Department of Public Works Supplemental Documents

Please contact the Department of Public Works concerning questions on the following documents.

CITY OF BATTLE CREEK

SEWER CONNECTION SLIP

TAP NUMBER: _____ _____
LICENSED MASTER PLUMBER

BATTLE CREEK, MICHIGAN, _____, _____

PROPER APPLICATION AND PAYMENT HAS BEEN MADE FOR CONNECTION FOR _____

_____ NUMBER _____ ON THE _____

SIDE OF _____

BETWEEN _____

DOWNSTREAN MANHOLE LOCATED _____

_____

UPSTREAM MANHOLE LOCATED _____

SIZE OF MAIN SEWER _____ DEPTH _____ TYPE _____

APPROXIMATE DEPTH TO SLANT OR Y _____ FEET. SIZE AND KIND OF HOUSE SEWER _____

_____ INCH.

STRAIGHT PIPE USED NEXT TO Y OR SLANT _____ FEET. DEPTH OF HOUSE SEWER AT MAIN _____

CURVE USED _____ DEPTH OF HOUSE SEWER AT CLEANOUT _____

GRADE OF HOUSE SEWER _____ INCHES PER FOOT. DEPTH OF HOUSE SEWER AT CURB _____

ANY CHANGE OF GRADE OR FALL; WHERE LOCATED _____

_____

DISTANCE OF HOUSE SEWER FROM _____ LOT LINE _____ FEET AND FROM _____

LOT LINE _____ FEET, AT STREET LINE _____

LOCATION OF CLEAN OUT _____

LOCATION OF CLEAN OUT _____

LOCATION OF CLEAN OUT _____

LOCATION OF ANGLE AND Y _____

LOCATION OF ANGLE AND Y _____

LOCATION OF ANGLE AND Y _____

LOCATION OF ANGLE AND Y _____

P.V.C. LAID BY _____
SKETCH PLAN ON BACK OF THIS SHEET.

CONSTRUCTED _____, _____ _____
INSPECTOR

REMARKS: _____

SKETCH:

WATER CONNECTION

TAP # _____

NAME _____

ADDRESS _____

PARCEL # _____

DATE _____

Tap# _____

Date of Tap _____

Domestic ☐
Fire ☐
Irrigation ☐

Owner _____

House/Bldg Number _____

Bldg is on _____ of street

House is between _____

Size of tap _____

Size of main _____

Size & type of pipe
Pipe material _____

Diameter of pipe _____

Length of pipe _____

Size of curb stop _____

Plumber Name _____

Completed _____

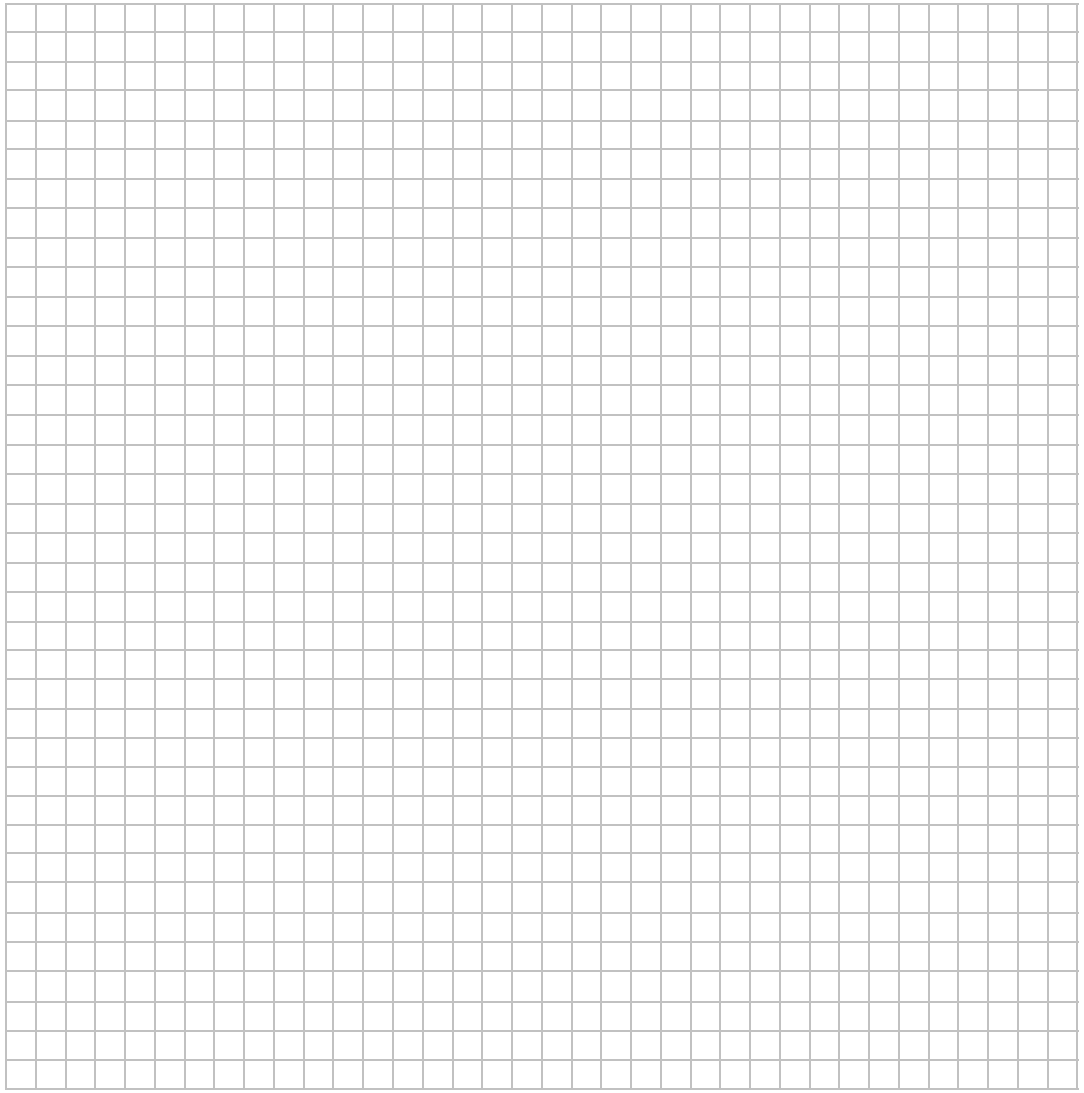
Foreman _____

CURB BOX LOCATION _____

_____

_____

_____



Policy of Inspection

Address:	Project Name:

The applicant shall be required to contract with an engineering or construction management firm to provide the necessary construction inspection to ensure that all facilities that are to become public owned and maintained are constructed in accordance with the City of Battle Creek standards. The applicant shall be required to provide a copy of the agreement and/or contract with the engineering or construction management firm for the construction inspection services to the City Engineer prior to the preconstruction meeting. The engineering or construction management firm shall be required to provide the following:

1. Inspection as directed by City Engineer on all utilities.
2. Inspection as directed by City Engineer on all street and sidewalk construction.
3. Progress reports on a weekly basis, Monday through Saturday, to the City Engineer. Reports must be recived by the City Engineer no later than noon of the Monday following the reporting period.
4. "Tie downs" on the ends of all sanitary sewer leads and stubs, showing horizontal ties from three prominent points and vertical ties (elevations). Pipe invert elevations shall be logged as well as the top elevation of any riser that is installed.
5. Tie downs for fittings, valves, curb stop and curb boxes on the water main construction.
6. Invert elevations of all manholes, leaching basins and catch basins.
7. Invert elevations of all pipes entering and leaving all manholes, leaching basins and catch basins.
8. Top of casting elevations of all manholes, leaching basins and catch basins.
9. All testing as required by the City of Battle Creek specifications. The City of Battle Creek, Department of Public Works, Engineering Division shall provide the witnessing of water main and sanitary sewer testing, unless other arrangements are pre-approved. The developer or his/her designee must contact the City Engineer a minimum of 72 hours in advance to schedule witnessing of the testing.
10. As built plans for all public improvements, including sanitary sewer and water service location cards.
11. Signed and sealed certification that construction has been completed per City of Battle Creek Specifications.

PLEASE RETURN THE COMPELETED APPLICATION TO:

City of Battle Creek
ATTN: Industrial Surveillance Group
2000 W. River Road
Battle Creek, MI 49037

INDUSTRIAL USER DISCHARGE AUTHORIZATION
APPLICATION FORM

SECTION ONE – GENERAL INFORMATION

1. Facility Name: _____

a. Operator Name: _____

b. Is the operator identified in 1 a. the owner of the facility? Yes ◯ No ◯
If no, provide the name and address of the owner.

_____
_____
_____
_____

1. Facility Address:
Street: _____

City: _____ State: _____

Zip: _____

2. Business Mailing Address:
Street: _____

City: _____ State: _____

Zip: _____

3. Designate signatory authority of the facility:
(Attach similar information for each added authorized representative)

Name: _____

Title: _____

Address: _____

City: _____ State: _____

Zip: _____

4. Designated Facility Contact:
   (Attached similar information for each added facility contact)

   Name: _____

   Title: _____

   Phone Number(s):

   _____

   _____

   Email address: _____

SECTION TWO – BUSINESS ACTIVITY

1. If your facility employs or will be employing processes in any of the industrial categories or business activities listed below (regardless of whether they generate wastewater, waste sludge, or hazardous wastes), place a check beside the category of business activity (check all that apply).

   (☐) Aluminum Forming
   (☐) Asbestos Manufacturing
   (☐) Battery Manufacturing
   (☐) Can Making
   (☐) Carbon Black
   (☐) Coal Mining
   (☐) Coil Coating
   (☐) Copper Forming
   (☐) Electric and Electrical Components Manufacturing
   (☐) Electroplating
   (☐) Feedlots
   (☐) Fertilizer Manufacturing
   (☐) Foundries (Metal Molding and Casting)
   (☐) Glass Manufacturing
   (☐) Grain Mills
   (☐) Inorganic Chemicals
   (☐) Iron and Steel
   (☐) Leather Tanning and Finishing
   (☐) Metal Finishing
   (☐) Nonferrous Metals Forming
   (☐) Organic Chemicals Manufacturing
   (☐) Paint and Ink Formulating
   (☐) Paving and Roofing Manufacturing
   (☐) Pesticides Manufacturing

(☐) Petroleum Refining
(☐) Pharmaceutical
(☐) Plastic and Synthetic Materials Manufacturing
(☐) Plastics Processing Manufacturing
(☐) Porcelain Enamel
(☐) Pulp, Paper, and Fiberboard Manufacturing
(☐) Rubber
(☐) Soap and Detergent Manufacturing
(☐) Steam Electric
(☐) Sugar Processing
(☐) Textile Mills
(☐) Timber Products

A facility with processes inclusive in these business areas may be covered by the Environmental Protection Agency (EPA) categorical pretreatment standards. These facilities are termed "Categorical Users".

2. Give a brief description of all operations at this facility including primary products and/or services.

_____
_____
_____
_____
_____
_____
_____
_____

3. Indicate applicable Standard Industrial Classification (SIC) code(s) for all processes.

_____
_____

4. Product Volume:

Product Name:	Production Amounts per Day		Daily Unit
	Average	Maximum	
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

SECTION THREE – WATER SUPPLY

1. Water Sources (Check all that apply):
   (☐) Private Well
   (☐) Surface Water
   (☐) Municipal Water (Please specify) _____
   (☐) Other (Please specify) _____

2. Name on the water bill:

   Name: _____

   Street Address: _____

   City: _____ State: _____ Zip: _____

3. Water service account number: _____

4. List average water usage on premises (new facilities may use estimates):

	Average in Gallons per day (gpd)
Contact cooling water	_____
Non-contact cooling water	_____
Boiler feed	_____
Process	_____
Sanitary	_____
Air pollution control	_____
Contained in product	_____
Irrigation and lawn watering	_____
Other	_____
Total	_____

5. National Pollutant Discharge Elimination System (NPDES) permit number (if applicable):

   _____

SECTION FOUR – SEWER INFORMATION

1. a. For existing business:

   Is the building presently connected to the public sanitary sewer system?

   ◯ Yes

   ◯ No: Have you applied for a sanitary sewer hookup? ◯ Yes ◯ No

   b. For new business:

   Will you be occupying an existing vacant building (such as an industrial park)?

   ◯ Yes ◯ No

   Have you applied for a building permit if a new facility will be constructed?

   ◯ Yes ◯ No

   Will you be connected to the public sanitary sewer system?

   ◯ Yes ◯ No

2. List the size, location (be as descriptive as possible), and flow of each facility sewer connection to the City's sewer system (if more than three (3), please attach additional information).

Sewer Size	Location Description	Average Flow (gpd)
_____	_____	_____
_____	_____	_____
_____	_____	_____

SECTION FIVE – WASTEWATER DISCHARGE INFORMATION

1. Does (or will) this facility discharge any wastewater other than from restrooms to the City sewer system?

◯ Yes If the answer is "yes", please complete the remainder of this application.

◯ No If the answer is "no", please go to Section Nine.

2. Please provide the following information on **WASTEWATER** flow rates (new facilities may use estimates).
   a. Hours per day discharged (i.e. 8 hours per day)

      M _____ T _____ W _____ Th _____ F _____ Sa _____ Su _____

   b. Hours of discharge (i.e. 9am to 5pm)

      M _____

      T _____

      W _____

      Th _____

      F _____

      Sa _____

      Su _____

   c. Peak hourly flow rate (in gallons per day) _____

   d. Maximum daily flow rate (in gallons per day) _____

e. Annual daily average (in gallons per day) _____

3. If batch discharging occurs or will occur, please indicate the following (new facilities may use estimates):
   a. Number of batch discharges per day: _____
   b. Average discharge volume per batch (in gallons per day): _____
   c. Time of batch discharges (which day(s) and how many hour(s))

      _____

      _____

      _____

   d. Flow rate (on gallons per minute): _____
   e. Percent of total discharge _____
4. Please provide schematic and water flow diagrams as attachments.

Facilities that checked activities in question 1 of Section Two are considered Categorical Industrial Users and should proceed to question 6.

5. For Non-categorical Users only: List average wastewater discharge, maximum discharge, and type of discharge (i.e. batch, continuous, both) flows for each plant process (new facilities should provide estimates).

Process Description	Average Flow (gpd)	Maximum Flow (gpd)	Type of Discharge

ANSWER QUESTIONS 6 & 7 ONLY IF YOUR FACILITY IS SUBJECT TO CATEGORICAL PRETREATMENT STANDARDS.

6. For Categorical Users: Please provide wastewater discharge, maximum discharge, and type of discharge (i.e. batch, continuous, both) flows for each of your processes and/or proposed processes (new facilities should provide estimates).

Regulated Process	Average Flow (gpd)	Maximum Flow (gpd)	Type of Discharge

Unregulated Process	Average Flow (gpd)	Maximum Flow (gpd)	Type of Discharge

Dilution	Average Flow (gpd)	Maximum Flow (gpd)	Type of Discharge

7. For Categorical Users subject to Total Toxic Organic (TTO) requirements: Please provide the following information:
   a. Does/will this facility use any of the toxic organic substances listed under the TTO standard of the applicable categorical pretreatment standards published by the EPA?
      ◯ Yes ◯ No
   b. Has a baseline monitoring report (BMR) been submitted which contains TTO information?
      ◯ Yes ◯ No
   c. Has a toxic organic management plan (TOMP) been developed?
      ◯ Yes; please attach a copy of the plan
      ◯ No
8. Do you have and/or plan to have automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

Current: Flow Metering	◯ Yes	◯ No	◯ Not applicable
Sampling Equipment	◯ Yes	◯ No	◯ Not applicable
Planned: Flow Metering	◯ Yes	◯ No	◯ Not applicable
Sampling Equipment	◯ Yes	◯ No	◯ Not applicable

If Yes, please indicate the present or future location of this equipment on the schematic flow diagram.

9. Are any process changes or expansions planned during the next three (3) years that could alter wastewater volumes or characteristics? Consider all production processes as well as air and/or water pollution treatment processes that may affect the discharge.
   ◯ Yes ◯ No; skip question 10

10. Briefly describe these changes and their effects on the wastewater volumes and characteristics (attach additional sheets if needed):

_____

_____

_____

_____

_____

_____

_____

11. Are any materials or water reclamation systems in use and/or planned?

◯ Yes ◯ No, skip question 12

12. Briefly describe the recovery process, substance recovered, percent recovered, and the concentration of the substance in the spent solution. Submit a flow diagram for each process (attach additional sheets if needed).

_____

_____

_____

_____

_____

_____

_____

SECTION SIX – CHARACTERISTICS OF DISCHARGE

Current Users: If your facility is currently providing self-monitoring data to the City, skip to Section Seven. Any additional data or monitoring being implemented and has not been submitted to the City, it must be attached.

New Users: New dischargers should attach any data that is pertinent or available from facilities with similar processes.

SECTION SEVEN – TREATMENT

1. Is any form of wastewater treatment practiced at this facility? See list below for devices and/or processes.

   ◯ Yes ◯ No

2. Is any form of wastewater treatment planned for this facility within the next three (3) years?

   ◯ Yes, please describe:

   _____

   _____

   _____

   ◯ No

   For facilities with existing treatments: Any changes to existing wastewater treatment within the next three (3) years?

   ◯ Yes, please describe:

   _____

   _____

   _____

   ◯ No

3. Please indicate all treatment devices and/or processes used or proposed for treating wastewater and/or sludge (check all that apply):

   (☐) Air flotation
   (☐) Biological treatment, type: _____
   (☐) Centrifuge
   (☐) Chemical precipitation
   (☐) Chlorination
   (☐) Cyclone
   (☐) Filtration
   (☐) Flow equalization

(☐) Grease or oil separation, type: _____
(☐) Grease trap
(☐) Grinding filter
(☐) Grit removal
(☐) Ion exchange
(☐) Neutralization, pH correction
(☐) Ozonation
(☐) Rainwater diversion or storage
(☐) Reverse Osmosis
(☐) Screen
(☐) Sedimentation
(☐) Septic tank
(☐) Solvent protection
(☐) Sump
(☐) Other chemical treatment, type: _____
(☐) Other physical treatment, type: _____
(☐) Other, type: _____

4. Describe the pollutant loading, flow rates, design capacity, physical size, and operating procedures of each treatment of each facility checked from above (attach additional sheets).

_____

_____

_____

_____

5. Attach a process flow diagram for each existing treatment system. Include process equipment, by-products, by-products disposal method, waste and by-product volumes, and design and operating conditions.
6. Describe any changes in treatment or disposal methods planned or under construction for the wastewater discharge to the sanitary sewer. Include estimated completion dates.

_____

_____

_____

_____

7. Do you have a treatment operator? ◯ Yes ◯ No

   If yes, Name: _____

   Title: _____

   Phone number and email address:

   _____

8. Do you have a manual on the correct operation of your treatment equipment?

   ◯ Yes ◯ No

9. Do you have a written maintenance schedule for your treatment equipment?

   ◯ Yes ◯ No

SECTION EIGHT – FACILITY OPERATION

1. Shift Information

		Mon	Tue	Wed	Thur	Fri	Sat	Sun
Work days		☐	☐	☐	☐	☐	☐	☐
Shifts per work day		_____	_____	_____	_____	_____	_____	_____
Number of employees per shift	1st	_____	_____	_____	_____	_____	_____	_____
	2nd	_____	_____	_____	_____	_____	_____	_____
	3rd	_____	_____	_____	_____	_____	_____	_____

   1st shift starts at: _____ ends at: _____

   2nd shift starts at: _____ ends at: _____

   3rd shift starts at: _____ ends at: _____

2. Indicate whether the facility discharge is:

   ◯ Continuous during work hours

   ◯ Batch or intermittent

3. List types and amounts (mass or volume per day) of raw materials used or planned for use (attach additional sheets as needed).

_____

_____

_____

_____

_____

_____

4. List each substance from Appendix A that is contained in any materials used or stored and could be present in your facility's wastewater discharge (list by the number from the appendix rather than by name).

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

5. List each substance from Appendix A that is contained in any materials used or stored at your facility (list by the number from the appendix rather than by name).

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. Building layout – Provide a map of the location of each building on the premises. Please show map orientation and the location of all water meters, storm sewers, and each building's sewer line connection to the public sewer system. Indicate unit processes in respect to drains and overflows. Specify sampling locations situated outside of buildings.

SECTION NINE – SPILL PREVENTION

1. Do you have chemical storage containers, bins, or ponds at your facility?

   ◯ Yes ◯ No

   If yes, please give a description of their location, contents, size, type, and frequency and method of cleaning. Also indicate in a diagram or comment on the proximity of these containers, bins, or ponds to a sewer or storm drain (attach additional sheets).

   _____

   _____

   _____

   _____

   _____

2. Do you have floor drains in your manufacturing or chemical storage areas?

   ◯ Yes ◯ No

   If yes, specify where they discharge to:

   _____

   _____

3. If you have chemical storage containers, bins, or ponds in a manufacturing area, could an accidental spill lead to a discharge to (check all that apply):

   (☐) Onsite disposal system

   (☐) Public sanitary sewer system (i.e. floor drain)

   (☐) Storm drain

   (☐) To ground

   (☐) Other, specify: _____

   (☐) Not applicable, no possible discharge to any of the above routes

4. Do you have an accidental spill prevention plan (ASPP) to prevent spills of chemicals or slug discharges from entering the City's collection system?

   ◯ Yes – Enclose a copy with this application

   ◯ No

◯ No applicable since there are no floor drains and/or the facility only discharges domestic waste

5. Has your facility reviewed the ASPP in the last two (2) years?

   ◯ Yes – Enclose a copy with this application

   ◯ No – Please state why:

   _____

   _____

   ◯ Not applicable as there are no floor drains and/or the facility discharges only domestic waste

SECTION TEN – NON-DISCHARGE WASTES

1. Are any waste liquids or sludge generated that are not disposed of into the sanitary sewer system?

   ◯ Yes, please describe below

   ◯ No, skip the remainder of Section Ten

Waste Generated	Quantity (per year)	Disposal Method

Indicate which wastes identified above are disposed of at an offsite treatment facility or onsite.

2. If an outside firm removes any of the above wastes, state the name, address, and Permit number for all waste haulers (attach additional sheets if needed).

   Name: _____

   Address: _____

   Permit Number: _____

Name: _____

Address: _____

Permit Number: _____

Name: _____

Address: _____

Permit Number: _____

SECTION ELEVEN – AUTHORIZED SIGNATURES

Compliance certification

1. Are all applicable Federal, State, and/or City pretreatment standards and requirements being met on a consistent basis?

   ◯ Yes ◯ No ◯ Not yet discharging

2. If No:

   a. What additional operations and maintenance procedures are being considered to bring the facility into compliance? List any additional treatment practices being considered in order to bring the facility into compliance.

      _____

      _____

      _____

      _____

      _____

b. Provide a schedule for bringing the facility into compliance. Specify major events planned with reasonable completion dates (these dates are subject to approval by the City of Battle Creek).

Event or Activity	Completion Date

Authorized Representatives Statement

The information contained in this application is familiar to me and to the best of my knowledge and belief, such information is true, accurate, and complete.

Name (please print) _____ Title _____

Signature _____ Date _____

Stormwater Management

Stormwater-Management-Technical-Reference-Manual---May-2020 (battlecreekmi.gov)

2019-0730 TRM Stormwater Calculation Tool.xlsm (live.com)

CITY OF BATTLE CREEK
DEPARTMENT OF PUBLIC WORKS – ENGINEERING DIVISION

STORMWATER MAINTENANCE AGREEMENT OUTLINE

150 SOUTH KENDALL STREET BATTLE CREEK MICHIGAN 49037
PHONE (269) 966-3343 WWW.BATTLECREEKMI.GOV

Notice:

The City of Battle Creek by way of the Calhoun County and Battle Creek Area Storm water Management Program: Technical Resource Manual and General Construction Specifications require all private developments to enter in to a maintenance agreement for privately owned storm water facilities. The following agreement applies to all current and future owners of the property as long as the current storm water facilities are in use at said property.

Maintenance:

All systems require maintenance regardless of the type of BMP installed. The maintenance requirements vary with each BMP and should be tailored according to system and site specific needs. The property owner of the BMP should be aware of the annual maintenance costs associated with each BMP and should consider these in establishing the long term operations and maintenance plan.

Operation and Maintenance Agreement:

The Operation and Maintenance (O&M) Agreement must include the following elements:

1. An inspection and Maintenance Schedule and Agreement signed by the property owner.
2. A long-term Maintenance Plan written by the design engineer or plan designer. The plan must include:
    a. Description of the storm water system and included components
    b. Inspection priorities
    c. Inspection schedule for each component
    d. Schematic for each BMP
3. Drawing of easements on a plat or a system location map to enable the City of Battle Creek to locate BMPs as needed.

A sample Operation and Maintenance Agreement including guidelines for inspection and maintenance frequency for common BMPs, including water quality buffers is included with this outline. As noted in this outline, inspection priorities and schedules for each BMP must be submitted as a component of the O&M Agreement. The template is a guideline and may be modified by the design engineer or plan designer as need for site specific conditions but must still be approved by The City of Battle Creek, Department of Public Works, Engineering Division.

INSPECTION and MAINTENANCE AGREEMENT for STORMWATER FACILITIES

Map & parcel number: _____

Project Name & Address:

THIS AGREEMENT, made this_____day of_____, 20_, by and between *(insert full BMP owner's name)*_____, hereinafter referred to as the "OWNER(S)" of the following property and the City of Battle Creek hereinafter referred to as the "City."

WITNESSETH, that

WHEREAS, the Landowner is the owner of certain real property, with full authority to execute deeds, mortgages, other covenants, do hereby covenant with the City and agree as follows:

1. The OWNER(S) covenant with the City that the OWNER(S) shall provide for adequate long term maintenance and continuation of the stormwater control measures described in the SWPPP (Stormwater Pollution Prevention Plan) and shown in the location map, deed of easement drawing or plat attached hereto to ensure that the facilities are and remain in properworking condition in accordance with approved design standards, rules and regulations and applicable laws. The OWNER(S) shall perform preventative maintenance activities at intervals described in the inspection schedule included in the Operations and Maintenance Plan along with necessary landscaping (grass cutting, etc.) and trash removal as part of regular maintenance.

2. The OWNER shall submit to the City an annual report by_____(define the due date) each year. The report shall include the Operations and Maintenance Plan that documents the inspection schedule, times of inspection, remedial actions taken to repair, modify or reconstruct the system, the state of control measures and notification of any planned change in responsibility for the system.

3. The OWNER(S) shall grant to the City or its agent or contractor the right of entry at reasonable times and in a reasonable manner for the purpose of inspecting, operating, installing, constructing, reconstructing, maintaining or repairing the facility.

4. The OWNER shall grant to the City the necessary easements and rights-of-way and maintain perpetual access from public rights-of-way to the facility for the GOVERNMENT or itsagent and contractor.

5. If, upon inspection, the City finds that OWNER(S) has failed to properly maintain thefacilities, the City may order the work performed within _____ days. In the event the work is not performed within the specified time, the OWNER(S) agrees to allow the City to enter the property and take whatever steps it deems necessary to maintain the stormwater control facilities. This provision shall not be construed to allow the City to erect any structure of a permanent nature on the land of the OWNER(S) without first obtaining written approval of the OWNER(S).

6. The City is under no obligation to maintain or repair said facilities, and in no eventshall this Agreement be construed to impose any such obligation on the City. The OWNER(S) shall reimburse the City upon demand the costs incurred in the maintenance of the facilities.

7. If the OWNER fails to pay the City for the above expenses after_____days written notice, the OWNER authorizes the City to collect said expenses from the OWNER through appropriate legal action and the OWNER shall be liable for the reasonable expenses of collection, court costs, and attorney fees.

8. The OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns and any other successor interest shall indemnify and hold harmless the City and its officers, agents and employees for any and all damages, accidents, casualties, occurrences, claims or attorney's fees which might arise or be asserted, in whole or in part, against the City from the construction, presence, existence, or maintenance of the stormwater control facilities subject tothe Agreement. In the event a claim is asserted against the City, its officers, agents oremployees, the City shall notify OWNER(S) and the OWNER(S) shall defend at OWNER(S) expense any suit based on such claim. If any judgment or claims against the City, its officers, agents or employees, shall be allowed, the OWNER(S) shall pay all costs and expenses in connection therewith. The City will not indemnify, defend or hold harmless in any fashion the OWNER(S) from any claims arising from any failure, regardless of any language in any attachment or other document that the OWNER(S) may provide.

9. The OWNER(S) shall not be able to transfer, assign or modify its responsibilities with respect to this agreement without the City's written prior consent. Nothing herein shall be construed to prohibit a transfer by OWNER(S).

10. No waiver of any provision of this Agreement shall affect the right of any party thereafter to enforce such a provision or to exercise any right or remedy available.

11. The OWNER(S) shall record a plat showing and accurately defining the easements for stormwater control facilities. The plat must reference the Instrument Number where this Agreement and its or attachments are recorded and contain a note that the OWNER(S) is responsible for maintaining the stormwater management facilities.

12. The OWNER(S) shall record that Agreement in the Office of the Register of Deeds for the county of_____, state____, and the Agreement shall constitute a covenant running with the land and shall be binding upon the OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns and any other successors in interest.

Attest by OWNER(S)

_____	_____
OWNER(S) Signature	OWNER(S) Signature
_____	_____
OWNER(S) Print Name	OWNER(S) Print Name
_____	_____
Date	Date

STORMWATER BMP MAINTENANCE GUIDELINES

The required maintenance interval for stormwater BMPs are often dependent upon the degree of pollutant loading from a particular drainage basin. BMP maintenance can best be broken into three categories: **inspection**, **routine maintenance**, and **major maintenance**. Though each BMP type has its own unique characteristics, **inspections** will generally consist of an assessment to assure its functionalityand the general condition. **Routine maintenance** will generally consist of trash and vegetation removal, unclogging of drains, minor sediment removal and exchange of filter media where applicable. **Major maintenance** will be completed as required from inspections and generally consists of significant reconstruction due to failures in the BMP. Examples of Major Maintenance include dredging, excavation,removal of existing media, replacing fabric, replacing the under-drain, and reestablishment of vegetation. The following schedule is offered as a guideline for performing **Inspection** and **routine maintenance** for a range of BMP categories.

BMP	Inspection Frequency	Routine Maintenance Frequency
	Inspection Frequency key: *A = annual; M=monthly; S=after major storms; Q=Quarterly; SA=Semi Annually*	
Bioretention Systems	A, S	2 x /year
Cartridge or Module Media Filtration Structures	SA	1 – 2 x /year
Catch Basin Inserts (long term)	Q	3 – 4 x /year
Dry Pond	M	3 – 4 x /year
Dry Wells	A	1 x /year
Filter Strips or Swales	M	2 – 3 x /year
Green Roofs	SA; S	2 – 3 x /year
Hydrodynamic or Gravity Separators	SA	1 – 2 x /year
Infiltration Trenches	A; S	2 – 3 x /year
Permeable Pavement	A	2 – 3 x /year
Rainwater Gardens	SA; S	2 – 3 x /year
Rainwater Harvesting	SA; S	2 – 3 x /year
Sand Filter	Q first year; SA after	1 – 2 x/ year
Trash & Debris Screens	SA; S	2 – 3 x /year
Underground Storage Facilities	SA	1 x /year
Wetlands	SA	2 x /year
Wet Pond	Q	2 – 3 x /year

Above table developed by SWEMA as a general reference or guideline.

CITY OF BATTLE CREEK

DEPARTMENT OF PUBLIC WORKS – ENGINEERING DIVISION

Acceptance of Public Infrastructure

Project Name:	Address:				
Property Owner:	Engineer/CM:				
Date:					

This check list in intended as a guide to assist the applicant with the submittal of construction related items and other public infrastructure documents prior to final acceptance of the project. Before the water and/or sanitary sewer mains are approved for use, a field inspection must first be completed by city staff, inspecting engineer

Sanitary Sewer

Yes	No	N/A		
☐	☐	☐	1.	Air Test
☐	☐	☐	2.	Deflection Test
☐	☐	☐	3.	Video
☐	☐	☐	4.	Force Main Pressure Test
☐	☐	☐	5.	Lift Station Startup/ Inspection

Storm Sewer

Yes	No	N/A		
☐	☐	☐	1.	Deflection Test
☐	☐	☐	2.	Manhole Inspection
☐	☐	☐	3.	Retention Basin inspection
☐	☐	☐	4.	Maintenance Agreement with Calculations

Miscellaneous Items

Yes	No	N/A		
☐	☐	☐	1.	Trench Compaction Test
☐	☐	☐	2.	Backfill Material Testing and Certification
☐	☐	☐	3.	Utility Construction Materials Certifications

Documentation

Yes	No	N/A		
☐	☐	☐	1.	Easements with $50 record and review fee per easement
☐	☐	☐	2.	Title Insurance Commitment
☐	☐	☐	3.	Title insurance Policy
☐	☐	☐	4.	Construction Contracts
☐	☐	☐	5.	Lien Waivers
☐	☐	☐	6.	Tie Cards
☐	☐	☐	7.	Inspection Reports
☐	☐	☐	8.	Certification of Inspection
☐	☐	☐	9.	Infrastructure Quantities
☐	☐	☐	10.	Electronic File with Record Information

Water Main

Yes	No	N/A		
☐	☐	☐	1.	Pressure Test
☐	☐	☐	2.	Bacteriological Test
☐	☐	☐	3.	Hydrant Inspection
☐	☐	☐	4.	Curb Stops and Valve Boxes

Streets

Yes	No	N/A		
☐	☐	☐	1.	Pavement Inspections
☐	☐	☐	2.	Curb and Gutter Mix Design
☐	☐	☐	3.	Sidewalk Mix design
☐	☐	☐	4.	Compaction Test
☐	☐	☐	5.	Compression Test
☐	☐	☐	6.	Top soil, Seed and Mulch Certification
☐	☐	☐	7.	Street Sign Material Certification
☐	☐	☐	8.	Traffic Sign Material Certification
☐	☐	☐	9.	Pavement Marking Material Certification

Private Utilities

Yes	No	N/A		
☐	☐	☐	1.	Gas As-Built Map
☐	☐	☐	2.	Electric As-Built Map
☐	☐	☐	3.	Telephone As-Built Map
☐	☐	☐	4.	Cable/Fiber As-Built Map

Field Inspection

Yes	No	N/A		
☐	☐	☐	1.	Field Inspection (water and or sanitary sewer mains must be inspected before approved for use)
☐	☐	☐	2.	Inspection of Punch List Items
☐	☐	☐	3.	Cleared for Water and Sewer Use by City Engineer
☐	☐	☐	4.	Cleared for Building Permit by City Engineer

CITY OF BATTLE CREEK

DEPARTMENT OF PUBLIC WORKS – ENGINEERING DIVISION

Inspection Certification

Certification of proper completion by _____, being the duly authorized representative of the developer for the project known as _____ located at _____ which includes the following public improvements.

Sanitary Sewer Water Storm Sewer Streets Other _____

Herby certifies that:

1. I, or my representative(s), under my direct super vision, have provided inspection for the publics improvements listed above through on-site observations of the work in progress and field checks of materials and equipment.
2. All work has been performed in accordance with the plans approved by the City of Battle Creek and in accordance with the City of Battle Creek Specifications, rules, regulations and ordinance requirements.
3. I have reviewed all applicable field reports, including required testing and have furnished copies of the same to the City of Battle Creek Engineer.
4. A spacial-vector format file of the approved plans modified in accordance with construction records (as-builts) and sewer and water tie cards completed in a manner acceptable to the City of Battle Creek has been provided to the City Engineer, or will be provided at no expense to the City of Battle Creek for those improvements not completed at this date: and that
5. All required and/or applicable testing, including equipment and systems startup, has been successfully and satisfactorily conducted and observed by me or my authorized representative(s).

It is also agreed that I and/or my authorized representative(s) will continue to provide inspection and consultation for any required or otherwise necessary correction work or uncompleted work at no expense to the City of Battle Creek.

_____
Name (Typed or Printed)

_____
Title

_____
Signature

_____
Date

150 South Kendall Street Battle Creek Michigan 49037
Phone (269) 966-3343 www.battlecreekmi.gov

CITY OF BATTLE CREEK

DEPARTMENT OF PUBLIC WORKS – ENGINEERING DIVISION

Infrastructure Quantities

Address:	Project Name:

This checklist is intended to record the quantities of public improvements installed with each project. The inspecting engineering firm is responsible for completion

SANITARY SEWER:	Size (diameter)	Length (in feet)
Total Length.		

STORM SEWER:	Size (diameter)	Length (in feet)
Total Length.		

SIDEWALK	Width (in feet)	Length (in feet)
Total Length.		

WATER MAIN (not including fire hydrant leads):	Size (diameter)	Length (in feet)
Total Length.		

FIRE HYDRANTS	Total

STREET CENTERLINE LENGTH	Length (in feet)

CITY OF BATTLE CREEK

DEPARTMENT OF PUBLIC WORKS – ENGINEERING DIVISION

QUALITY CONTROL TESTING
SANITARY SEWER

PROJECT

ENGINEERING/CM/DEVELOPER

DATE TESTING BEGAN

CONTRACTOR

TESTING COMPLETE: TESTER SIGNATURE DATE

STREET NAME

TESTING COMPLETE: INSPECTOR SIGNATURE DATE

REVIEWED: CITY ENGINEER DATE

GRAVITY MAIN PRESSURE TESTS

MH. IN	MH. OUT	SIZE OF PIPE TYPE OF PIPE	LENGTH OF TESTED LINE	TEST		LOSS		PASS	DATE
				P.S.I.	MIN.	ACTUAL	ALLOWABLE		

FORCE MAIN PRESSURE TEST

FROM STA.	TO STA.	SIZE OF PIPE TYPE OF PIPE	LENGTH OF TESTED LINE	TEST		LOSS (IN GALLONS)		PASS	DATE
				P.S.I.	MIN.	ACTUAL	ALLOWABLE		

GRAVITY SEWER DEFLECTION TEST

MH. IN	MH. OUT	SIZE OF PIPE TYPE OF PIPE	LENGTH OF TESTED LINE	COMMENTS	PASS	DATE

CITY OF BATTLE CREEK

DEPARTMENT OF PUBLIC WORKS – ENGINEERING DIVISION

QUALITY CONTROL TESTING
STORM SEWER

PROJECT

ENGINEERING/CM/DEVELOPER

DATE TESTING BEGAN

CONTRACTOR

TESTING COMPLETE: TESTER SIGNATURE DATE

STREET NAME

TESTING COMPLETE: INSPECTOR SIGNATURE DATE

REVIEWED: CITY ENGINEER DATE

GRAVITY SEWER DEFLECTION TEST

MH IN	MH OUT	SIZE OF PIPE TYPE OF PIPE	LENGTH OF TESTED LINE	COMMENTS	PASS	DATE

CITY OF BATTLE CREEK

DEPARTMENT OF PUBLIC WORKS – ENGINEERING DIVISION

QUALITY CONTROL TESTING
WATER MAIN

PROJECT

ENGINEERING/CM/DEVELOPER

CONTRACTOR

STREET NAME

DATE TESTING BEGAN

TESTING COMPLETE: TESTER SIGNATURE DATE

TESTING COMPLETE: INSPECTOR SIGNATURE DATE

REVIEWED: CITY ENGINEER DATE

PRESSURE TESTS

FROM STA.	TO STA.	SIZE OF PIPE TYPE OF PIPE	LENGTH OF TESTED LINE	TEST		LOSS (IN GALLONS)		PASS	DATE
				P.S.I.	MIN.	ACTUAL	ALLOWABLE		

BACTERIOLOGICAL TESTS

FROM STA.	TO STA.	DATE OF STERILIZATION	DATE FIRST SAMPLE TAKEN	RESULTS OF FIRST SAMPLE		DATE SECOND SAMPLE TAKEN	RESULTS OF SECOND SAMPLE		COMMENTS
				SAFE	NOT SAFE		SAFE	NOT SAFE	

Pollutant/Chemical Name	Item Code Number
1-(4-chlorophenyl)-3,3-dimethyltriazene	39
1-amino-2-methylanthraquinone	14
1-chloro-2,3-epoxypropane	33
1-methylnaphthalene	95
1-naphthylamine	99
1,1-dichloroethane	30B
1,1-dichloroethylene	54A
1,1,1-trichloroethane	30A
1,1,2-trichloroethane	143
1,1,2,2-tetrachloroethane	30D
1,2-dichlorobenzene	27C
1,2-dichloroethane	53
1,2-dichloropropane	55B
1,2-trans-dichloroethylene	54B
1,2(methylenedioxy)-4-propenyl benzene	93
1,2,3,4-diepoxybutane	56
1,2,4-trichlorobenzene	27B
1,3-dichlorobenzene	27D
1,3-dichloropropene	55A
1,3-propane Sultone	129
1,4-dichlorobenzene	27E
1,4-dioxane	66
1,5-naphthalenediamine	98
2-(2-formylhydrazino)-4-(5-nitro-2-furyl)thiazole	76
2-acetylaminofluorene	4
2-aminoanthraquinone	9
2-chloroethyl vinyl ether (mixed)	34A
2-chloronaphthalene	31A
2-chlorophenol	32A
2-methyl-1-nitroanthraquinone	96
2-naphthylamine	100
2-nitrophenol	106
2-(p-tert-butylphenoxy)-isopropyl-2-chloroethyl sulfite	184
2,3-epoxy-1-propanol	67
2,4-diaminoanisole sulfate	45
2,4-diaminotoluene	47
2,4-dichlorophenol	32C
2,4-dimethylphenol	60
2,4-dinitrophenol	62
2,4-dinitrotoluene	63

2,4,5-trimethylaniline	146
2,6-dinitrotoluene	64A
3-(chloromethyl) pyridine hydrochloride	38
3-amino-9-ethylcarbazole	13
3,3-dichlorobenzidine salts	52
3,3-dichlorobenzidine	51
3,4-benzofluoranthene	128A
4-aminobiphenyl	12
4-aminopyridine	175
4-bromophenyl Phenyl Ether	77B
4-chloro-m-phenylenediamine	40
4-chloro-o-phenylenediamine	41
4-chlorophenyl Phenyl Ether	77A
4-dimethylaminoazobenzene	58
4-nitrobiphenyl	104
4-nitrophenol	107
4,4'-DDD (or Dichlorodiphenyldichloroethane)	225B
4,4'-DDE (or Dichlorodiphenyldichloroethylene)	225A
4,4-diaminodiphenyl ether	46
4,4-methylene-bis-(2-methylaniline)	91
4,4-methylene-bis-(N,N-dimethylaniline)	92
4,4'-thiodianiline	137
4,6-dinitro-o-cresol	61
5-chloro-o-toluidine	43
5-nitro-o-anisidine	102
5-nitroacenaphthene	101
5-propyl-1,3-benzodioxole	131
α-BHC (or alpha-BHC)	222A
Acenaphthene	2
Acenaphthylene	128D
Acetone Cyanohydrine	3
Acids, Inorganic	167
Acids, Organic	1
Acrolein	5
Acrylic Acid	6
Acrylonitrile	7
Aldicarb	173
Aldrin	174
Allyl Chloride	8
4-aminoazobenzene	10
Aminotriazole	15
Anilazine	176
Aniline	16

Aniline Hydrochloride	17
Anthracene	128E
Antimony	150
Antimycin A	177
Arsenic	151
Asbestos (fibrous)	172
Azinphos-ethyl	178
Azinphos-methyl	179
β-BHC (or beta-BHC)	222B
β-propiolactone (or beta-propiolactone)	130
Barban	180
Bendiocarb	181
Benomyl	182
Benzo(k)fluoranthane	128B
Benz(a)anthracene	20
Benzene	21
Benzidine	22
Benzidine Salts	23
Benzo(a)pyrene	24
Benzo(ghi)perylene	128F
Beryllium	152
Bis(2-chloroethoxy)methane	77C
Bis(2-chloroethyl)ether	35
Bis(2-chloromethyl)ether	37
Bis(2-ethylhexyl)phthalate	73
Bromoform	78D
Bromoxynil	183
Brucine	25
Butyl Benzyl Phthalate	124A
Cadmium	153
Captafol	185
Captan	186
Carbaryl	187
Carbofuran	188
Carbon Tetrachloride	26
Carbophenothion	189
Chloramines	168
Chlordane	190
Chlordecone	191
Chlorfenvinphos	192
Chlorinated Benzenes	27
Chlorinated Dibenzofurans	28
Chlorinated Dioxins	29

Chlorinated Ethanes	30
Clorinated Naphthalenes	31
Chlorinated Phenols	32
Chlorine	169
Chloroalkyl Ethers	34
Chlorobenzene	27A
Chlorobenzilate	193
Chlorodibromomethane	78H
Chloroethane	30C
Chloroform	36
Chloroprene	42
Chlorpyrifos	194
Chromium	154
Chrysene	128C
Clonitralid	195
Cobalt	155
Copper	156
Coumaphos	196
Crotoxyphos	197
Cyanides	157
Cycloheximide	198
DDT	199
Demeton	200
Di-n-butyl phthalate	50
Di-n-octyl phthalate	65
Diallate	201
Diazinon	202
Dibenz(a,h)anthracene	48
Dibromochloropropane (DBCP)	203
Dichlone	204
Dichlorobromomethane	78E
Dichlorodifluoromethane	78G
Dichloroethylenes	54
Dichloropropane and Dichloropropene	55
Dichlorvos	205
Dicrotophos	206
Dieldrin	207
Diethyl Phthalate	124B
Diethyl Sulfate	57
Dimethoate	208
Dimethyl Phthalate	124C
Dimethylhydrazines	59
Dinocap	209

Dinoseb	210
Dinitrotoluene	64
Dioxathion	211
Disulfoton	212
Endosulfan	213
Endosulfan Sulfate	226A
Endrin	214
Endrin Aldehyde	227A
EPN [or o-ethyl-o-(4-nitrophenyl)phenylphosphonothioate]	215
Ethion	216
Ethylbenzene	68
Ethylene Dibromide	69
Ethylene Oxide	71
Ethylene Thiourea	72
Ethyleneimine	70
Ethyl methanesulfonate	74
Fensulfothion	217
Fenthion	218
Fluchloralin	219
Fluoranthene	75
Fluorene	128G
γ-BHC (or gamma-BHC)	222C
Haloethers	77
Halomethanes	78
Heptachlor	220 or 228A
Heptachlor Epoxide	221
Hexachlorobenzene (HCB)	79
Hexachlorobutadiene	80
Hexachlorocyclohexane	81
Hexachlorocyclopentadiene	82
Hexachloroethane	83
Hydrazine	170
Hydrazobenzene	84
Hydrogen Sulfide	171
Hydroquinone	85
Hypochlorite	158
Indeno(1,2,3-cd)pyrene (or 2,3-o-phenylenepyrene)	128I
Isomers of Hexachlorocyclehexane	222
Isophorone	87
Lactonitrile	88
Lead	159
Leptophos	223
Lithium	160

Malachite Green	89
Malathion	224
Mercury	161
Metabolites of DDT	225
Metabolites of Endosulfan	226
Metabolites of Endrin	227
Metabolites of Heptachlor	228
Methomyl	229
Methoxychlor	230
Methyl Bromide (or Bromomethane)	78C
Methyl Chloride (or Chloromethane)	78B
Methyl Hydrazine (or Monomethylhydrazine)	94
Methyl Mercaptan (or Methanethiol)	231
Methyl Parathion	232
Methylene Chloride (or Dichloromethane)	78A
4,4'-Methylene-bis-(2-chloroaniline)	90
Mevinphos	233
Mexacarbate	234
Mirex	235
Monocrotophos	236
Mustard Gas	97
N-(2-hydroxyethyl)ethylenediamine	89
N-nitrosodi-n-propylamine	108B
N-nitroso-n-butyl-N-(4-hydroxybutyl)amine	109
N-nitroso-N-ethylurea	113
N-nitroso-N-methylurea	114
N-nitroso-N-methylurethane	115
N-nitroso-N-phenylhydroxylamine ammonium salt	118
N-nitrosodiethylamine	110
N-nitrosodimethylamine	111
N-nitrosodiphenylamine	108A
N-nitrosomethylvinylamine	116
N-nitrosomorpholine	117
N-nitrososarcosine	119
Naled	237
Naphthalene	128K
Nickel	162
Nicotine	238
Nitrobenzene	103
Nitrofen	239
Nitrogen Mustard	105
Nitrosamines	108
O-aminoazotoluene	11

O-anisidine	18
O-anisidine hydrochloride	19
O-toluidine	140
O-toluidine hydrochloride	141
Oxydemeton-methyl	240
P-cresidine	44
P-nitrosodiphenylamine	112
P-chlor-m-cresol	32B
Paraquat	241
Parathion	242
Pentachloronitrobenzene	120
Pentachlorophenol	121
Peroxyacetic Acid (or Peracetic acid)	122
Phenathrene	128H
Phenol	123
Phorate	243
Phosazetim	244
Phosmet	245
Phosphamidon	246
Phthalate Esters	124
Piperonyl Sulfoxide	125
Polybrominated Biphenyls (PBB)	126
Polychlorinated Biphenyls (PCB)	127
Poylnuclear Aromatic Hydrocarbons	128
Propyleneimine	132
Pyrene	128J
Rotenone	247
Selenium	163
Semicarbarzide	133
Silver	164
Silvex, Propylene Glycolbutyl Ether Ester	248
Sodium Fluoroacetate	249
Strychnine	250
Styrene	134
Sulfallate	251
Sulfotep	252
TDE (same as 4,4'-DDD)	253
TEPP (or Tetraethyl pyrophosphate)	254
Terbufos	255
Tetrachloroethylene (or Perchloroethylene)	135
Tetrachlorvinphos	256
Thallium	165
Thioacetamide	136