COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

FORM 26R
CHEMICAL ANALYSIS OF RESIDUAL WASTE
ANNUAL REPORT BY THE GENERATOR
INSTRUCTIONS

GENERAL INFORMATION

General Instructions. This package is designed to assist an *existing client with DEP* in completing the annual report form. This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. Attach additional sheets as necessary.

General References: 287.54

Date Prepared/Revised. Provide the date the application was prepared and/or revised. When additional sheets are attached to include additional information, identify each attached sheet as Form 26R, reference the item number and identify the date prepared/revised. The "Date Prepared/Revised" on any attached sheets needs to match the "Date Prepared/Revised" on the completed annual report form. Please type or print clearly when completing the form.

SECTION A. CLIENT (GENERATOR OF THE WASTE) INFORMATION

Company Name. Identify the company name. Include the company's mailing address, phone number and email address.

Subsidiary/Parent Company. If the company identified is a subsidiary, identify the name of the parent company and the EPA Generator ID number.

Company Contact. Identify the company's contact and include the contact's phone number and email address.

Waste Generation Location. If the waste generated is not at the company's mailing address, describe the location of the waste generation; and provide the township, county, and state.

SECTION B. WASTE DESCRIPTION

Residual Waste. Enter the code that represents the type of residual waste. The list of Residual Waste Codes (RWC) can be found on the 'Codes Residual Waste' document included with this package. Also include the code's description, the amount of waste; the unit of measurement, and the timeframe for disposal/processing. If the timeframe is 'one time' check the box; if other than 'one time' provide the appropriate timeframe.

1. GENERAL PROPERTIES

a. pH Range. Indicate the pH range based on analyses or knowledge.

b. Physical State. Check appropriate box to indicate physical state.

c. Physical Appearance. Describe the color and odor of the waste. Enter the number of solid and/or liquid phases of separation and describe each phase. For example, two phases: one yellow oily liquid and one gray granular solid.

2. CHEMICAL ANALYSIS ATTACHMENTS

Check the appropriate box to indicate if required information is attached to the completed annual report form.

The analytical methodologies used shall be those set forth in the most recent edition of the EPA's Test Methods for Evaluating Solid Waste (SW-846), Methods for Chemical Analysis of Water and Wastes (EPA 600/4-79-020), Standard Methods for the Examination of Water and Wastewater (prepared jointly by the American Public Health Association, American Water Works Association, and Water Environment Federation), or a comparable method subsequently approved by EPA or the Department.

The person taking the samples and the laboratory performing the analysis shall employ the quality assurance/quality control procedures described in the EPA's Test Methods for Evaluating Solid Waste (SW-846) or Handbook for Analytical Quality Control in Water and Wastewater Laboratories (EPA 600/4-79-019).

All analyses submitted must specify the method used and any special preparation, deviation from the method, or pertinent observations. Each analysis sheet must include: *date of sampling, date of analysis, name of laboratory performing test, laboratory accreditation number, laboratory contact person and phone number*. Analytical determinations should be run on the samples, as is, unless otherwise specified in the cited method. Report the analyses in mg/kg on a dry weight basis for solids or in mg/L for liquids, or as otherwise specified in cited method.

No single analytical method is applicable for all waste streams and some modifications may be necessary for unusual waste types. Any modifications, however, must be approved by the Department.

If the sample is of unknown origin or characteristics, contact the appropriate Department regional office prior to analysis.

Chemical analysis of the waste must include the following unless the generator certifies, in writing, either the concentration of the parameter or the absence of the parameter based on his/her knowledge of the manufacturing or pollution control process:

a. Gross Analysis. The total concentration of any constituent present at 1% or greater.

b. Trace Analysis. The total concentration of any constituent listed in Appendix VIII (40 CFR 261.34(e), as incorporated by reference at 25 Pa. Code 261a.1) which, based upon generator knowledge of the waste and the process generating the waste, are likely to be found in the waste at concentrations exceeding 50 ppm.

c. Hazardous Waste Determination. As required under 40 CFR262.11, and as incorporated by reference at 25 Pa. Code 262a.1.

1) pH

2) Ignitability

3) Reactive Sulfide

4) Reactive Cyanide

5) Toxicity Characteristic Leaching Procedure (TCLP) - include all parameters found in 40 CFR 261.24, as incorporated by reference at 25 Pa. Code 261a.1, as well as pH of extract. Report all results in mg/L or as otherwise specified in method.

d. Wastewater Produced from the Drilling, Completion and Production of a Marcellus Shale or Other Shale Gas Well. In lieu of the Trace Analysis described in subsection b., the chemical analysis of wastewater produced from the drilling, completion and production of a Marcellus Shale or other shale gas well must include the following:

Acidity
Alkalinity (Total as CaCO3)
Aluminum
Ammonia Nitrogen
Arsenic
Barium
Benzene
Beryllium
Biochemical Oxygen Demand
Boron
Bromide
Cadmium
Calcium
Chemical Oxygen Demand
Chlorides
Chromium
Cobalt
Copper
Ethylene Glycol
Gross Alpha
Gross Beta
Hardness (Total as CaCO3)
Iron – Dissolved
Iron – Total
Lead
Lithium
Magnesium
Manganese
MBAS (Surfactants)
Mercury
Molybdenum
Nickel
Nitrite-Nitrate Nitrogen
Oil & Grease
pH
Phenolics (Total)
Radium 226
Radium 228
Selenium
Silver
Sodium
Specific Conductance
Strontium
Sulfates
Thorium
Toluene
Total Dissolved Solids
Total Kjeldahl Nitrogen
Total Suspended Solids
Uranium
Zinc

Additional constituents that are expected or known to be present in the wastewater.

*Note - All metals reported as total.

For impoundments and tanks, the chemical analysis must represent the volume of wastewater stored in the impoundment or tank. A representative analysis is based upon the frequency, location and number of samples. Samples of an impoundment should be composite samples taken from various locations and wastewater depths as identified on a grid. If multiple loads of wastewater are removed from the same impoundment or tanks for transfer, processing, treatment or disposal, the same chemical analysis of the wastewater may be used repeatedly without further analysis, provided the analysis remains representative of the impoundment. If large volumes of water, wastewater or other fluids are added to the impoundment, a new chemical analysis must be performed that is representative of the impoundment.

e. Additional Analyses. Any additional parameters as required.

1) On Form U (if waste is managed at a Pennsylvania facility)

2) By conditions in a permit or approval, for management of the waste.

3) By the facility(ies) managing the waste.

3. PROCESS DESCRIPTION & SCHEMATIC ATTACHMENTS

a. Manufacturing and/or Pollution Control Processes. Check the appropriate box to indicate if a detailed description of the manufacturing and/or pollution control processes producing the waste is attached.

Describe the manufacturing process that produced the waste and any pollution control methods involved. This must include the raw materials used in the process, any intermediate products formed, final products, and any substances added during treatment. For non-hazardous waste, provide sufficient detail to demonstrate the waste is not a listed hazardous waste. For example:

"Resol Resin Manufacture"

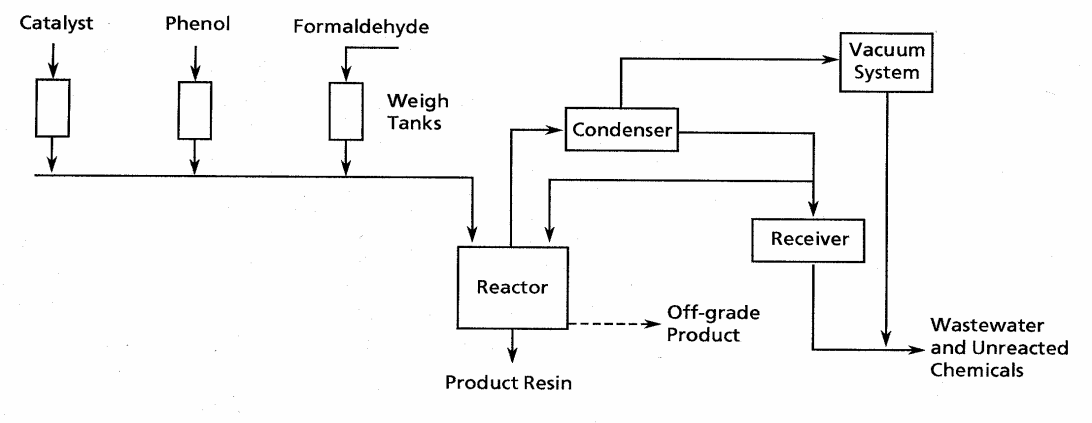
"These resins are formed by reacting phenol, or a substituted phenol with formaldehyde which contains an excess of formaldehyde. An alkali (sodium hydroxide) is used to catalyze the polymerization which takes place at a pH of between 8 and 11 and at a temperature of 60°C."

"When the desired degree of polymerization has occurred, the kettle is cooled to about 35°C to inhibit further reaction. The caustic may be neutralized in the kettle with sulfuric acid at this time. The water from this distillation forms a concentrated waste of unreacted materials and low molecular weight resin."

"The batch is dumped, and depending on the specific resin, the batch may be washed several times and a vacuum may be used during the dehydration cycle. It is important that molten resin be handled quickly to avoid its setting up to an insoluble, infusible mass which would become a waste."

b. Schematic of Manufacturing and/or Pollution Control Processes. Check the appropriate box to indicate if a schematic of the manufacturing and/or pollution control processes producing the waste is attached.

Provide, on 8½ x 11" size paper, flow schematics of the manufacturing and/or pollution control processes generating the waste stream starting with the raw materials and ending with the final products. (See example on next page.)



c. Confidentiality Claim. Check the appropriate box to indicate if the substantiation for a confidentiality claim (if portions of the information submitted are confidential) is attached.

Information submitted to the Department in this portion of the form may be claimed as confidential by the applicant. If no claim is made at the time of submission, the Department shall make the information available to the public without further notice.

Claim of confidentiality shall address the following:

- The portions of the information claimed to be confidential.
- The length of time the information is to remain confidential.
- The measures taken to guard undesired disclosure of the information to others.
- The extent to which the information has been disclosed to others and the precautions taken in connection with that disclosure.
- A copy of pertinent confidentiality determinations by EPA or any other federal agency.
- The nature of the substantial harm to the competitive position by disclosure of the information, the reasons it should be viewed as substantial, and the relationship between the disclosure and the harm.

SECTION C. MANAGEMENT OF RESIDUAL WASTE

1. PROCESSING OR DISPOSAL FACILITY(IES)

On the annual report form, Items a through d are repeated twice (to accommodate identification of two facilities). Attach additional sheets if necessary to identify all facilities being utilized.

For each facility identified, include the facility name and address; the municipality and county in which the facility is located; the facility's contact person (name, title, phone, and email address); and the volume of waste shipped to the processing or disposal facility in the previous year.

2. BENEFICIAL USE

Indicate whether the waste has been approved for beneficial use; and include the general permit number or approval number. Also identify the volume of waste beneficially used in the previous year.

SECTION D. CERTIFICATION

In accordance with 25 Pa. Code 287.54(f), information required in "Waste Description", if previously submitted to the Department, may be omitted from the annual report form, provided the generator certifies that this information has not changed from that set forth for the previous year. The generator is to check the appropriate box(es) in this area of the annual report form, identify the form(s) and date(s) of submission on which the information is found, and sign the certification statement.

If none of the "Waste Description" information is omitted, do not check any of the boxes; but do sign the certification statement.

The completed annual report form shall be signed by a responsible official for the facility that generated the waste.

Department of Environmental Protection

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2 East Main Street
Norristown, PA 19401-4915
Phone (484) 250-5960

Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222
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Northeast Regional Office
2 Public Square
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