CONTAMINANT (CODE) | |
| 12/9/2004 | 286528005 | TP001 | DEP00 | DEP HERCULES | RT | DIBENZOFURAN (2202) | Y |
| | | | | | | DIELDRIN (2070) | Y |
| | | | | | | DIETHYL PHTHALATE (2284) | Y |
| | | | | | | DIMETHYL PHTHALATE (2282) | Y |
| | | | | | | DI-N-BUTYL PHTHALATE (2290) | Y |
| | | | | | | ENDRIN (2005) | Y 0.00001 |
| | | | | | | EPTAM (EPTC) (2052) | Y |
| | | | | | | FLUORANTHENE (2286) | Y |
| | | | | | | FLUORENE (2264) | Y |
| | | | | | | HEPTACHLOR (2065) | Y 0.00004 |
| | | | | | | HEPTACHLOR EPOXIDE (2067) | Y 0.00002 |
| | | | | | | HEXACHLOROBENZENE (2274) | Y 0.0001 |
| | | | | | | HEXACHLOROCYCLOPENTADIENE (2042) | Y 0.0001 |
| | | | | | | INDENO (1,2,3-CD) PYRENE (2308) | Y |
| | | | | | | METHOXYCHLOR (2015) | Y 0.0001 |
| | | | | | | METOLACHLOR (2045) | Y |
| | | | | | | METRIBUZIN (SENCOR) (2595) | Y |
| | | | | | | MOLINATE (ORDRAM) (2626) | Y |
| | | | | | | NAPHTHALENE (2248) | Y 0.5 UG/L |
| | | | | | | PHENANTHRENE (2278) | Y |
| | | | | | | PROPACHLOR (2077) | Y |
| | | | | | | PYRENE (2288) | Y |
| | | | | | | SIMAZINE (2037) | Y 0.00007 |
| | | | | | | TERBACIL (2272) | Y |
| 12/9/2004 | 286528006 | TP001 | DEP00 | DEP HERCULES | RT | 3-HYDROXYCARBOFURAN (2066) | Y |
| | | | | | | ALDICARB (2047) | Y 0.0005 |
| | | | | | | ALDICARB SULFONE (2044) | Y 0.0005 |

HERCULES INCORPORATED

SYSTEM ID DE0000017 **PWS TYPE** NTNC **POPULATION** 650 **PRINCIPAL CITY SERVED** WILMINGTON **PRINCIPAL COUNTY SERVED** NEW CASTLE **PRIMARY SOURCE** SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | SAMPLE | | |
|-----------------|------------|--------|-------|--------------|--------------------------------------|-----------|------------------------------|-----------|
| RESULT (D) | | | | | | | | |
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT | |
| 12/9/2004 | 286528006 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | ALDICARB SULFOXIDE (2043) | | Y | 0.0008 |
| | | | | | CARBARYL (2021) | | Y | |
| | | | | | CARBOFURAN (2046) | | Y | 0.0009 |
| | | | | | METHIOCARB (2024) | | Y | |
| | | | | | METHOMYL (2022) | | Y | |
| | | | | | OXAMYL (VYDATE) (2036) | | Y | 0.002 |
| | | | | | PROPOXUR (BAYGON) (2023) | | Y | |
| 3/17/2005 | 129573 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | ALKALINITY, TOTAL (1927) | 50 MG/L | N | |
| | | | | | CHLORIDE (1017) | 19.8 MG/L | N | |
| | | | | | CHLORINE RESIDUAL, FREE (1013) | 0.82 MG/L | N | |
| | | | | | FLUORIDE (1025) | | Y | 0.1 MG/L |
| | | | | | HARDNESS, TOTAL (AS CaCO3) (1915) | 32 MG/L | N | |
| | | | | | IRON (1028) | | Y | 0.05 MG/L |
| | | | | | NITRATE (AS N) (1040) | 3.3 MG/L | N | |
| | | | | | NITRATE+NITRITE (AS N) (1038) | 3.30 MG/L | | |
| | | | | | NITRITE (AS N) (1041) | | Y | 0.1 MG/L |
| | | | | | PH (1925) | 7.7 PH | N | |
| | | | | | SODIUM (1052) | 15 MG/L | N | |
| | | | | | SOLIDS, TOTAL DISSOLVED (TDS) (1930) | 166 MG/L | N | |
| | | | | | SULFATE (1055) | 25.4 MG/L | N | |
| 3/17/2005 | 9607768001 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | 3-HYDROXYCARBOFURAN (2066) | | Y | |
| | | | | | ALDICARB (2047) | | Y | 0.0005 |
| | | | | | ALDICARB SULFONE (2044) | | Y | 0.0005 |
| | | | | | ALDICARB SULFOXIDE (2043) | | Y | 0.0008 |
| | | | | | CARBARYL (2021) | | Y | |
| | | | | | CARBOFURAN (2046) | | Y | 0.0009 |
| | | | | | METHIOCARB (2024) | | Y | |

HERCULES INCORPORATED

SYSTEM ID DE0000017 **PWS TYPE** NTNC **POPULATION** 650 **PRINCIPAL CITY SERVED** WILMINGTON **PRINCIPAL COUNTY SERVED** NEW CASTLE **PRIMARY SOURCE** SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | SAMPLE | | | |
|-----------------|------------|------------|--------|-------|--------------|--------------------------------------|-----------|--------------|-----------------|
| RESULT (D) | SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | LEVEL | LESS THAN DL | DETECTION LIMIT |
| | 3/17/2005 | 9607768001 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | | METHOMYL (2022) | | Y | |
| | | | | | | OXAMYL (VYDATE) (2036) | | Y | 0.002 |
| | | | | | | PROPOXUR (BAYGON) (2023) | | Y | |
| | 3/17/2005 | 9607768002 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | | 1,2,3-TRICHLOROPROPANE (2414) | | Y | 0.5 UG/L |
| | | | | | | DIBROMOCHLOROPROPANE (DBCP) (2931) | | Y | 0.5 UG/L |
| | | | | | | ETHYLENE DIBROMIDE (EDB) (2946) | | Y | 0.5 UG/L |
| | 6/13/2005 | 130082 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | 7/19/2005 | 129916 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | | CHLORINE RESIDUAL, FREE (1013) | 1.3 MG/L | N | |
| | | | | | | BROMODICHLOROMETHANE (2943) | 1.20 UG/L | N | |
| | | | | | | BROMOFORM (2942) | 3.58 UG/L | N | |
| | | | | | | CHLORINE RESIDUAL, FREE (1013) | 0.75 MG/L | N | |
| | | | | | | CHLORODIBROMOMETHANE (2944) | 3.47 UG/L | N | |
| * | 6/20/2006 | S21267 | 10465 | SP1 | WELL #20 | RT | | | |
| | | | | | | ALKALINITY, TOTAL (1927) | 37 MG/L | N | |
| | | | | | | CHLORIDE (1017) | 17.4 MG/L | N | |
| | | | | | | FLUORIDE (1025) | | Y | 0.1 MG/L |
| | | | | | | HARDNESS, TOTAL (AS CaCO3) (1915) | 32.2 MG/L | N | |
| | | | | | | IRON (1028) | | Y | 0.05 MG/L |
| | | | | | | NITRATE (AS N) (1040) | 5.5 MG/L | N | |
| | | | | | | NITRATE+NITRITE (AS N) (1038) | 5.50 MG/L | N | |
| | | | | | | NITRITE (AS N) (1041) | | Y | 0.1 MG/L |
| | | | | | | PH (1925) | 6.1 PH | N | |
| | | | | | | SODIUM (1052) | 11.6 MG/L | N | |
| | | | | | | SOLIDS, TOTAL DISSOLVED (TDS) (1930) | 184 MG/L | N | |
| | 12/13/2006 | S44234 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | | ALKALINITY, TOTAL (1927) | 45 MG/L | N | |

HERCULES INCORPORATED

SYSTEM ID DE0000017
PWS TYPE NTNC
POPULATION 650
PRINCIPAL CITY SERVED WILMINGTON
PRINCIPAL COUNTY SERVED NEW CASTLE
PRIMARY SOURCE SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | SAMPLE | | |
|-----------------|------------|--------|-------|--------------|--------------------------------------|-----------|------------------------------|-----------|
| RESULT (1) | | | | | | | | |
| SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | LEVEL | LESS THAN DL DETECTION LIMIT | |
| 12/13/2006 | S44234 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | CHLORIDE (1017) | 32.1 MG/L | N | |
| | | | | | CHLORINE RESIDUAL, FREE (1013) | 1.14 MG/L | N | |
| | | | | | FLUORIDE (1025) | | Y | 0.1 MG/L |
| | | | | | HARDNESS, TOTAL (AS CaCO3) (1915) | 35.1 MG/L | N | |
| | | | | | IRON (1028) | | Y | 0.05 MG/L |
| | | | | | NITRATE (AS N) (1040) | 3.3 MG/L | N | |
| | | | | | NITRATE+NITRITE (AS N) (1038) | 3.30 MG/L | | |
| | | | | | NITRITE (AS N) (1041) | | Y | 0.1 MG/L |
| | | | | | PH (1925) | 7.6 PH | N | |
| | | | | | SODIUM (1052) | 16.6 MG/L | N | |
| | | | | | SOLIDS, TOTAL DISSOLVED (TDS) (1930) | 110 MG/L | N | |
| 12/27/2006 | 9671404003 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | 1,2,3-TRICHLOROPROPANE (2414) | | Y | 0.02 UG/L |
| | | | | | DIBROMOCHLOROPROPANE (DBCP) (2931) | | Y | 0.02 UG/L |
| | | | | | ETHYLENE DIBROMIDE (EDB) (2946) | | Y | 0.02 UG/L |
| 12/27/2006 | 9671404006 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | 3-HYDROXYCARBOFURAN (2066) | | Y | 1 UG/L |
| | | | | | ALDICARB (2047) | | Y | 1 UG/L |
| | | | | | ALDICARB SULFONE (2044) | | Y | 1 UG/L |
| | | | | | ALDICARB SULFOXIDE (2043) | | Y | 1 UG/L |
| | | | | | CARBARYL (2021) | | Y | 1 UG/L |
| | | | | | CARBOFURAN (2046) | | Y | 1 UG/L |
| | | | | | METHIOCARB (2024) | | Y | 1 UG/L |
| | | | | | METHOMYL (2022) | | Y | 1 UG/L |
| | | | | | OXAMYL (VYDATE) (2036) | | Y | 1 UG/L |
| | | | | | PROPOXUR (BAYGON) (2023) | | Y | 1 UG/L |
| 12/27/2006 | S44674 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | ANTIMONY (1074) | | Y | 0.0005 |

HERCULES INCORPORATED

SYSTEM ID **PWS TYPE** **POPULATION** **PRINCIPAL CITY SERVED** **PRINCIPAL COUNTY SERVED** **PRIMARY SOURCE**
 DE0000017 NTCN 650 WILMINGTON NEW CASTLE SWP

Fact Sheet - Other Chemical Results

| SAMPLE LOCATION | | | | | | SAMPLE | | | |
|-----------------|------------|-----------|--------|-------|--------------|--------------------------------|-----------|--------------|-----------------|
| RESULT (1) | SAMPLE DT | SAMPLE ID | WSF ID | ID | DESCRIPTION | CONTAMINANT (CODE) | LEVEL | LESS THAN DL | DETECTION LIMIT |
| | 12/27/2006 | S44674 | TP001 | DEP00 | DEP HERCULES | RT | | | |
| | | | | | | ARSENIC (1005) | .0006 | N | |
| | | | | | | BARIUM (1010) | .0409 | N | |
| | | | | | | BERYLLIUM (1075) | | Y | 0.0005 |
| | | | | | | CADMIUM (1015) | | Y | 0.0005 |
| | | | | | | CHLORINE RESIDUAL, FREE (1013) | 1.15 MG/L | N | |
| | | | | | | CHROMIUM (1020) | .0020 | N | |
| | | | | | | LEAD (1030) | | Y | 0.0005 |
| | | | | | | MERCURY (1035) | | Y | 0.0005 |
| | | | | | | NICKEL (1036) | .0012 | N | |
| | | | | | | SELENIUM (1045) | | Y | 0.01 MG/L |
| | | | | | | THALLIUM (1085) | | Y | 0.0005 |

Fact Sheet - Total Trihalomethane Rule Results

| SAMPLE LOCATION | | | | SAMPLE | | RESULT (2) | |
|-----------------|-----------|--------|-----------------|-----------------------|------------|--------------|-----------------|
| SAMPL DT | SAMPLE ID | ID | DESCRIPTION | CONTAMINANT | LEVEL | LESS THAN DL | DETECTION LIMIT |
| 8/5/2004 | 122020 | MRT001 | MAIN GATE HOUSE | RT | | | |
| | | | | TOTAL TRIHALOMETHANES | 19.01 UG/L | N | |
| | | | | CHLORODIBROMOMETHANE | 7.67 UG/L | N | |
| | | | | BROMODICHLOROMETHANE | 3.61 UG/L | N | |
| | | | | BROMOFORM | 6.33 UG/L | N | |
| | | | | CHLOROFORM | 1.40 UG/L | N | |

Notes:

1. Sometimes the contaminant being measured is not found in the sample of water. If this occurs, is it reported as "less than MDL", where DL stands for the detection limit. The "Detection Limit" is the lowest level of

the contaminant that can be detected by the laboratory equipment. If the contaminant is detected, the amount detected is indicated under the label "LEVEL DETECTED".

2. RT = routine; CO = confirmation

HERCULES INCORPORATED

| | | | | | |
|------------------|-----------------|-------------------|------------------------------|--------------------------------|-----------------------|
| SYSTEM ID | PWS TYPE | POPULATION | PRINCIPAL CITY SERVED | PRINCIPAL COUNTY SERVED | PRIMARY SOURCE |
| DE0000017 | NTNC | 650 | WILMINGTON | NEW CASTLE | SWP |

Fact Sheet - Other Microbiological Results

| SAMPLE | SAMPLE ID | SAMPLE | | SAMPLE LOCATION | | INDICATOR ORGANISM | P/A (C) | RESULT |
|-----------|-----------|--------|-----|-----------------|--|--------------------------|---------|--------|
| | | ID | | DESCRIPTION | | | | |
| 3/21/2002 | 109970 | RT | SP4 | GUARD SHACK | | ALKALINITY, TOTAL (1927) | A | |
| | | | | | | CHLORIDE (1017) | A | |
| | | | | | | FLUORIDE (1025) | A | |
| | | | | | | HARDNESS, TOTAL (AS | A | |
| | | | | | | IRON (1028) | A | |
| | | | | | | NITRATE (AS N) (1040) | A | |
| | | | | | | PH (1925) | A | |
| | | | | | | SODIUM (1052) | A | |
| | | | | | | SOLIDS, TOTAL DISSOLVED | A | |

Notes: 1. "A" means the indicator organism was not found in the sample of water; "P" means the indicator organism was present in the sample