



**INSTRUCTIONS AND FORMS  
FOR COMPLETING**

**THE 2016 HAZARDOUS WASTE  
REDUCTION PLAN**

**GEORGIA DEPARTMENT OF  
NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION**

The forms are available for download from our Web Site in Microsoft Word format to assist you in completion. Select Hazardous Waste Management: Waste Reduction Plan.

**Completed Forms Should Be Addressed To:**

Land Protection Branch  
Hazardous Waste Compliance Program  
Suite 1054, East Tower  
2 Martin Luther King, Jr. Drive, SE  
Atlanta, Georgia 30334-9000

**Questions:**

404/657-8839

[Linda.Weglewski@dnr.ga.gov](mailto:Linda.Weglewski@dnr.ga.gov)

## TABLE OF CONTENTS

INTRODUCTION .....	1
WHAT IS WASTE REDUCTION .....	1
WHO MUST SUBMIT A HAZARDOUS WASTE REDUCTION PLAN .....	1
WHEN AND WHERE TO FILE.....	1
WHAT MUST BE INCLUDED IN THE PLAN .....	2
OPTIONAL REPORTING.....	2
CONFIDENTIAL BUSINESS INFORMATION.....	3
ADDITIONAL RESOURCES .....	3
HOW TO SUBMIT THE PLAN .....	3
HOW TO COMPLETE THE FORMS	
Format .....	4
Instructions for Completing the Forms .....	4-9
APPENDICES	
Appendix A: Hazardous Waste Reduction Plan Requirement as Cited in the Georgia Hazardous Waste Management Act.....	10
Appendix B: Sample Waste Reduction Policy Statements.....	11
Appendix C: Information Resources.....	12
PLAN FORMS	
FORM I.....	13
FORM II.....	14
FORM III.....	15
FORM IV-A.....	16
FORM IV-B.....	17-18
FORM IV-C.....	19
FORM IV-D.....	20-21
FORM IV-E.....	22
FORM V .....	23
FORM VI .....	24
CONTINUATION FORM .....	25
PROGRESS REPORT .....	26



## INTRODUCTION

In March of 1990 the Georgia General Assembly amended the Georgia Hazardous Waste Management Act to require that large quantity hazardous waste generators develop hazardous waste reduction plans. (See Appendix A)

To assist the Large Quantity Generators (LQGs) in the preparation of the required Hazardous Waste Reduction Plan (**PLAN**) the Environmental Protection Division has developed this instruction booklet and forms to serve as a guide to both the content and format of the **PLAN**. At a minimum, the **PLAN** must analyze the hazardous waste generation at the site, describe and discuss the development and implementation of a hazardous waste reduction program, and evaluate methods and technologies that would further reduce hazardous waste generation.

## WHAT IS WASTE REDUCTION

**Waste reduction** means a practice, other than dewatering, dilution, or evaporation, including changes in production technology, materials, processes, operations, or procedures or use of in-process, in-line, or closed loop recycling according to standard engineering practices, that reduces the environmental and health hazards associated with waste without diluting or concentrating the waste before release, handling, storage, transport, treatment or disposal of the waste.

**Waste reduction does not include** a practice applied to the waste after it is generated and exits a production or commercial operation. Waste reduction does not include such practices as waste burning industrial furnaces, boilers, or cement kilns; transfer of an environmental waste from one environmental medium to another (waste shifting); conversion of a potential waste into another form for use in a production process or operation without serving any substantial productive function; off-site recycling; or any other method of end-of-pipe management of the environmental waste.

## WHO MUST SUBMIT A HAZARDOUS WASTE REDUCTION PLAN

You are a large quantity generator and thus required to submit a Hazardous Waste Reduction Plan if in 2015 your site:

- generated in any single month 1,000 kg. (2,200 lbs.) or more of RCRA hazardous waste;

### OR

- generated in any single month, or accumulated at any time, 1 kg. (2.2 lbs.) of RCRA acute hazardous waste.

If the waste generated in 2015 was produced as a result of a one-time site remediation/cleanup or the facility is in the process of closing, complete Form I and utilize Form II to describe the situation in a few paragraphs and why future waste reduction is not applicable to your facility. You need only submit these two forms in this situation.

## WHEN AND WHERE TO FILE

The **PLAN** must be submitted to the Environmental Protection Division along with your 2015 Hazardous Waste Report no later than March 1, 2016. The **PLAN** and the Hazardous Waste Report should be submitted to the address given on the inside of the cover to this booklet.

## WHAT MUST BE INCLUDED IN THE PLAN

The principal purposes of the **PLAN** are to identify, evaluate, and document ways to reduce the generation of hazardous waste; therefore, the **PLAN** should focus on the hazardous waste generating processes at the site. The **PLAN** must first identify the hazardous waste generated at the site and provide a Process Flow Diagram and corresponding narrative for each process that generates hazardous waste. The remainder of the **PLAN** will explain your waste reduction program by referencing those Processes illustrated on the Process Flow Diagram(s).

For the purpose of the **PLAN**, **Process** is defined as the method, technique, step, event, manufacturing function, unit operation or other descriptive term that describes how and where hazardous waste is generated at the site. Process is the key element of the **PLAN** and is the word that should be used throughout to correlate and connect each component of the **PLAN**.

A Process Flow Diagram and corresponding narrative must be provided for each Process that generates a hazardous waste. This **Process Flow Diagram** should identify the individual processes or facilities and other activities where hazardous waste may be generated. It must include types, amount, and hazardous constituents of hazardous waste generated, and the final disposition of all hazardous waste generated by the Process. It is important that each Process Flow Diagram and corresponding narrative contain as much information as necessary to identify where hazardous waste can be reduced. This may require that a complicated series of drawings, charts, or schematics be submitted. Regardless, the degree of detail is dependent upon the need to characterize your waste reduction activities, including previous waste reduction activities, impediments to waste reduction and future activities. It is not necessarily required or recommended that you provide a detailed Process Flow Diagram if your narrative of the Process(es) is adequately described on FORM II.

The **PLAN** must use the volume of hazardous waste generated in 1989, or most current year data is available, as its baseline for comparing all waste reduction activities. Projections for subsequent years must also be based on hazardous waste activities that occurred in the baseline year. Subsequent reporting years may only require an update of the information submitted in this **PLAN** and a progress report on waste reduction activities. For those facilities which submitted a **PLAN** for 1998 or later, a Progress Report Form is included at the back of this booklet. If waste reduction efforts warrant or significant changes have taken place since 1998 (or any subsequent year a full report was submitted), you should complete all other forms instead of the Progress Report Form.

## OPTIONAL REPORTING

This planning requirement may also promote the exchange of successful waste reduction program elements and activities as well as waste reduction technologies. In addition to what is required in the Law, this guidance document also mentions additional information that may be provided in the **PLAN**. You have the **option** to include additional information on several sections of your plan, including the organization of your waste reduction program (part of FORM V). The optional sections of this guide are clearly designated by the words, "**OPTIONAL**" or "**if data is available.**"

Since the original development of this report, more and more emphasis is being placed on pollution prevention. Prior versions of this report utilized FORM IV-D and FORM IV-E as optional. The information was **required** and the forms were provided as an optional format to be utilized as a convenience. With the pollution prevention initiatives now in the forefront of hazardous waste management, the forms are no longer optional in order to provide a consistent method of information submittal and analysis.

Even though the **PLAN** addresses hazardous waste reduction only, you may also report activities which have reduced, minimized, or eliminated emissions to other environmental media. Examples may include reductions in air emissions, solid waste, or non-hazardous wastewater. These activities may be reported as an addendum to FORM IV-D.

## CONFIDENTIAL BUSINESS INFORMATION

It is recognized that these reporting requirements might reveal confidential business information or in other ways have the potential to affect industries' competitive status. You may not withhold information from the Director of the EPD because it

is confidential. A business which is submitting information to EPD may assert a business confidentiality claim covering the information by placing on or attached to the information a suitable form of notice such as "trade secret" or "confidential." A business must also submit, pursuant to a specific law, such as referenced in the Georgia Hazardous Waste Management Act, O.C.G.A. § 12-8-78, the legal basis for treating such information as confidential.

The filing of such a claim, supported by reference to the legal basis under which confidentiality is claimed, shall be sufficient to render such records prima facie confidential and result in their being treated as confidential until a request is made for such records. In the absence of a claim that records are entitled to protection or confidentiality under the law, such records shall be maintained in files which are open to the public for inspection on request.

## ADDITIONAL RESOURCES

If you have any specific questions regarding these requirements please refer to the references in the Appendices:

- Hazardous Waste Reduction Plan Requirement as cited in the Georgia Hazardous Waste Management Act
- Sample Waste Reduction Policy Statements
- Information Resources

## HOW TO SUBMIT THE PLAN

The **PLAN** for your site must be submitted on the forms included in this booklet. FORM I through FORM VI must be completed. The instructions for completing all forms are on pages 4 - 9. The information requested on these forms is summarized below.

Form	Contents
FORM I	Identification and Certification
FORM II	Description of Process(es) that Generate Hazardous Waste; Process Flow Diagram(s)
FORM III	Waste Reduction Policy Statement; Scope and Objectives
FORM IV-A	Performance Goals for Reductions-By Process
FORM IV-B	Analysis of Hazardous Waste Streams, Accounting System-By Process
FORM IV-C	Potential Hazardous Waste Reduction Options-By Process
FORM IV-D	Previous Hazardous Waste Reduction Activities-By Process
FORM IV-E	Impediments to Hazardous Waste Reduction-By Process
FORM V	Employee Awareness and Training
FORM VI	Institutionalization of the Plan

## HOW TO COMPLETE THE FORMS

### FORMAT

1. Please print or type all information on the forms provided.

2. The identification of your site (name and EPA ID number) must appear on each page, including any addendum pages.
3. Five forms must be completed for each hazardous waste generating Process illustrated on the Process Flow Diagram(s). The forms are: Performance Goals for Reductions (FORM IV-A), Analysis of Hazardous Waste Streams (FORM IV-B), Potential Hazardous Waste Reduction Options (FORM IV-C), Previous Hazardous Waste Reduction Activities (FORM IV-D), and Impediments to Hazardous Waste Reduction (FORM IV-E).
4. Label parts of your **PLAN** exactly as they appear in this instruction booklet, using the same lettering and numbering system.

Be sure to fill in the name of the Process on FORMS IV-A, IV-B, IV-C, IV-D and IV-E. Submit all of FORMS IV as a group. That is, after FORM III you would submit FORMS IV-A through IV-E for Process 1, FORMS IV-A through IV-E for Process 2, ..., repeating those forms for the remaining Processes.

5. When you have completed all the forms, number all of the pages consecutively from beginning to end. The page number should be written so that both the individual page numbers and the total number of pages in your submission appear on the bottom of the page (e.g., page 1 of 20, page 2 of 20, etc.)

If it is necessary to continue information onto supplemental pages, use the "Continuation Form" provided in this booklet.

## FORM I: IDENTIFICATION AND CERTIFICATION

Provide the following information:

Section 1. Site name and location address.

Section 2. Mailing address.

Section 3. Contact.

Provide the name, title, and phone number of the person who should be contacted if questions arise regarding the information provided in this report.

Section 4. NAICS Code(s) which characterize your business.

Enter the same NAICS code(s) that are reported in your 2015 Hazardous Waste Report.

Section 5. Certification.

Do not sign Section 5 on **FORM I** until all forms required for submission are complete, accurate, and attached. After you have completed the **PLAN** as required, read the certification statement, enter your name and title, the date, and sign the form, in accordance with 40 CFR 270.11 of the Georgia Rules for Hazardous Waste Management on signatory authority.

## FORM II: DESCRIPTION OF THE PROCESS(ES) THAT GENERATE HAZARDOUS WASTE AND CORRESPONDING PROCESS FLOW DIAGRAM(S)

The **PLAN** must first identify the hazardous waste generated at the site and provide a Process Flow Diagram for each Process that generates the hazardous waste. FORM II provides the narrative description and pictorial representation for the internal analysis of your hazardous waste streams.

As stated earlier, it is important that each Process Flow Diagram contain as much information as necessary to identify where hazardous waste can be reduced. The degree of detail is dependent upon the need to characterize your waste



reduction activities, including previous waste reduction activities, future activities, and impediments to waste reduction. It is not necessarily required or recommended that you provide a detailed Process Flow Diagram if your narrative description of the Process(es) is adequately detailed.

This form may be completed in **one of two ways**:

- (1) Provide a concise but detailed description of the hazardous waste generating Process(es) and a simplified (more general) Process Flow Diagram

**OR**

- (2) Provide a general narrative description of the hazardous waste generating Process(es) and a detailed Process Flow Diagram

Provide the following information on FORM II:

Section 1. Narrative description.

A written description of each hazardous waste generating Process, using the same terms used to label the components on the Process Flow Diagram. When naming the Process, you can use the actual name of the Process (e.g., "Aerobic Digester", "Semiazide Reactor", "Reverberatory Furnace") or a generic name (e.g., Process A, B, C,... or Process 1, 2, 3, ...).

Section 2. Process Flow Diagram.

A Process Flow Diagram must be provided for each hazardous waste that is generated. Label the components so that they correspond with the narrative description. Each Process Flow Diagram **must, at a minimum**, illustrate the following:

- (1) Blocks or other figures, connected by lines, that show what steps the raw materials go through to produce the hazardous waste.
- (2) Output from the Process
  - Hazardous waste (include waste code) and quantity
  - Hazardous constituents (include type) and quantity
  - Type of finished product only, not quantity
- (3) How the hazardous waste is handled after generation
  - Shipped off-site (including recycle and reuse)
  - Managed on-site (including recycle and reuse)
  - Other. Explain.

### FORM III: WASTE REDUCTION POLICY STATEMENT; SCOPE AND OBJECTIVES

Provide the following information:

#### Section 1. Policy Statement

A statement articulating upper management and corporate support for the generator's hazardous waste reduction plan and a commitment to implement the **PLAN** goals.

Sample policy statements are included in Appendix B. One of these statements may be used and edited to meet your company's intent and to satisfy this requirement.

#### **OPTIONAL INFORMATION:**

The names and titles of the site's senior management and company's corporate management who support and are committed to the implementation of this **PLAN** may be included. It is suggested that these include at least the CEO/Owner, Plant Manager, Chief Financial Officer or similar persons at the site.

#### Section 2. Scope and Objectives

Scope and objectives for achieving reductions in the volume of hazardous waste generated from each Process.

Include a statement that an evaluation of the program's specific goals, technologies, procedures, and personnel training will be performed in order to ensure unnecessary hazardous waste is not generated; include a schedule for this periodic evaluation.

### FORM IV-A: PERFORMANCE GOALS FOR REDUCTIONS-BY PROCESS

Provide the following information for each hazardous waste generating Process illustrated on FORM II:

#### Section 1. Short and Long Term Goals

- (1) Short term goal(s) for achieving reductions in hazardous waste generated from this Process. Include the implementation schedule for these goals, using 1989, or most current year data is available, as the baseline year.
- (2) Long term goal(s) for achieving reductions in hazardous waste generated from this Process. Include the implementation schedule for these goals, using 1989, or most current year data is available, as the baseline year.
- (3) Wherever technically and economically practical, the specific performance goals shall be in numeric terms. If the establishment of numeric goals is not practical, the performance goals shall include a clearly stated list of objectives designed to lead to the establishment of numeric goals as soon as practical.

#### Section 2. Rationale

A rationale for each goal identified in (1) and (2). The rationale shall address any impediments to hazardous waste reduction, including but not limited to the following:

- (1) The lack of technically practical hazardous waste reduction methods, including any anticipated changes in the future;
- (2) Previously implemented reductions of hazardous waste; and
- (3) Economical impracticability of available hazardous waste reduction methods, including any anticipated changes in the future.

**NOTE:** Specific information on previous waste reduction activities and impediments are to be reported on FORMS IV-D and IV-E, respectively.

## FORM IV-B: ANALYSIS OF HAZARDOUS WASTE STREAMS-BY PROCESS

Provide the following information for each hazardous waste generating Process illustrated on FORM II:

"An internal analysis of hazardous waste streams, with periodic hazardous waste reduction assessments, to review individual processes or facilities and other activities where hazardous waste may be generated and identify opportunities to reduce or eliminate hazardous waste generation. Such assessments shall evaluate data on the types, amount, and hazardous constituents of hazardous waste generated, where and why that hazardous waste was generated within the production process or other operations, and potential hazardous waste reduction and recycling techniques applicable to those hazardous wastes." § 12-8-65.1(a)(3) (Appendix A)

### Section 1. Hazardous constituents of the hazardous waste generated

A list of the hazardous constituents of the hazardous waste generated in each Process. Identify the year the data was collected - either the baseline year or most current year data is available.

### Section 2. Hazardous waste generation

A list of the types (names), EPA Waste Code, and amounts of hazardous waste generated from each Process. Identify the year the data was collected - either the baseline year or most current year data is available.

### Section 3. Accounting System

A description of your hazardous waste accounting system. This is the system by which you identify all hazardous waste management costs, including liability, compliance, and oversight costs to the extent technically and economically practical.

#### **OPTIONAL INFORMATION:**

The date of the last waste reduction assessment of the Processes that generate hazardous waste.

## FORM IV-C: POTENTIAL HAZARDOUS WASTE REDUCTION OPTIONS-BY PROCESS

Provide the following information for each hazardous waste generating Process illustrated on FORM II:

### Section 1. Potential reduction options

A list of the hazardous waste reduction and/or recycling options applicable to this process that have not been successfully implemented previously. Provide at least three options **if possible**. These options may include:

- (a) Improved operating/housekeeping;
- (b) Scheduling production (e.g., changing paint colors) to eliminate too-frequent equipment cleaning;
- (c) Process change;
- (d) Equipment change;
- (e) Change in the composition or design of a product;
- (f) Input substitution or input materials modification;
- (g) Segregation of wastes;
- (i) Return a waste into the originating Process as a substitute for a raw material;
- (j) Other. Explain.

#### **NOTE: The reduction options shall not include:**

- (a) Waste burning industrial furnaces, boilers, or cement kilns;
- (b) Transfer of an environmental waste from one environmental medium to another environmental medium (otherwise known as waste shifting);
- (c) Conversion of a potential waste into another form for use in a production process or operation without serving any substantial productive function;
- (d) Off-site recycling;
- (e) Any other method of end-of-pipe management of environmental wastes.

### Section 2. Evaluation of options

Evaluation of these options; include evaluation criteria.

## FORM IV-D: PREVIOUS HAZARDOUS WASTE REDUCTION ACTIVITIES-BY PROCESS

Provide the following information for each hazardous waste generating Process illustrated on FORM II:

Note: Information on previous reduction activities is requested for this reporting year; subsequent years will only request an update of this information.

If data is available, complete the table on **FORM IV-D** on waste reduction activities implemented at the site since 1981 (the first year Georgia required a formal report on hazardous waste handling activities). The information requested includes:

- \* waste reduction activity;
- \* date implemented;
- \* cost to implement the activity;
- \* pay-back time;
- \* percentage reduction achieved in volume;
- \* termination of activity, if applicable.

Waste reduction activities cannot always be implemented successfully at every site where the process is in operation. The attempt to implement a particular waste reduction option should be a part of your historical perspective, even if the activity had to be terminated. **If the activity was terminated**, document the reason for its termination by choosing one of the explanation(s) listed below and enter the letter(s) in the appropriate column on this table.

### Related to source reduction efforts

- (a) Insufficient capital to install new source reduction equipment or implement new source reduction practices;
- (b) Lack of technical information on source reduction techniques applicable to the specific production practice;
- (c) Source reduction not economically feasible; cost savings in waste management or production will not recover the capital investment;
- (d) Concern that product quality may decline as a result of source reduction;
- (e) Technical limitations of the manufacturing operations;
- (f) Permitting burdens;
- (g) Source reduction previously implemented-additional reduction does not appear to be technically feasible;
- (h) Source reduction previously implemented-additional reduction does not appear to be economically feasible;
- (i) Source reduction previously implemented-additional reduction does not appear to be feasible due to permitting requirements;
- (j) Other. Explain.

### Related to closed-loop recycling efforts

- (k) Insufficient capital to install new closed-loop recycling equipment or implement new practices;
- (l) Lack of technical information on closed-loop recycling techniques applicable to the specific production practice;
- (m) Closed-loop recycling is not economically feasible; cost savings in waste management or production will not recover the capital investment;
- (n) Concern that product quality may decline as a result of closed-loop recycling;
- (o) Technical limitations of the manufacturing operations inhibit closed-loop recycling;
- (p) Closed-loop recycling previously implemented-additional recycling does not appear to be technically feasible;
- (q) Closed-loop recycling previously implemented-additional recycling does not appear to be economically feasible;
- (r) Closed-loop recycling previously implemented-additional recycling does not appear to be feasible due to permitting requirements;
- (s) Other. Explain.

## OPTIONAL REPORTING ON REDUCTION ACTIVITIES TO OTHER MEDIA:

As stated earlier, you may report activities which have reduced, minimized, or eliminated the emissions to other environmental media. Examples may include reductions in air emissions, solid waste, or non-hazardous wastewater. These activities may be reported as an addendum to FORM IV-D.

## FORM IV-E: IMPEDIMENTS TO HAZARDOUS WASTE REDUCTION-BY PROCESS

Provide the following information for each hazardous waste generating Process illustrated on FORM II:

### Section 1. Impediments to reductions

FORM IV-E lists possible impediments to hazardous waste reduction. Check all that apply to this Process.

## FORM V: EMPLOYEE AWARENESS AND TRAINING

Provide the following information:

### Section 1. Training outline

An outline of the training and employee awareness activities related to the waste reduction techniques applicable to the hazardous waste generating Process(es). These may include:

- (1) Types of awareness activities and courses provided;
- (2) Schedule of awareness activities and training course offerings;
- (3) Method of documenting staff training.

### Section 2. Waste reduction program (OPTIONAL INFORMATION)

A description of your waste reduction program. This description may include:

- (1) Goals, purposes and responsibilities;
- (2) Strategies for implementing program efforts
  - Employee incentive programs
  - Waste reduction committees or teams
- (3) Waste Reduction Committee(s)
  - Position titles and department assignments of committee members;
  - Rationale for committee composition.

### Section 3. Description of staff organization (OPTIONAL INFORMATION)

An overview of the site's staff including the department titles, the number of employees in each department, and each department's function as it relates to the Processes;

## FORM VI: INSTITUTIONALIZATION OF THE PLAN

Provide the following information:

### Section 1. Institutionalization

An explanation of how the **PLAN** elements will be incorporated into management practices and standard operating procedures.

## APPENDICES

APPENDIX A: Hazardous Waste Reduction Plan Requirement as cited in the Georgia Hazardous Waste Management Act

APPENDIX B: Sample Waste Reduction Policy Statements

APPENDIX C: Information Resources

## APPENDIX A

### GEORGIA HAZARDOUS WASTE MANAGEMENT ACT HAZARDOUS WASTE REDUCTION PLAN CITATION

#### **12-8-65.1. Hazardous waste reduction plans; specific performance goals; biennial progress reports; rules and regulations.**

(a) By not later than March 1, 1992, large quantity hazardous waste generators shall develop hazardous waste reduction plans and submit such plans to the director. At a minimum, the plans shall include:

(1) A written policy articulating upper management and corporate support for the generator's hazardous waste reduction plan and a commitment to implement plan goals;

(2) The scope and objectives of the plan, including the evaluation of technologies, procedures, and personnel training programs to ensure unnecessary hazardous waste is not generated and specific goals for hazardous waste reduction, based on what is technically and economically practical;

(3) Internal analysis of hazardous waste streams, with periodic hazardous waste reduction assessments, to review individual processes or facilities and other activities where hazardous waste may be generated and identify opportunities to reduce or eliminate hazardous waste generation. Such assessments shall evaluate data on the types, amount, and hazardous constituents of hazardous waste generated, where and why that hazardous waste was generated within the production process or other operations, and potential hazardous waste reduction and recycling techniques applicable to those hazardous wastes;

(4) Hazardous waste accounting systems that identify hazardous waste management costs and factor in liability, compliance, and oversight costs to the extent technically and economically practical;

(5) Employee awareness and training programs to involve employees in hazardous waste reduction planning and implementation to the maximum extent feasible;

(6) Institutionalization of the plan to ensure an ongoing effort as demonstrated by incorporation of the plan into management practice and procedures; and

(7) Implementation of technically and economically practical hazardous waste reduction options, including a plan for implementation.

(b) As part of each hazardous waste reduction plan developed under subsection (a) of this Code section, each large quantity hazardous waste generator shall establish specific performance goals for the reduction of hazardous waste. Wherever technically and economically practical, the specific performance goals established under this subsection shall be expressed in numeric terms. If the establishment of numeric performance goals is not practical, the performance goals shall include a clearly stated list of objectives designed to lead to the establishment of numeric goals as soon as practical. Each large quantity hazardous waste generator shall explain the rationale for each performance goal. The rationale for a particular performance goal shall address any impediments to hazardous waste reduction, including but not limited to the following:

(1) The availability of technically practical hazardous waste reduction methods, including any anticipated changes in the future;

(2) Previously implemented reductions of hazardous waste; and

(3) The economic practicability of available hazardous waste reduction methods, including any anticipated changes in the future.

(c) Examples of situations where hazardous waste reduction may not be economically practical as provided for in paragraph (3) of subsection (b) of this Code section include but are not limited to:

(1) For valid reasons of priority, a particular company may choose first to address other more serious hazardous waste reduction concerns;

(2) Necessary steps to reduce hazardous waste are likely to have significant adverse impacts on product quality; or

(3) Legal or existing contractual obligations interfere with the necessary steps that would lead to hazardous waste reduction.

(d) All large quantity hazardous waste generators shall complete biennially a hazardous waste reduction progress report. A biennial progress report shall:

(1) Analyze and quantify progress made, if any, in hazardous waste reduction, relative to each performance goal established under subsection (b) of this Code section; and

(2) Set forth amendments to the hazardous waste reduction plan and explain the need for the amendments.

(e) The board may adopt and promulgate such rules and regulations as may be necessary to further define and implement the provisions of this Code section and Code Section 12-8-65.2, provided such rules and regulations are supplemental to and not in conflict with this Code section and Code Section 12-8-65.2.

Effective date -- Ga. L. 1992, p. 2234, § 5, effective July 1, 1992, reenacted this Code section without change.

Code Commission notes. -- Pursuant to Code Section 28-9-5, in 1990, ". Such" was substituted for "; such" in the middle of paragraph (3) of subsection (a), and a comma was deleted following "programs" in paragraph (5) of subsection (a).

#### **12-8-65.2. Updating plans and reports; technical assistance; information available to public.**

(a) All large quantity hazardous waste generators shall complete and submit to the director a hazardous waste reduction plan on or before March 1, 1992. The plans shall be updated and progress reported on a biennial basis thereafter. The first updated biennial report shall be due in 1994 and shall be submitted to the director as prescribed in rules or regulations adopted by the board.

(b) Subject to available funding, the Georgia Institute of Technology shall provide technical assistance, if requested, to hazardous waste generators in reducing the amount and toxicity of hazardous waste generated, in preparing hazardous waste reduction plans, and in preparing biennial progress reports.

(c) The director shall maintain a copy of each hazardous waste reduction plan and biennial progress report received. This information shall be available to the public at the director's or the division's office.

Effective date -- Ga. L. 1992, p. 2234, § 5, effective July 1, 1992, reenacted this Code section without change.

## APPENDIX B

### SAMPLE WASTE REDUCTION POLICY STATEMENTS

All employees need to be made aware of the need for waste reduction and the contribution that each individual can make. This can best be accomplished by issuing a policy statement on waste reduction. The policy should be issued by senior management and discussed with all employees to ensure commitment. The following are examples of waste reduction policy statements:

1. (Company Name)'s policy is to reduce all hazardous and nonhazardous waste to the minimum levels economically and technically practical and to be in full compliance with all Federal and State regulations;

As both a responsible citizen and (Company Name) employee, each individual is responsible for reducing waste during working hours, for complying fully with all waste reduction program goals established by the company, and for not violating any Federal or State waste regulations;

Employees are urged to come forth with suggestions for further reducing waste in their own work area and in any other area about which they may have ideas;

Mr./Ms. \_\_\_\_\_ has been given overall company responsibility for establishing the training programs and operating procedures required to implement this policy.

2. (Company Name) advocates a clean and safe environment. Its policy is to minimize the generation of hazardous and nonhazardous solid wastes and, insofar as possible, to eliminate air and water pollutants. It seeks to the help of all employees in the achievement of these objectives. Further, (Company Name) wants its employees to be fully aware of all hazardous and potentially dangerous chemicals or equipment used in the work place and to use them in a completely safe manner. Finally, it is (Company Name)'s desire to operate in full compliance with all applicable Federal and State environmental regulations.
3. (Company Name) is committed to excellence and leadership in protecting the environment. In keeping with this policy, our objective is to reduce waste and emissions. We strive to minimize adverse impact on the air, water, and land through excellence in waste reduction. By successfully reducing waste at its source, we can achieve cost savings, increase operational efficiencies, improve the quality of our products and services, operate in full compliance with all Federal and State environmental regulations, and maintain a safe and healthy workplace for our employees. (Company Name) promotes environmentally sound recycling, reuse, and reclamation of all waste streams.
4. (Company Name) is committed to excellence in environmental protection. Our policy is to constantly seek opportunities in source reduction, thereby achieving advantages in cost minimization, operational efficiencies, and quality. This reaffirms our goals to provide a safe and healthy environment for the growth of our employees and neighbors in the community.
5. (Company Name) and its employees are committed to preserving our environment through an innovative waste reduction program. Utilizing the latest waste reduction techniques, employee involvement, and top management support, we pledge to reduce the generation of hazardous and other wastes to the maximum extent possible.
6. At (Company Name), protecting the environment is a high priority. We are pledged to eliminate or reduce, wherever possible: 1) our generation of hazardous and other wastes; 2) our use of toxic substances; and 3) our release of toxic pollutants. When wastes or releases cannot be avoided, we are committed to recycling, treatment, and disposal in ways that minimize any undesirable impacts on the air, water and land.

APPENDIX C  
INFORMATION RESOURCES

For assistance in the completion of the **PLAN**:

Georgia Dept. of Natural Resources  
Environmental Protection Division  
Land Protection Branch  
Hazardous Waste Compliance Program  
Suite 1054, East Tower  
2 Martin Luther King, Jr. Drive  
Atlanta, Georgia 30334-9000  
404-657-8839

For general information on pollution prevention and waste minimization:

Waste Reduction Resource Center for the Southeast  
P. O. Box 27687  
512 North Salisbury Street  
Raleigh, North Carolina 27611-7687  
1-800-476-8686

U. S. Environmental Protection Agency  
Region IV  
Pollution Prevention Unit  
61 Forsyth Street  
Atlanta, Georgia 30303  
404-562-9900

U. S. Environmental Protection Agency  
Pollution Prevention Information Clearinghouse  
401 M Street, SW  
Washington DC 20460  
202-475-7161

Georgia Dept. of Natural Resources  
Sustainability Division  
Suite 450  
7 Martin Luther King, Jr. Drive  
Atlanta, Georgia 30334  
404-651-5120  
800-685-2443 (Outside Atlanta)

Georgia Tech Research Institute  
Environmental Science & Technology  
Laboratory  
Atlanta, Georgia 30332  
404-407-8645





## GEORGIA DEPARTMENT OF NATURAL RESOURCES 2016 HAZARDOUS WASTE REDUCTION PLAN

### FORM I: IDENTIFICATION AND CERTIFICATION

Read the instructions on page 4 before completing this form.

<b>Section 1. Site location and location address.</b>			
Site Name		EPA ID No.  _ _ _ _ _	
Street Address and Number			
City		State	ZIP
<b>Section 2. Mailing address</b>			
Street Address or Box Number			
City		State	ZIP
<b>Section 3. Name, title, and telephone number of the person who should be contacted if questions arise regarding this report.</b>			
Last name, First		Title	Telephone
<b>Section 4. North American Industry Classification System (NAICS) Code(s). Enter the same codes that you entered on the 2013 Hazardous Waste Report.</b>			
A.  _ _ _ _ _	B.  _ _ _ _ _	C.  _ _ _ _ _	D.  _ _ _ _ _
<b>Section 5.</b> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties under the Georgia Hazardous Waste Management Act for submitting false information, including the possibility of fine, imprisonment, or both."			
Last name, first		Title	
Signature			Date of Signature

GEORGIA DEPARTMENT OF NATURAL RESOURCES  
2016 HAZARDOUS WASTE REDUCTION PLAN

**FORM II: DESCRIPTION OF PROCESSES THAT GENERATE HAZARDOUS WASTE  
AND CORRESPONDING PROCESS FLOW DIAGRAM(S)**

**SITE NAME:** \_\_\_\_\_ **EPA ID NO:** \_ \_ \_ \_ \_

Read the instructions on page 5 before completing this form. This form must include Section 1. Narrative Description and Section 2. Process Flow Diagram.

GEORGIA DEPARTMENT OF NATURAL RESOURCES  
2016 HAZARDOUS WASTE REDUCTION PLAN

**FORM III: WASTE REDUCTION POLICY STATEMENT; SCOPE AND OBJECTIVES**

**SITE NAME:** \_\_\_\_\_ **EPA ID NO:** \_ \_ \_ \_ \_

Read the instructions on page 6 before completing this form.

Section 1. Policy Statement

Section 2. Scope and Objectives

GEORGIA DEPARTMENT OF NATURAL RESOURCES  
2016 HAZARDOUS WASTE REDUCTION PLAN

FORM IV-A: PERFORMANCE GOALS FOR REDUCTIONS-BY PROCESS

SITE NAME: \_\_\_\_\_  
PROCESS: \_\_\_\_\_

EPA ID NO: \_ \_ \_ \_ \_

Read the instructions on page 6 before completing this form.

Section 1. Short and long term goals

Section 2. Goal Rationales

GEORGIA DEPARTMENT OF NATURAL RESOURCES  
2016 HAZARDOUS WASTE REDUCTION PLAN

FORM IV-B: ANALYSIS OF HAZARDOUS WASTE STREAMS-BY PROCESS

SITE NAME: \_\_\_\_\_ EPA ID NO: \_ \_ \_ \_ \_

PROCESS: \_\_\_\_\_

Read the instructions on page 7 before completing this form.

Section 1. Hazardous constituents of hazardous waste

<u>Name of the Waste Stream</u>	<u>Hazardous constituents</u>	<u>Amount generated (in lbs.)</u>	<u>Year data collected</u>
---------------------------------	-------------------------------	-----------------------------------	----------------------------

Section 2. Hazardous waste generation

<u>Name of waste stream</u>	<u>EPA Waste Code</u>	<u>Amount generated (in lbs.)</u>	<u>Year data collected</u>
-----------------------------	-----------------------	-----------------------------------	----------------------------

GEORGIA DEPARTMENT OF NATURAL RESOURCES  
2016 HAZARDOUS WASTE REDUCTION PLAN

FORM IV-B: ANALYSIS OF HAZARDOUS WASTE STREAMS-BY PROCESS  
CONTINUED

SITE NAME: \_\_\_\_\_ EPA ID NO: \_ \_ \_ \_ \_

PROCESS: \_\_\_\_\_

Section 3. Accounting system

(1) Hazardous waste accounting system

**OPTIONAL INFORMATION:**

(2) Date of waste reduction assessment of the hazardous waste generating Processes: \_\_\_\_\_

GEORGIA DEPARTMENT OF NATURAL RESOURCES  
2016 HAZARDOUS WASTE REDUCTION PLAN

**FORM IV-C: POTENTIAL HAZARDOUS WASTE REDUCTION OPTIONS-BY PROCESS**

**SITE NAME:** \_\_\_\_\_ **EPA ID NO:** \_ \_ \_ \_ \_

**PROCESS:** \_\_\_\_\_

Read the instructions on page 7 before completing this form. This form must include Section 1. Potential reduction options and Section 2. Evaluation of options.

**GEORGIA DEPARTMENT OF NATURAL RESOURCES  
2016 HAZARDOUS WASTE REDUCTION PLAN**

**FORM IV-D: PREVIOUS HAZARDOUS WASTE REDUCTION ACTIVITIES-BY PROCESS**

**SITE NAME:** \_\_\_\_\_ **EPA ID NO:** \_ \_ \_ \_ \_  
**PROCESS:** \_\_\_\_\_

Read the instructions on page 8 before completing this form.

**If data is available,** provide information for all the activities that apply to this Process.

Waste Reduction Activities			Pay-Back Time	% Volume Reduction	Reason, if Activity Terminated
<u>Source reduction options</u>					
(a) Improved operating/housekeeping practices					
(b) Scheduling to eliminate frequent equipment cleaning					
(c) Process change					
(d) Equipment change					
(e) Change in the composition or design of a product					
(f) Input substitution or input materials modification					
(g) Segregation of wastes					
(h) Other: (1)					
(2)					
(3)					
<u>Recycling options</u>					
(i) Return a waste into the originating Process as a substitute for a raw material					
(j) Other: (1)					
(2)					
(3)					



**GEORGIA DEPARTMENT OF NATURAL RESOURCES  
2016 HAZARDOUS WASTE REDUCTION PLAN**

**FORM IV-D: PREVIOUS HAZARDOUS WASTE REDUCTION ACTIVITIES-BY PROCESS  
CONTINUED**

**SITE NAME:** \_\_\_\_\_ **EPA ID NO:** \_ \_ \_ \_ \_

**PROCESS:** \_\_\_\_\_

Waste Reduction Activities	Date Implemented	Cost to Implement	Pay-Back Time	% Volume Reduction	Reason, If Activity Terminated
<u>Management Activity</u>					
(k) Gained top management support for waste reduction activity					
(l) Implemented employee awareness activity					
(m) Implemented employee training program in waste reduction techniques					
(n) Implemented employee incentive program (rewarding employee ideas and accomplishments that support the hazardous waste reduction program)					
(o) Developed a characterization of your waste generation					
(p) Generated a raw materials or waste cost allocation system					
(q) Other: (1) (2) (3)					

**Optional:** Additional activities which have reduced, minimized, or eliminated the emissions to other environmental media may be reported as an addendum to this form.

**GEORGIA DEPARTMENT OF NATURAL RESOURCES  
2016 HAZARDOUS WASTE REDUCTION PLAN**

**FORM IV-E: IMPEDIMENTS TO HAZARDOUS WASTE REDUCTION-BY PROCESS**

SITE NAME: \_\_\_\_\_ EPA ID NO: \_ \_ \_ \_ \_

PROCESS: \_\_\_\_\_

Read the instructions on page 9 before completing this form.

Check those impediments that apply to this Process.

Related to source reduction efforts

- ☐ (a) Insufficient capital to install new source reduction equipment or implement new source reduction practices;
- ☐ (b) Lack of technical information on source reduction techniques applicable to the specific production practice;
- ☐ (c) Source reduction not economically feasible; cost savings in waste management or production will not recover the capital investment;
- ☐ (d) Concern that product quality may decline as a result of source reduction;
- ☐ (e) Technical limitations of the manufacturing operations;
- ☐ (f) Permitting burdens;
- ☐ (g) Source reduction previously implemented-additional reduction does not appear to be technically feasible;
- ☐ (h) Source reduction previously implemented-additional reduction does not appear to be economically feasible;
- ☐ (i) Source reduction previously implemented-additional reduction does not appear to be feasible due to permitting requirements;
- ☐ (j) Other: Explain.

Related to On-Site Recycling Efforts

- ☐ (k) Insufficient capital to install new closed-loop recycling equipment or implement new recycling practices;\_
- ☐ (l) Lack of technical information on closed-loop recycling techniques applicable to the specific production practice;
- ☐ (m) Closed-loop recycling is not economically feasible; cost savings in waste management or production will not recover the capital investment;
- ☐ (n) Concern that product quality may decline as a result of closed-loop recycling;
- ☐ (o) Technical limitations of the manufacturing operations inhibit closed-loop recycling;
- ☐ (p) Closed-loop recycling previously implemented-additional recycling does not appear to be technically feasible;
- ☐ (q) Closed-loop recycling previously implemented-additional recycling does not appear to be economically feasible;
- ☐ (r) Closed-loop recycling previously implemented-additional recycling does not appear to be feasible due to permitting requirements;
- ☐ (s) Other: Explain.

GEORGIA DEPARTMENT OF NATURAL RESOURCES  
2016 HAZARDOUS WASTE REDUCTION PLAN

FORM V: EMPLOYEE AWARENESS AND TRAINING

SITE NAME: \_\_\_\_\_ EPA ID NO: \_ \_ \_ \_ \_

Read the instructions on page 9 before completing this form. This form must include Section 1. Training outline. Section 2. Waste reduction program description and Section 3. Description of staff organization are optional sections.

**GEORGIA DEPARTMENT OF NATURAL RESOURCES  
2016 HAZARDOUS WASTE REDUCTION PLAN**

**FORM VI: INSTITUTIONALIZATION OF THE PLAN**

**SITE NAME:** \_\_\_\_\_ **EPA ID NO:** \_ \_ \_ \_ \_

Read the instructions on page 9 before completing this form.

GEORGIA DEPARTMENT OF NATURAL RESOURCES  
2016 HAZARDOUS WASTE REDUCTION PLAN

CONTINUATION FORM FOR

FORM \_\_\_\_\_:

SITE NAME: \_\_\_\_\_ EPA ID NO: \_ \_ \_ \_ \_

**GEORGIA DEPARTMENT OF NATURAL RESOURCES  
WASTE REDUCTION PLAN UPDATE**

PROGRESS REPORT

Instructions

**This report may be used if you previously submitted a Waste Reduction Plan to EPD.** Include From I: Identification and Certification with your progress report. If you have not previously submitted a Plan, do not complete this form but complete all other required forms in this package according to instructions. You should complete all other forms if significant changes in your processes or waste reduction efforts warrant.

It is recommended that you review your original plan and discuss each portion of it here. The discussion should include an assessment of its effectiveness, its ease of implementation and any positive or negative outcomes during the last two years. It is also important to include any numerical data or results that support the narrative. Specifically, discuss how you are tracking your performance goals either numerically or subjectively. To enable EPD to perform a meaningful review of the progress reports, EPD recommends that each Section of your previous plan be outlined by Form number, page number and section number. For example:

Form II, page 4 of 12

Form III, page 6 of 12, Section 2

Use additional copies of this form as needed.

Narrative

SITE NAME: \_\_\_\_\_ EPA ID NO: \_ \_ \_ \_ \_