Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Dave Freudenthal, Governor

John Corra, Director

MEMORANDUM

To: Interested Parties

From: LeRoy C. Feusner, P.E., BCEE
Administrator, Solid and Hazardous Waste Division

Date: May 6, 2008 (Revision of February 25, 2008 version)

RE: Groundwater monitoring data reporting format for municipal solid waste landfills

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Introduction

The 2006 Wyoming Legislature mandated that, by June 30, 2010, the Department of Environmental Quality, Solid and Hazardous Waste Division (SHWD), report to the legislature regarding the extent to which contaminants from municipal solid waste disposal facilities have impacted groundwater in Wyoming. In order to facilitate the generation of this report, and in order to provide a comprehensive repository for environmental monitoring data to facilitate evaluations of environmental impacts, it is necessary that the groundwater data from solid waste disposal sites be housed in an electronic database so that evaluation of the data can be performed. The data are being gathered in response to environmental monitoring requirements for operating and closed landfills permitted by the department, and groundwater monitoring required at historic disposal sites as set forth in the 2006 amendments to the Environmental Quality Act (W.S. 35-11-521 and 35-11-522). The purpose of this memorandum is to provide information on the content and format of the electronic groundwater monitoring data that are to be provided to the SHWD.

Authority

Wyoming Solid Waste Rules and Regulations, Chapter 2, Section 6(b)(iii), requires that paper copies of groundwater data be submitted, and that the SHWD administrator may require the submittal of data in an electronic format for type I facilities and type II facilities with three or more monitoring wells. Because an adequate groundwater monitoring network is not possible without at least three wells, all landfills are being requested to submit data in the electronic format described in this memorandum.

Information Needed

The electronic information to be submitted to the SHWD has been categorized into three basic groups, each with its own specific reporting format. These are:

- Groundwater well construction/completion information;
- Static water level measurements in each monitoring well; and,
- Laboratory and field analytical data

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ADMIN/OUTREACH	ABANDONED MINES	AIR QUALITY	INDUSTRIAL SITING	LAND QUALITY	SOLID & HAZ. WASTE	WATER QUALITY
(307) 777-7937	(307) 777-6145	(307) 777-7391	(307) 777-7369	(307) 777-7756	(307) 777-7752	(307) 777-7781
FAX 777-3610	FAX 777-6462	FAX 777-5616	FAX 777-5973	FAX 777-5864	FAX 777-5973	FAX 777-5973

The groundwater well construction information with associated field/column names that must be provided includes:

Well Construction/Completion Information	
Description of Information	***Field/Column Name***
SHWD file number	SWFileNumber
Well name/identifier	WellName
Well completion date (mm/dd/yyyy)	DateDrilled
Latitude of well location in decimal degrees with 6 decimal accuracy in NAD 1983	LatDD
Longitude of well location in decimal degrees with 6 decimal accuracy in NAD 1983	LongDD
Drilling method(s) used to install well	Method
Ground surface elevation (in feet mean sea level to the nearest 0.1 foot)	GroundElevation
Measuring point elevation (in feet mean sea level to the nearest **0.01** foot)	MPElevation
Distance from ground surface to the bottom of borehole (in feet to nearest 0.1 foot)	BoreholeDepth
Distance from ground surface to the bottom of well casing (in feet to nearest 0.1 foot)	CasingDepth
Distance from ground surface to the top of well screen (in feet to nearest 0.1 foot)	ScreenTopDepth
Distance from ground surface to the bottom of well screen (in feet to nearest 0.1 foot)	ScreenBottomDepth
Distance from ground surface to the top of filter pack (in feet to nearest 0.1 foot)	FilterTopDepth
Distance from ground surface to the bottom of filter pack (in feet to nearest 0.1 foot)	FilterBottomDepth

The static water level information with associated field/column names that must be provided includes:

Static Water Elevation Information	
Description of Information	***Field/Column Name***
SHWD file number	SWFileNumber
Well name/identifier	WellName
Date that static water level measurement was made (mm/dd/yyyy)	DateMeasured
Depth to groundwater (in feet)	DepthToGW
Elevation of groundwater (in feet mean sea level)	GWElevation
If no water is in well, enter "dry" in this field	Comment

The chemical information determined by field or laboratory measurements with associated field/column names that must be provided includes:

Chemical Analysis Information	
Description of Information	***Field/Column Name***
Well name/identifier	WellName
SHWD file number	SWFileNumber
Sample collection date (mm/dd/yyyy)	DateSampled
Sample analysis date (mm/dd/yyyy)	DateAnalyzed
Parameter name*	AnalyteParameterName
Chemical Abstract Service Registry Number or Parameter Code*	CASNumber

Chemical Analysis Information	
Description of Information	***Field/Column Name***
Result of analysis (ND if result is less than method detection limit)	Value
Units of measure (e.g., mg/l, ug/l, SU, NTU, pCi/l)	UnitsOfMeasurement
Method detection limit (lab only; expressed in same units as results)	MethodDetectionLimit
Practical quantitation limit (lab only; expressed in same units as results)	PracticalQuantitationLimit
Qualifier (when result is less than practical quantitation limit, blank contamination is present, dilution of sample increased detection limit, etc.)	Flag
Method number of analytical technique used	MethodNumber
Location of analysis (i.e., lab or field)	LabOrField
Type of sample (blank unless quality assurance sample such as duplicate, trip blank, equipment blank, etc)	SampleType

The data must be provided in a spreadsheet format such as MS Excel, database table such as MS Access or delimited text document. Preformatted spreadsheets are available for download from the SHWD web page at http://deq.state.wy.us/shwd/gwg/Index.asp. In most cases, the laboratory will be able to provide the electronic data files to you for the chemical analyses done in the laboratory. Please provide a copy of this memorandum to your laboratory for their reference.

It is very important that wells be named consistently in reporting each type of data and for each sampling event.

**Because expressions of constituent names are variable, a table is attached to this memorandum that describes the name to be used for constituents that do not have established Chemical Abstract Service registry numbers (CAS RN). The table also identifies the CAS RN for constituents that are required to be analyzed at municipal solid waste disposal facility sites.*

Historic Data

Because the legislation requires the SHWD to utilize all available data when assessing groundwater impacts resulting from solid waste disposal facilities in compiling the report in 2010, historic data also need to be provided to the SHWD in an electronic format as specified above. Completion information as described above for existing wells needs to be compiled in a spreadsheet, database or delimited text format and the electronic files submitted to the SHWD. This is also the case for static water level measurements and chemical analyses that have been conducted for existing wells in the past. Some historic laboratory data are available in the requested format from laboratories doing groundwater analyses for Wyoming landfills. The date at which time these data are available in this format depends upon the date that the laboratory that did the analyses implemented its laboratory information system (LIMS). For data that pre-date the laboratory's LIMS, research is currently underway to determine the best way to upload this information into the SHWD's database. At this point in time, you need to do nothing in terms of providing these data electronically. You may be contacted in the future to authorize the release of these data electronically from the laboratory or to obtain an electronic copy from the laboratory to be provided to SHWD.

Contact Information

If you have questions regarding the contents of this memorandum or the submittal of electronic data to the SHWD, you may contact one of the following staff members:

Cheyenne Office (Maggie McKenzie) (307) 777-7752
Casper Office (Dale Anderson) (307) 473-3450
Lander Office (Patrick Troxel) (307) 332-6924

Enclosure: Table of constituents

Table of Constituents

Parameter	CAS number/Code	Application
Antimony (Total)	7440-36-0	Routine monitoring once per year unless detected. If detected, monitor each event.
Arsenic (Total)	7440-38-2	Routine Monitoring
Barium (Total)	7440-39-3	Routine Monitoring
Beryllium (Total)	7440-41-7	Routine monitoring once per year unless detected. If detected, monitor each event.
Bicarbonate as HCO_3	BICARB-HCO3	Routine Monitoring
Cadmium (Total)	7440-43-9	Routine Monitoring
Calcium	7440-70-2	Routine Monitoring
Carbonate as CO_3	CACO3-CO3	Routine Monitoring
Chloride	16887-00-6	Routine Monitoring
Chromium (Total)	7440-47-3	Routine Monitoring
Cobalt (Total)	7440-48-4	Routine monitoring once per year unless detected. If detected, monitor each event.
Conductivity	SpC	Routine Monitoring
Copper (Total)	7440-50-8	Routine Monitoring
Cyanide (Total Automated)	57-12-5	Routine Monitoring
Fluoride	16984-48-8	Routine Monitoring
Hardness	HARDNESS	Routine Monitoring
Iron (Total)	7439-89-6	Routine Monitoring
Lead (Total)	7439-92-1	Routine Monitoring
Magnesium	7439-95-4	Routine Monitoring
Manganese	7439-96-5	Routine Monitoring
Mercury	7439-97-6	Routine Monitoring
Nickel (Total)	7440-02-0	Routine Monitoring
Nitrogen, Ammonia as N	7664-41-7	Routine Monitoring
Nitrogen, Nitrate as N	14797-55-8	Routine Monitoring
Organic Carbon, Total (TOC)	7440-44-0	Routine Monitoring
Oxygen Demand, Chemical (COD)	COD	Routine Monitoring
pH	PH	Routine Monitoring
Potassium	7440-09-7	Routine Monitoring
Selenium	7782-49-2	Routine Monitoring
Silver (Total)	7440-22-4	Routine Monitoring
Sodium	7440-23-5	Routine Monitoring

Table of Constituents

Parameter	CAS number/Code	Application
Solids, Total Dissolved TDS @ 180 C	TDS-Calc	Routine Monitoring
Sulfate	14808-79-8	Routine Monitoring
Temperature	TEMP	Routine monitoring
Thallium (Total)	7440-28-0	Routine monitoring once per year unless detected. If detected, monitor each event.
Vanadium (Total)	7440-62-2	Routine monitoring once per year unless detected. If detected, monitor each event.
Zinc (Total)	7440-66-6	Routine Monitoring
Acetone	67-64-1	Routine monitoring once per year unless detected. If detected, monitor each event.
Acrylonitrile	107-13-1	Routine monitoring once per year unless detected. If detected, monitor each event.
Benzene	71-43-2	Routine monitoring once per year unless detected. If detected, monitor each event.
Bromochloromethane	74-97-5	Routine monitoring once per year unless detected. If detected, monitor each event.
Bromodichloromethane	75-27-4	Routine monitoring once per year unless detected. If detected, monitor each event.
Bromoform	75-25-2	Routine monitoring once per year unless detected. If detected, monitor each event.
Bromomethane	74-83-9	Routine monitoring once per year unless detected. If detected, monitor each event.
Carbon disulfide	75-15-0	Routine monitoring once per year unless detected. If detected, monitor each event.
Carbon tetrachloride	56-23-5	Routine monitoring once per year unless detected. If detected, monitor each event.
Chlorobenzene	108-90-7	Routine monitoring once per year unless detected. If detected, monitor each event.
Chlorodibromomethane	124-48-1	Routine monitoring once per year unless detected. If detected, monitor each event.
Chloroethane	75-00-3	Routine monitoring once per year unless detected. If detected, monitor each event.
Chloroform	67-66-3	Routine monitoring once per year unless detected. If detected, monitor each event.
Chloromethane	74-87-3	Routine monitoring once per year unless detected. If detected, monitor each event.
Dibromo-3-chloropropane,1,2-	96-12-8	Routine monitoring once per year unless detected. If detected, monitor each event.
Dibromoethane, 1,2-	106-93-4	Routine monitoring once per year unless detected. If detected, monitor each event.
Dibromomethane	74-95-3	Routine monitoring once per year unless detected. If detected, monitor each event.
Dichloro-2-butene, trans-1,4-	110-57-6	Routine monitoring once per year unless detected. If detected, monitor each event.
Dichlorobenzene, 1,2-	95-50-1	Routine monitoring once per year unless detected. If detected, monitor each event.
Dichlorobenzene, 1,4-	106-46-7	Routine monitoring once per year unless detected. If detected, monitor each event.
Dichlorodifluoromethane	75-71-8	Routine monitoring once per year unless detected. If detected, monitor each event.
Dichloroethane, 1,1-	75-34-3	Routine monitoring once per year unless detected. If detected, monitor each event.
Dichloroethane, 1,2-	107-06-2	Routine monitoring once per year unless detected. If detected, monitor each event.
Dichloroethene, 1,1-	75-35-4	Routine monitoring once per year unless detected. If detected, monitor each event.
Dichloroethene, cis-1,2-	156-59-2	Routine monitoring once per year unless detected. If detected, monitor each event.
Dichloroethene, trans-1,2-	156-60-5	Routine monitoring once per year unless detected. If detected, monitor each event.

Table of Constituents

Parameter	CAS number/Code	Application
Dichloropropane, 1,2-	78-87-5	Routine monitoring once per year unless detected. If detected, monitor each event.
Dichloropropene, cis-1,3-	10061-01-5	Routine monitoring once per year unless detected. If detected, monitor each event.
Dichloropropene, trans-1,3-	10061-02-6	Routine monitoring once per year unless detected. If detected, monitor each event.
Ethylbenzene	100-41-4	Routine monitoring once per year unless detected. If detected, monitor each event.
Hexanone, 2-	591-78-6	Routine monitoring once per year unless detected. If detected, monitor each event.
Iodomethane	74-88-4	Routine monitoring once per year unless detected. If detected, monitor each event.
Methyl ethyl ketone	78-93-3	Routine monitoring once per year unless detected. If detected, monitor each event.
Methyl isobutyl ketone	108-10-1	Routine monitoring once per year unless detected. If detected, monitor each event.
Methylene chloride	75-09-2	Routine monitoring once per year unless detected. If detected, monitor each event.
Styrene	100-42-5	Routine monitoring once per year unless detected. If detected, monitor each event.
Tetrachloroethane, 1,1,1,2-	630-20-6	Routine monitoring once per year unless detected. If detected, monitor each event.
Tetrachloroethane, 1,1,2,2-	79-34-5	Routine monitoring once per year unless detected. If detected, monitor each event.
Tetrachloroethene	127-18-4	Routine monitoring once per year unless detected. If detected, monitor each event.
Toluene	108-88-3	Routine monitoring once per year unless detected. If detected, monitor each event.
Trichloroethane, 1,1,1-	71-55-6	Routine monitoring once per year unless detected. If detected, monitor each event.
Trichloroethane, 1,1,2-	79-00-5	Routine monitoring once per year unless detected. If detected, monitor each event.
Trichloroethene	79-01-6	Routine monitoring once per year unless detected. If detected, monitor each event.
Trichlorofluoromethane	75-69-4	Routine monitoring once per year unless detected. If detected, monitor each event.
Trichloropropane, 1,2,3-	96-18-4	Routine monitoring once per year unless detected. If detected, monitor each event.
Vinyl acetate	108-05-4	Routine monitoring once per year unless detected. If detected, monitor each event.
Vinyl chloride	75-01-4	Routine monitoring once per year unless detected. If detected, monitor each event.
Xylenes, Total	1330-20-7	Routine monitoring once per year unless detected. If detected, monitor each event.
Acenaphthene	83-32-9	Assessment monitoring
Acenaphthylene	208-96-8	Assessment monitoring
Acetonitrile; Methyl cyanide	75-05-8	Assessment monitoring
Acetophenone	98-86-2	Assessment monitoring
Acetylaminofluorene, 2-; 2-AAF	53-96-3	Assessment monitoring
Acrolein	107-02-8	Assessment monitoring
Aldrin	309-00-2	Assessment monitoring
Allyl chloride	107-05-1	Assessment monitoring
alpha-BHC	319-84-6	Assessment monitoring

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Parameter	CAS number/Code	Application
Aminobiphenyl, 4-	92-67-1	Assessment monitoring
Anthracene	120-12-7	Assessment monitoring
Aroclor 1016	12674-11-2	Assessment monitoring
Aroclor 1221	11104–28–2	Assessment monitoring
Aroclor 1232	11141–16–5	Assessment monitoring
Aroclor 1242	53469–21–9	Assessment monitoring
Aroclor 1248	12672-29-6	Assessment monitoring
Aroclor 1254	11097-69-1	Assessment monitoring
Aroclor 1260	11096–82–5	Assessment monitoring
azobenzene, p-(Dimethylamino)	60-11-7	Assessment monitoring
Benz [a] anthracene; Benzanthracene	56-55-3	Assessment monitoring
Benzo [a] pyrene	50-32-8	Assessment monitoring
Benzo [b] fluoranthene	205-99-2	Assessment monitoring
Benzo [ghi] perylene	191-24-2	Assessment monitoring
Benzo [k] fluoranthene	207-08-9	Assessment monitoring
Benzyl alcohol	100-51-6	Assessment monitoring
beta-BHC	319-85-7	Assessment monitoring
Bis (2-chloro-1-methylethyl) ether; Dichlorodiisopropyl ether, 2,2'-; DCIP	108-60-1	Assessment monitoring
Bis (2-chloroethoxy) methane	111-91-1	Assessment monitoring
Bis (2-chloroethyl) ether; Dichloroethyl ether	111-44-4	Assessment monitoring
Bis (2-ethylhexyl) phthalate	117-81-7	Assessment monitoring
Bromophenyl phenyl ether, 4-	101-55-3	Assessment monitoring
Butyl Benzyl phthalate; Benzyl butyl phthalate	85-68-7	Assessment monitoring
Chlordane	57-74-9	Assessment monitoring
Chloroaniline, p-	106-47-8	Assessment monitoring
Chlorobenzilate	510-15-6	Assessment monitoring
Chloro-m-cresol, p-; Chloro-3-methylphenol, 4-	59-50-7	Assessment monitoring
Chloronaphthalene, 2-	91-58-7	Assessment monitoring
Chlorophenol, 2-	95-57-8	Assessment monitoring
Chlorophenyl phenyl ether, 4-	7005-72-3	Assessment monitoring

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Parameter	CAS number/Code	Application
Chloroprene	126-99-8	Assessment monitoring
Chrysene	218-01-9	Assessment monitoring
Cresol, m-; Methylphenol, 3-	108-39-4	Assessment monitoring
Cresol, o-; Methylphenol, 2-	95-48-7	Assessment monitoring
Cresol, p-; Methylphenol, 4-	106-44-5	Assessment monitoring
DDD, 4,4'-	72-54-8	Assessment monitoring
DDE, 4,4'-	72-55-9	Assessment monitoring
DDT, 4,4'-	50-29-3	Assessment monitoring
delta-BHC	319-86-8	Assessment monitoring
Diallate	2303-16-4	Assessment monitoring
Dibenz [a,h] anthracene	53-70-3	Assessment monitoring
Dibenzofuran	132-64-9	Assessment monitoring
Dichlorobenzene, 1,3-	541-73-1	Assessment monitoring
Dichlorobenzidine, 3,3'-	91-94-1	Assessment monitoring
Dichlorophenol, 2,4-	120-83-2	Assessment monitoring
Dichlorophenol, 2,6-	87-65-0	Assessment monitoring
Dichlorophenoxy-acetic acid, 2,4-; 2,4-D	122-88-3	Assessment monitoring
Dichloropropane, 1,3-; Trimethylene dichloride	142-28-9	Assessment monitoring
Dichloropropane, 2,2-; Isopropylidene chloride	594-20-7	Assessment monitoring
Dichloropropene, 1,1-	563-58-6	Assessment monitoring
Dieldrin	60-57-1	Assessment monitoring
Diethyl o-2-pyrazinyl phosphorothioate, o,o-; Thionazin	297-97-2	Assessment monitoring
Diethyl phthalate	84-66-2	Assessment monitoring
Dimethoate	60-51-5	Assessment monitoring
Dimethyl phthalate	84-66-2	Assessment monitoring
Dimethylbenz [a] anthracene, 7,12-	57-97-6	Assessment monitoring
Dimethylbenzidine, 3,3'-	119-93-7	Assessment monitoring
Dimethylphenol, 2,4-; m-Xylenol	105-67-9	Assessment monitoring
Di-n-butyl phthalate	84-74-2	Assessment monitoring
Dinitrobenzene, m-	99-65-0	Assessment monitoring
Dinitro-o-cresol, 4,6-; Dinitro-2-methylphenol, 4,6-	534-52-1	Assessment monitoring

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Parameter	CAS number/Code	Application
Dinitrophenol, 2,4-	51-28-5	Assessment monitoring
Dinitrotoluene, 2,4-	121-14-2	Assessment monitoring
Dinitrotoluene, 2,6-	606-20-2	Assessment monitoring
Di-n-octyl phthalate	117-64-0	Assessment monitoring
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol	88-85-7	Assessment monitoring
Diphenylamine	122-39-4	Assessment monitoring
Disulfoton	298-04-4	Assessment monitoring
Endosulfan I	959-98-8	Assessment monitoring
Endosulfan II	33213-65-9	Assessment monitoring
Endosulfan sulfate	115-29-7	Assessment monitoring
Endrin	72-20-8	Assessment monitoring
Endrin aldehyde	7421-93-4	Assessment monitoring
Ethyl methacrylate	97-63-2	Assessment monitoring
Ethyl methanesulfonate	62-50-0	Assessment monitoring
Famphur	52-85-7	Assessment monitoring
Fluoranthene	206-44-0	Assessment monitoring
Fluorene	86-73-7	Assessment monitoring
gamma-BHC; Lindane	58-89-9	Assessment monitoring
Heptachlor	76-44-8	Assessment monitoring
Heptachlor epoxide	1024-57-3	Assessment monitoring
Hexachlorobenzene	118-74-1	Assessment monitoring
Hexachlorobutadiene	87-68-3	Assessment monitoring
Hexachlorocyclopentadiene	77-47-4	Assessment monitoring
Hexachloroethane	67-72-1	Assessment monitoring
Hexachloropropene	188-71-7	Assessment monitoring
Indeno (1,2,3-cd) pyrene	193-39-5	Assessment monitoring
Isobutyl alcohol	78-83-1	Assessment monitoring
Isodrin	465-73-6	Assessment monitoring
Isophorone	78-59-1	Assessment monitoring
Isosafrole	120-58-1	Assessment monitoring
Kepone	143-50-0	Assessment monitoring

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Parameter	CAS number/Code	Application
Methacrylonitrile	126-98-7	Assessment monitoring
Methapyrilene	91-80-5	Assessment monitoring
Methoxychlor	72-43-5	Assessment monitoring
Methyl methacrylate	80-62-6	Assessment monitoring
Methyl methanesulfonate	66-27-3	Assessment monitoring
Methyl parathion; Parathion methyl	298-00-0	Assessment monitoring
Methylcholanthrene, 3-	56-49-5	Assessment monitoring
Methylnaphthalene, 2-	91-57-6	Assessment monitoring
Naphthalene	91-20-3	Assessment monitoring
Naphthoquinone, 1,4-	130-15-4	Assessment monitoring
Naphthylamine, 1-	134-32-7	Assessment monitoring
Naphthylamine, 2-	91-59-8	Assessment monitoring
Nitroaniline, m-; Nitroaniline, 3-	99-09-2	Assessment monitoring
Nitroaniline, o-; Nitroaniline, 2-	88-74-4	Assessment monitoring
Nitroaniline, p-; Nitroaniline, 4-	100-01-6	Assessment monitoring
Nitrobenzene	98-95-3	Assessment monitoring
Nitro-o-toluidine, 5-	99-55-8	Assessment monitoring
Nitrophenol, o-; Nitrophenol, 2-	88-75-5	Assessment monitoring
Nitrophenol, p-; Nitrophenol, 4-	100-02-7	Assessment monitoring
Nitrosodiethylamine, n-	55-18-5	Assessment monitoring
Nitrosodimethylamine, n-	62-75-9	Assessment monitoring
Nitrosodi-n-butylamine, n-	924-16-3	Assessment monitoring
Nitrosodiphenylamine, n-	86-30-6	Assessment monitoring
Nitrosodipropylamine, n-; Nitroso-n-dipropylamine, n-; Di-n-propylnitrosamine	621-64-7	Assessment monitoring
Nitrosomethylethylamine, n-	10595-95-6	Assessment monitoring
Nitrosomorpholine, n-	59-89-2	Assessment monitoring
Nitrosopiperidine, n-	100-75-4	Assessment monitoring
Nitrosopyrrolidine, n-	930-55-2	Assessment monitoring
Parathion	56-38-2	Assessment monitoring
Pentachlorobenzene	608-93-5	Assessment monitoring

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Parameter	CAS number/Code	Application
Pentachloronitrobenzene	82-68-8	Assessment monitoring
Pentachlorophenol	87-86-5	Assessment monitoring
Phenacetin	62-44-2	Assessment monitoring
Phenanthrene	85-01-8	Assessment monitoring
Phenol	108-95-2	Assessment monitoring
Phenylenediamine, p-	106-50-3	Assessment monitoring
Phorate	298-02-2	Assessment monitoring
Pronamide	23950-58-5	Assessment monitoring
Propionitrile; Ethyl cyanide	107-12-0	Assessment monitoring
Pyrene	129-00-0	Assessment monitoring
Safrole	94-59-7	Assessment monitoring
Silvex; TP, 2,4,5-	93-72-1	Assessment monitoring
Sulfide, as H_2S	7783-06-4	Assessment monitoring
Tetrachloro-benzene, 1,2,4,5-	95-94-3	Assessment monitoring
Tetrachlorophenol, 2,3,4,6-	58-90-2	Assessment monitoring
Toluidine, o-	95-53-4	Assessment monitoring
Toxaphene	8001-35-2	Assessment monitoring
Trichlorobenzene, 1,2,4-	120-82-1	Assessment monitoring
Trichlorophenol, 2,4,5-	95-95-4	Assessment monitoring
Trichlorophenol, 2,4,6-	88-06-2	Assessment monitoring
Trichlorophenoxyacetic acid, 2,4,5-; 2,4,5-T	93-76-5	Assessment monitoring
Triethyl phosphorothioate, o,o,o-	126-68-1	Assessment monitoring
Trinitrobenzene, sym-	99-35-4	Assessment monitoring

END OF MEMORANDUM