NEW YORK STATE | Department of Environmental Conservation

Hazardous Waste Reduction Plan (HWRP)

Always refer to Part A of the guidance while completing this form:
http://www.dec.ny.gov/chemical/8769.html

I. Cover Sheet

Facility Name –

EPA ID –

Contact Name at Facility -

Title of Contact -

Phone Number(s) –

Email Address –

Fax Number (optional) –

Site Address -

Mailing Address -

Date of Submission -

☐ Check if you hold a Part 373 permit for Treatment, Storage and Disposal.

☐ Check if you are a generator of acute hazardous wastes.

Additional Comments (optional) -

II. **Facility Description**

This section should provide a general description of the facility and operations conducted on-site.

III. **Listing of Facility's Hazardous Waste Streams**

Provide a list of the hazardous waste streams generated by the facility that are subject to the HWRP requirements. See Guidance Document Part A.3 for requirements.

IV. Description of Facility's/Corporation's Waste Reduction Policy

Provide a description of the waste reduction policy, along with the method that will be used to communicate the policy to relevant employees and personnel. The description should include the items listed below, at a minimum. See Part A.9 of the Guidance Document for more details.

- Specific Goals of the Policy
- Statement of Management Commitment
- Team Members Responsible for Implementation of Policy/HWRP

V. Description of Existing/Planned Employee Training Program

Describe the training program that will be used to assure the proper implementation of feasible hazardous waste reduction alternatives. The description should include the items listed below, at a minimum. See Part A.12 of the Guidance Document for more details.

- Format of training (online, video, etc.)
- Frequency of training
- Employees trained (new hires, all staff, etc.)
- Topics covered in training

VI. Description of Any Transference of Hazardous Waste to Other Media (Air, Land, Water)

If any of the waste reduction alternatives selected achieve reductions through transference of hazardous waste to other media, please describe the transference, and the environmental benefits of such transference. If there is no transference to other media for the selected waste reduction alternative, please make note of this. See Part A.14 of the Guidance Document for more details.

VII. Hazardous Waste Stream Narrative

This section must provide a narrative description of the source and disposal method of each hazardous waste stream that is subject to HWRP requirements and listed in Section III above. This section must also provide the activity/production index calculation, costs for management, and an evaluation of the feasibility and practicability for reducing each waste stream.

Total number of waste streams subject to the HWRP: ☐

Note: If you have more than 3 waste streams, please use additional sheet(s) described in section **IX. Attachments on the last page of this fillable form.*

Waste Stream #1

1. Name of waste stream (This name should be consistent with the waste stream name used in the Annual Hazardous Waste Report).

2. *Source description* (Describe the source of generation of the hazardous waste stream [e.g., spent solvent from parts washer, sludge from wastewater treatment system, etc.] Process flow or block diagrams can be used to illustrate sources of waste generation, and should be provided as an appendix. See Part A.4 of the Guidance Document for more details).

3. *Description of disposal method* (Describe the method of disposal [e.g., solvent recovery, incineration, etc.] that is used either on-site or at the destination facility for this waste stream. See Part A.4 of the Guidance Document for more details).

4. *Productivity Index calculation* (Provide an example of the index calculation that will be used to measure changes in economic and other factors that affect the quantity of hazardous waste generated in a specific year compared to the previous year. Examples of economic factors may include number of parts manufactured, sales revenue (adjusted for inflation), labor hours, samples processed, or some other measure of economic activity for a given year. The index will be used in Table 1. See Part A.5 of the Guidance Document for more details).

5. *Cost of managing waste stream* (Provide an estimate of the costs incurred [illegible]

6. *Evaluation of feasibility/practicability of waste reduction options*

6.a Complete an evaluation of the feasibility and practicability of implementing the following hazardous waste reduction alternatives. **Reasons for rejecting any of the alternatives need to be provided**:

- Substitution of non-toxic or less toxic inputs to the production process which result in a reduction in the waste volume or toxicity;
- Re-formulation or re-design of end products to eliminate production inputs or production processes that result in the generation of such waste (i.e., “product re-design”);
- Modification or redesign of production processes, technologies or equipment which result in a reduction in the waste volume or toxicity (e.g., incorporating more efficient equipment or more optimal conditions into process);
- Changes in materials usage, handling and storage practices, including improved inventory control, preventive maintenance, spill and leak prevention and waste segregation, which will reduce the volume or toxicity of such waste;
- Use of closed-loop reclamation, reuse or recycling processes or technologies which directly recycle such wastes back into the production process; and
- Use of on-site or off-site recycling technologies or processes that reduce the amount of such waste that must be treated or disposed (e.g., off-site metals or solvents reclamation)

6.b The feasibility evaluation also needs to include the items listed below.

- List any options that are determined feasible/practicable, along with the associated return on investment. Return on investment can be calculated using a payback period, annualized cost, increased rate of return, or other method. This information also needs to be included on Table 2. (See Part A.8 of the Guidance Document for more details)

- Provide a schedule for implementation of any feasible/practicable options. This information also needs to be included on Table 2. (See Part A.10 of the Guidance Document for more details)

- Describe the method of waste reduction measurement that will be used as the basis for charting trends. Waste reduction measurements should measure changes in waste generation quantities while also accounting for changes in production. (See Part A.11 of the Guidance Document for more details)

Waste Stream #2

1. Name of waste stream (This name should be consistent with the waste stream name used in the Annual Hazardous Waste Report).

2. *Source description* (Describe the source of generation of the hazardous waste stream [e.g., spent solvent from parts washer, sludge from wastewater treatment system, etc.] Process flow or block diagrams can be used to illustrate sources of waste generation, and should be provided as an appendix. See Part A.4 of the Guidance Document for more details).

3. *Description of disposal method* (Describe the method of disposal [e.g., solvent recovery, incineration, etc.] that is used either on-site or at the destination facility for this waste stream. See Part A.4 of the Guidance Document for more details).

4. *Productivity Index calculation* (Provide an example of the index calculation that will be used to measure changes in economic and other factors that affect the quantity of hazardous waste generated in a specific year compared to the previous year. Examples of economic factors may include number of parts manufactured, sales revenue (adjusted for inflation), labor hours, samples processed, or some other measure of economic activity for a given year. The index will be used in Table 1. See Part A.5 of the Guidance Document for more details).

5. *Cost of managing waste stream* (Provide an estimate of the costs incurred [illegible]

6. *Evaluation of feasibility/practicability of waste reduction options*

6.a Complete an evaluation of the feasibility and practicability of implementing the following hazardous waste reduction alternatives. **Reasons for rejecting any of the alternatives need to be provided**:

- Substitution of non-toxic or less toxic inputs to the production process which result in a reduction in the waste volume or toxicity;
- Re-formulation or re-design of end products to eliminate production inputs or production processes that result in the generation of such waste (i.e., “product re-design”);
- Modification or redesign of production processes, technologies or equipment which result in a reduction in the waste volume or toxicity (e.g., incorporating more efficient equipment or more optimal conditions into process);
- Changes in materials usage, handling and storage practices, including improved inventory control, preventive maintenance, spill and leak prevention and waste segregation, which will reduce the volume or toxicity of such waste;
- Use of closed-loop reclamation, reuse or recycling processes or technologies which directly recycle such wastes back into the production process; and
- Use of on-site or off-site recycling technologies or processes that reduce the amount of such waste that must be treated or disposed (e.g., off-site metals or solvents reclamation)

6.b The feasibility evaluation also needs to include the items listed below.

- List any options that are determined feasible/practicable, along with the associated return on investment. Return on investment can be calculated using a payback period, annualized cost, increased rate of return, or other method. This information also needs to be included on Table 2. (See Part A.8 of the Guidance Document for more details)

- Provide a schedule for implementation of any feasible/practicable options. This information also needs to be included on Table 2. (See Part A.10 of the Guidance Document for more details)

- Describe the method of waste reduction measurement that will be used as the basis for charting trends. Waste reduction measurements should measure changes in waste generation quantities while also accounting for changes in production. (See Part A.11 of the Guidance Document for more details)

Waste Stream #3

1. Name of waste stream (This name should be consistent with the waste stream name used in the Annual Hazardous Waste Report).

2. *Source description* (Describe the source of generation of the hazardous waste stream [e.g., spent solvent from parts washer, sludge from wastewater treatment system, etc.] Process flow or block diagrams can be used to illustrate sources of waste generation, and should be provided as an appendix. See Part A.4 of the Guidance Document for more details).

3. *Description of disposal method* (Describe the method of disposal [e.g., solvent recovery, incineration, etc.] that is used either on-site or at the destination facility for this waste stream. See Part A.4 of the Guidance Document for more details).

4. *Productivity Index calculation* (Provide an example of the index calculation that will be used to measure changes in economic and other factors that affect the quantity of hazardous waste generated in a specific year compared to the previous year. Examples of economic factors may include number of parts manufactured, sales revenue (adjusted for inflation), labor hours, samples processed, or some other measure of economic activity for a given year. The index will be used in Table 1. See Part A.5 of the Guidance Document for more details).

5. *Cost of managing waste stream* (Provide an estimate of the costs incurred [illegible]

6. *Evaluation of feasibility/practicability of waste reduction options*

6.a Complete an evaluation of the feasibility and practicability of implementing the following hazardous waste reduction alternatives. **Reasons for rejecting any of the alternatives need to be provided**:

- Substitution of non-toxic or less toxic inputs to the production process which result in a reduction in the waste volume or toxicity;
- Re-formulation or re-design of end products to eliminate production inputs or production processes that result in the generation of such waste (i.e., “product re-design”);
- Modification or redesign of production processes, technologies or equipment which result in a reduction in the waste volume or toxicity (e.g., incorporating more efficient equipment or more optimal conditions into process);
- Changes in materials usage, handling and storage practices, including improved inventory control, preventive maintenance, spill and leak prevention and waste segregation, which will reduce the volume or toxicity of such waste;
- Use of closed-loop reclamation, reuse or recycling processes or technologies which directly recycle such wastes back into the production process; and
- Use of on-site or off-site recycling technologies or processes that reduce the amount of such waste that must be treated or disposed (e.g., off-site metals or solvents reclamation)

6.b The feasibility evaluation also needs to include the items listed below.

- List any options that are determined feasible/practicable, along with the associated return on investment. Return on investment can be calculated using a payback period, annualized cost, increased rate of return, or other method. This information also needs to be included on Table 2. (See Part A.8 of the Guidance Document for more details)

- Provide a schedule for implementation of any feasible/practicable options. This information also needs to be included on Table 2. (See Part A.10 of the Guidance Document for more details)

- Describe the method of waste reduction measurement that will be used as the basis for charting trends. Waste reduction measurements should measure changes in waste generation quantities while also accounting for changes in production. (See Part A.11 of the Guidance Document for more details)

VIII. **Diagram**

Submit a simple flow diagram, or a block diagram, of the unit, process, operation or plant generating your facilities waste stream(s). The diagram must include at a minimum: raw material inputs, major process steps/equipment, and product/waste outputs. Please insert the diagram below ōȅ ŎƒʎŎʅʎƴƎ l·ƴȅǿKŜǊŜ ʎƴʃűKŜ ƎǊl·ȅ ăǇl·ŎŜφ

IX. **Attachments**

Required Tables

An excel document for **tables 1 and 2** can be found to the left of this page as an attachment. You may use this document, or attach your own tables to this PDF. Please click the paperclip icon to edit the excel tables which will save directly to this PDF.

Please check the boxes below once you have completed each table.

☐ Table 1
☐ Table 2

Additional Waste Streams

An additional sheet is provided in the attachments shortcut. If you need to provide additional waste streams as described in section *VII*, please click the paperclip icon.

X. **Certification**

CERTIFICATION

This page should be signed and dated by at least one responsible official or senior staff member. An additional signatory is optional.

"I am a senior facility manager or authorized facility signatory, and am fully authorized to commit financial and/or staff resources to implementing this HWRP. In addition, I am familiar with the requirements of Article 27, Section 0908 of the Environmental Conservation Law. Further, I have personally examined and am familiar with the information contained in this HWRP. The information contained in this HWRP is, to the best of my knowledge and based on reasonable inquiry, true, accurate, and complete."

Optional: You may provide an additional signatory below.