

Clean Harbors Lone Mountain, LLC 40355 S. County Road 236 Waynoka, OK 73680 580.697.3500 www.cleanharbors.com

October 22, 2015

Ms. Hillary Young, Chief Engineer Land Protection Division Oklahoma Department of Environmental Quality 707 N Robinson Road Oklahoma City, Oklahoma, 73101

RE: Submission of RCRA/HSWA Permit Renewal Application

Tulsa Disposal, LLC

EPA ID No. OKD 000632737

Dear Ms. Young:

In accordance with its RCRA/HSWA Permit, Tulsa Disposal, LLC is hereby submitting an application for renewal due to the pending expiration on April 20, 2016 of the 10 year term of the Permit. In seeking a renewed Operations Permit for the Tulsa Disposal facility, the company makes a commitment to continue with the remediation activities currently being conducted and proposed activities.

On April 21, 2006, the DEQ issued the current RCRA Permit, Number OKD00632737 for remediation activities at the site. There are no notable changes to the renewal permit application.

Attached are three (3) copies of the RCRA/HSWA Permit Renewal Application. One (1) copy will be placed in the local Public Library. Should you have any questions, please contact me at 669-800-7958.

Certification: 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 for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Lon R. Stewart Sr. Compliance Manager

TULSA DISPOSAL, LLC RCRA PERMIT RENEWAL APPLICATION TABLE OF CONTENTS Revised October 2015

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TULSA DISPOSAL, LLC TULSA, OKLAHOMA

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INTRODUCTION

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1.0 - INTRODUCTION

1.1 PURPOSE

This document is a permit renewal for Tulsa Disposal, LLC (the Facility) formerly named Safety-Kleen (Tulsa), Inc. and Hydrocarbon Recyclers, Inc. (HRI), located at 5354 West 46th Street South, Tulsa, Oklahoma. This renewal contains changes to the currently-applicable permit resulting from cessation of waste management operations at the Facility in June 1996, and subsequent implementation of corrective measures approved by the Oklahoma Department of Environmental Quality (ODEQ).

1.2 APPLICABLE FEDERAL AND STATE RULES

The Facility permit renewal is submitted to meet the requirements of the Resource Conservation and Recovery Act (RCRA), 40 CFRs 264 and 270, and ODEQ Rules 200.205. The existing Permit Number for the Facility is OKD000632737.

1.3 ORGANIZATION

The permit renewal is organized as follows:

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Tab II	Permit (to be inserted upon ODEQ issuance of the permit)
Tab III	Certification and Signatories
Tab IV	Confidentiality
Tab V	Part-A Application
Tab VI	General Description
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TULSA DISPOSAL, LLC

TULSA, OKLAHOMA

TAB II

FACILITY PERMIT

Issued by the Oklahoma Department of Environmental Quality
In Compliance With
40 CFR 270

ODEQ permit will be inserted here upon issuance.

TULSA DISPOSAL, LLC TULSA, OKLAHOMA

TAB III

CERTIFICATION AND SIGNATORIES

In Compliance With 40 CFR 270.11

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3.0 - CERTIFICATION AND SIGNATORIES ODEQ Item Numbers S-0 to S-11 40 CFR 270. 11

3.1 SIGNATORY TO APPLICATION

The signatory to this application in accordance with 40 CFR 270.11 (a) is:

William Connors, Senior Vice President of Regulatory Compliance Tulsa Disposal, LLC Clean Harbors Environmental Services, Inc. 42 Longwater Drive Norwell, MA 02061

3.2 AUTHORIZED REPRESENTATIVE

By my signature below in Section 3.3, I, William Connors, designate the following individual as authorized representative in accordance with 40 CFR 270.11(b):

Martin Smith, Director, Remediation and Discontinued Operations, Clean Harbors Environmental Services, Inc.

3.3 CERTIFICATION

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 for submitting false information, including the possibility of fine and imprisonment for knowing violations.

William Connors

<u>/0/4/20</u>15 Date

TULSA DISPOSAL, LLC TULSA, OKLAHOMA

TAB IV

CONFIDENTIALITY

In Compliance With 40 CFR 270. 12

Revised October 2015

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4.0 - CONFIDENTIALITY ODEQ Item Numbers I-1 TO I-2 40 CFR 270. 12

Tulsa Disposal, LLC and Clean Harbors Environmental Services, Inc. do not claim any information in this permit renewal as confidential or proprietary.

TULSA DISPOSAL, LLC

TULSA, OKLAHOMA

TAB V

HAZARDOUS WASTE PERMIT APPLICATION – PART A

In Compliance With 40 CFR 270.13

Revised October 2015



United States Environmental Protection Agency

January 2015

RCRA Hazardous Waste Part A Permit Application

Instructions and Form

EPA Form 8700-23

(OMB #2050-0024; Expires 01/31/2017)

Office of Resource Conservation and Recovery (ORCR) (5303P)
Washington, DC 20460

RCRA Hazardous Waste Part A Permit Application Instructions and Form

The Resource Conservation and Recovery Act (RCRA) Section 3005 requires the U.S. Environmental Protection Agency (EPA) to establish permitting requirements applicable to hazardous waste treatment, storage, or disposal facilities (TSDFs). The owner and operator of a TSDF must obtain a permit as required under 40 CFR Part 270. Respondents must submit the information required in the RCRA Hazardous Waste Part A Permit Application [EPA Form 8700-23] (Part A Permit Application) for a first permit application or for a revised permit application. Owners and operators of four types of TSDFs are subject to the requirements: new facilities not yet constructed; newly regulated existing facilities subject to RCRA permitting requirements for the first time; permitted facilities with newly regulated units; and interim status facilities. The EPA needs information contained in the application to identify the person(s) legally responsible for hazardous waste activity, to determine which facilities require permits under more than one program, to assess potential for the facility to pollute nearby ground and surface waters, to identify the timeframe available for the EPA to process permit applications, and to determine the specific wastes a facility is legally allowed to handle for different purposes. The EPA must ensure that hazardous wastes are managed in a way that protects human health and the environment as required by RCRA. This is mandatory reporting by the respondents.

The EPA enters Part A Permit Application information submitted by respondents into RCRAInfo, the EPA national database, and issues permits. The EPA uses this information to identify the universe of regulated waste TSDFs and their specific regulated hazardous waste activities. The EPA also uses the information for tracking and planning and for a variety of enforcement and inspection purposes. Finally, the EPA uses this information to ensure that: hazardous wastes are managed properly; TSDFs are operated and maintained as required; statutory provisions are upheld; and that regulations are adhered to by facility owners and operators.

Section 3007(b) of RCRA and 40 CFR Part 2, Subpart B, which defines the EPA's general policy on public disclosure of information, both contain provisions for confidentiality. However, the Agency does not anticipate that businesses will assert a claim of confidentiality covering all or part of the Part A Permit Application. If such a claim were asserted, the EPA must and will treat the information in accordance with the regulations cited above. The EPA also will assure that the information collection complies with the Privacy Act of 1974 and OMB Circular 108.

Estimated Burden: Facilities - The reporting burden associated with the Part A Permit Application requirements is estimated to average 12 hours for a facility to prepare and submit a new or revised Part A Permit Application and associated documentation. The recordkeeping burden is estimated to average 4 hours for a facility to read the regulations. State Agencies - The reporting burden associated with the Part A Permit Application requirements is estimated to average 2 minutes for a State agency to notify an applicant of a deficiency in a new Part A Permit Application. The recordkeeping burden is estimated to average 5 hours for a State agency to review a new or revised Part A Permit Application and associated documentation, and enter the permit information into the RCRAInfo database.

To comment on the EPA's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, the EPA has established a public docket for the Information Collection Request (ICR) under Docket ID Number EPA-HQ-RCRA-2014-0296, which is available for online viewing at www.regulations.gov, or in person viewing at the RCRA Docket in the EPA Docket Center (EPA/DC), EPA West, Room B102, 1301 Constitution Avenue, NW, Washington, D.C. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the RCRA Docket is (202) 566-0270. An electronic version of the public docket is available at www.regulations.gov. This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select "search;" then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for the EPA. Please include the EPA Docket ID Number EPA-HQ-RCRA-2014-0296 and OMB Control Number 2050-0024 in any correspondence.

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THE RCRA HAZARDOUS WASTE PART A PERMIT APPLICATION

INTRODUCTION

The Resource Conservation and Recovery Act (RCRA) requires anyone who owns or operates a facility where hazardous waste is treated, stored, or disposed to have a RCRA hazardous waste permit issued by the U.S. Environmental Protection Agency (EPA). This booklet is designed to help you determine if you are subject to RCRA hazardous waste permitting requirements. The instructions contained in this booklet will assist you in starting the permitting process by completing and submitting a RCRA Hazardous Waste Part A Permit Application [EPA Form 8700-23] (Part A Permit Application) or in modifying your hazardous waste permit by submitting a revised application.

There are two parts to a RCRA Hazardous Waste Permit Application – Part A and Part B. Part A of the RCRA Hazardous Waste Permit Application consists of EPA Form 8700-23 (includes both the RCRA Subtitle C Site Identification Form and the Hazardous Waste Permit Information Form), along with maps, drawings, and photographs, as required by 40 CFR 270.13. Part B of the RCRA hazardous waste permit application contains detailed, site-specific information. There is no form for the Part B Permit Application; rather, the Part B Permit Application must be submitted in narrative form and contain the information described in applicable sections of 40 CFR 270.14 through 270.27.

Although this booklet contains information and instructions for completing a Part A Permit Application, it should not be considered a substitute for the regulations in Title 40 of the Code of Federal Regulations (40 CFR). Rather, this booklet serves as a supplement to the regulations and provides additional information not contained in 40 CFR. As an owner or operator of a hazardous waste treatment, storage, or disposal facility, you are responsible for learning and complying with all the requirements that apply to you and the operations at your facility.

NOTE

In addition, remember that this booklet and the regulations in 40 CFR address only the Federal hazardous waste program. Many States may have hazardous waste permitting requirements that differ from the Federal requirements; those States may use EPA Form 8700-23 for the Part A Permit Application submission or they may use a similar State form that requires information not requested in the EPA form. Again, it is your responsibility to make sure that you have completed and submitted all forms required under the Federal or your State program.

WHAT'S NEW

Below are a list of changes to the RCRA Hazardous Waste Part A Permit Application Instructions and Forms.

CLARIFIED THE DEFINITION OF LARGE QUANTITY GENERATOR (LQG)

Although current RCRA regulations do not specifically define the term "large quantity generator" (LQG), they do define the terms "conditionally exempt small quantity generator" (CESQG) and "small quantity generator" (SQG). Thus, a LQG is a generator that is not a CESQG or SQG. For purposes of clarity, the definition of LQG has been revised to describe all those situations where a generator would be a LQG.

CLARIFIED THE DEFINITION OF SMALL QUANTITY GENERATOR (SQG)

A SQG is defined at 40 CFR 260.10 as a site that generates less than 1,000 kilograms (kg; 2,200 pounds [lbs]) of hazardous waste in a calendar month. However, there are other situations where a generator could generate small amounts of acute hazardous waste listed in sections 261.31 or 261.33(e); and any residues or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous wastes listed in sections 261.31 or 261.33(e) and still maintain its regulatory status as a SQG. Therefore, for purposes of clarity, the definition of SQG has been revised to describe all those situations where a generator would continue to be a SQG. The EPA plans to make the appropriate conforming change to the outdated definition of SQG at 40 CFR 260.10 in the future.

CLARIFIED THE DEFINITION OF CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR (CESQG)

A CESQG is defined at 40 CFR 261.5(a) as a site that generates less than or equal to 100 kg (220 lbs) of hazardous waste in a calendar month. However, as found in 40 CFR 261.5(e), a generator also may generate small amounts of acute hazardous waste listed in sections 261.31 or 261.33(e); and any residues or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous wastes listed in sections 261.31, or 261.33(e) and still maintain its regulatory status as a CESQG. Therefore, for purposes of clarity, the definition of CESQG has been revised to describe all those situations where a generator would continue to be a CESQG.

WHERE TO GET HELP

We realize that the regulations are complex. Although we are not providing reprints of the 40 CFR regulations in this booklet, copies of the Federal regulations are available from the EPA (see below). A list of State and EPA Regional Office addresses, contact names, telephone numbers, and e-mail addresses are located at: http://www.epa.gov/osw/inforesources/data/form8700/contact.pdf.

In addition to those contacts, there are several other sources available to help with your questions and provide information on EPA regulations:

RCRA FREQUENTLY ASKED QUESTIONS

This allows users to find answers to commonly asked questions that cover a wide range of RCRA issues and topics. Find at: http://waste.supportportal.com/ics/support/default.asp?deptID=23023.

RCRA ONLINE

The RCRA Online database is designed to enable users to locate documents, including publications and other outreach materials that cover a wide range of RCRA issues and topics. Find at: http://www.epa.gov/rcraonline.

RCRA REGULATIONS

The Federal regulations can be found at: http://www.gpo.gov/fdsys/.

COMPLIANCE ASSISTANCE CENTERS

The EPA has sponsored partnerships with industry, academic institutions, environmental groups, and other agencies to launch sector-specific Compliance Assistance Centers (Centers). Each Center addresses real world issues in understandable language for you to understand Federal environmental requirements and how to save money through pollution prevention techniques. Visit the Compliance Assistance Centers at: http://www.assistancecenters.net.

EPA NATIONAL COMPLIANCE ASSISTANCE CLEARINGHOUSE

The Compliance Assistance Clearinghouse is a comprehensive source of compliance assistance information and resources. Use links to Federal, State, local, and other compliance assistance providers to find the tools you need. Visit the Compliance Assistance Clearinghouse at: http://www.epa.gov/compliance/assistance/index.html.

EPA SMALL BUSINESS OMBUDSMAN OFFICE

1-800-368-5888.

YOUR TRADE ASSOCIATION

EXISTING FACILITIES

Existing hazardous waste management facilities are those hazardous waste treatment, storage, or disposal facilities (TSDFs) which were in operation or for which construction had commenced on or before November 19, 1980, or which were in existence on the effective date of the statutory or regulatory amendments that render the facility subject to the requirement to obtain a RCRA permit. RCRA established a procedure for obtaining interim status that allows these existing facilities to continue operating until a final hazardous waste permit is issued.

You must submit a Part A Permit Application completing all forms included in this booklet. If you do not file a Notification of RCRA Subtitle C Activity and complete the Part A Permit Application by the deadlines specified in the "<u>WHEN SHOULD I FILE MY PERMIT APPLICATION?</u>" section of these instructions, you will be required by law to halt your operations until a RCRA hazardous waste permit is issued.

Facility owners or operators with interim status are treated as having been issued a permit until the EPA reviews the Part B Permit Application and issues a RCRA hazardous waste permit. You may submit your Part B Permit Application voluntarily; however, you are not required to submit it until it is requested by the EPA. You will then have up to six months to submit the Part B Permit Application.

NEW FACILITIES

New hazardous waste management facilities are those hazardous waste TSDFs which were not in operation or for which construction had not commenced on or before November 19, 1980. Owners or operators of new hazardous waste management facilities must submit both Parts A and B of the RCRA Hazardous Waste Permit Application at least 180 days before physical construction of the facility is expected to commence. In addition, these owners or operators are not allowed to begin physical construction of the new facility or to treat, store, or dispose of hazardous wastes until receiving a RCRA hazardous waste permit. As such, new facilities do not receive interim status. In addition, new facilities are those facilities that are newly subject to the requirement to obtain a RCRA hazardous waste permit (e.g., through the EPA's promulgation of a new hazardous waste listing). An application for a permit may be submitted any time after promulgation of those standards in 40 CFR subjecting the facility to hazardous waste permitting requirements.

Most State governments are authorized by the EPA to administer hazardous waste management programs in lieu of the Federal RCRA program. You should contact your State hazardous waste management agency to determine any additional State requirements. You will need to comply with the specific permit application requirements of that State.

The following instructions provide specific information for completing and submitting a Part A Permit Application using the forms included in this booklet. The instructions also provide general information for completing a Part B Permit Application. If, after reading the instructions, you have any questions regarding the RCRA hazardous waste permit application process, contact your State Representative who can answer your questions and help you understand the Federal and State requirements that apply to you. A list of State contacts is available at:

http://www.epa.gov/osw/inforesources/data/form8700/contact.pdf.

FIRST PART A SUBMISSION

Both new and existing facilities that treat, store, or dispose of regulated hazardous waste are required to submit a Part A Permit Application in accordance with the deadlines set forth in the "WHEN SHOULD I FILE MY PERMIT APPLICATION?" section of these instructions. Owners or operators of facilities that have not previously submitted a Part A Permit Application will need to submit a permit application for the first time. Examples of facilities making their first Part A submission are new facilities or existing

facilities that become newly subject to the requirement to have a RCRA hazardous waste permit. You should mark the box in Item 1 of the RCRA Subtitle C Site Identification Form (Site ID Form) to indicate as a component of a first RCRA Hazardous Waste Part A Permit Application. This booklet contains information and item-by-item instructions for completing both the Site ID Form and the Hazardous Waste Permit Information Form.

REVISED PART A SUBMISSION

There are several conditions under which a facility that has previously submitted a Part A Permit Application must revise that first submission to reflect changes that have occurred at the facility. Both facilities operating under interim status and facilities operating under a RCRA hazardous waste permit may find it necessary to revise their Part A Permit Application. You should mark the box in Item 1 of the Site ID Form to indicate as a component of a revised RCRA Hazardous Waste Part A Permit Application.

If the owner or operator of this facility has changed since the facility last submitted the Part A Permit Application, be sure to submit a Revised Part A Permit Application. The conditions requiring submission of a Revised Part A Permit Application are summarized in the "HOW TO FILE A RCRA HAZARDOUS WASTE PERMIT APPLICATION" section of this booklet. There is also item-by-item instructions for completing both the Site ID Form and the Hazardous Waste Permit Information Form contained in this booklet.

DETERMINING IF YOU MUST FILE

WHO MUST FILE A RCRA HAZARDOUS WASTE PERMIT APPLICATION?

The Resource Conservation and Recovery Act of 1976 (RCRA), as amended, requires each person owning or operating a facility for the treatment, storage, or disposal of regulated hazardous waste to have a RCRA hazardous waste permit. This includes individuals, trusts, firms, joint stock companies, Federal agencies, corporations (including government corporations), partnerships, associations, States, municipalities, commissions, interstate bodies, other political subdivisions of a State, or Indian tribes (or an authorized Indian tribe organization). If you treat, store, or dispose of regulated hazardous waste without obtaining a permit, you may be subject to a civil or criminal penalty.

Both new and existing facilities that treat, store, or dispose of regulated hazardous waste are required to submit a RCRA Hazardous Waste Part A Permit Application [EPA Form 8700-23] (Part A Permit Application) as described in 40 CFR Part 270. Four types of facilities are required to submit the Part A Permit Application: new facilities not yet constructed; newly regulated existing facilities subject to RCRA permitting requirements for the first time; permitted facilities with newly regulated units; and interim status facilities.

In an instance where the State may have a newly regulated unit, a Part A Permit Application is required. Adding new units for treating, storing, and disposing of waste creates a change to the facility (be it an existing facility or interim status facility) which would require a Revised Part A Permit Application, as does a major permit modification.

Contact your State if you have questions about the applicability of the Part A Permit Application form to your facility. A list of Part A Permit Application contacts can be found at: http://www.epa.gov/osw/inforesources/data/form8700/contact.pdf.

HOW DO I KNOW IF I HANDLE A REGULATED HAZARDOUS WASTE?

OFF-SITE FACILITIES

Owners or operators of off-site facilities that treat, store, or dispose of solid wastes, as defined by 40 CFR 261.2, are encouraged to obtain information on the solid wastes they receive from generators. If the generators will not supply this information, you are still responsible for determining if the solid wastes you handle are also hazardous wastes that are regulated by RCRA. To do so, you should follow the procedures for on-site facilities that are described below.

ON-SITE FACILITIES

Generators who treat, store, or dispose, on-site, their own solid wastes (as defined by $\underline{40 \text{ CFR } 261.2}$), should employ the following procedures in determining if their solid wastes are hazardous wastes that are regulated by RCRA. This determination is made as follows:

- First, you need to determine if the solid waste handled is excluded from regulation under RCRA. The list of exclusions can be found in the regulation entitled "Identification and Listing of Hazardous Waste," 40 CFR 261.4. If the solid wastes handled are excluded, a RCRA hazardous waste permit is not needed to treat, store, or dispose of these solid wastes. If the solid waste handled is not excluded by 40 CFR 261.4, you need to determine if the solid waste handled is a hazardous waste that is regulated under RCRA. As described below, the EPA regulates a solid waste as a hazardous waste by specifically listing it as a hazardous waste or by assigning it a generic hazardous waste code because it possesses any of the four hazardous waste characteristics.
- If the solid waste handled is not excluded by 40 CFR 261.4, you need to determine if it is a hazardous waste that is listed in 40 CFR Part 261, Subpart D, "Lists of Hazardous Wastes." If you own or operate a facility where listed hazardous waste is treated, stored, or disposed, you are subject to regulation and must file a RCRA Hazardous Waste Permit Application, unless the hazardous waste has been exempted as described below.
- If the solid waste handled is not listed in 40 CFR Part 261, Subpart D, the solid waste may still be
 a hazardous waste if it possesses certain characteristics or contains certain contaminants. These
 characteristics and contaminants are described in 40 CFR Part 261, Subpart C, "Characteristics of
 Hazardous Waste." A determination that a solid waste possesses these characteristics or
 contaminants may be made based on either:
 - 1. Your knowledge of the hazard characteristic of the solid waste in light of the materials or processes used; or
 - 2. The results of testing the solid waste according to the methods in 40 CFR Part 261, Subpart C.

If you own or operate a facility where characteristic hazardous waste is treated, stored, or disposed, you are subject to regulation and must file a RCRA Hazardous Waste Permit Application, unless the hazardous waste has been exempted as described below.

• If the hazardous waste that you handle has been exempted under 40 CFR 261.5 or 40 CFR 261.6(a)(3), you are not subject to regulation and do not need to file a RCRA Hazardous Waste Permit Application.

In addition, certain other persons who handle hazardous waste are not required to obtain a RCRA hazardous waste permit. They are:

- Generators who accumulate their own hazardous waste on-site for less than 90 days as provided in 40 CFR 262.34;
- Farmers who dispose of hazardous waste pesticides from their own use as provided in 40 CFR 262.70; and
- Owners and operators of totally enclosed treatment facilities as defined in 40 CFR 260.10.

HOW TO FILE A RCRA HAZARDOUS WASTE PERMIT APPLICATION

As noted above, there are two parts to the RCRA Hazardous Waste Permit Application – Part A and Part B. As required by 40 CFR 270.13, the Part A Permit Application defines the processes to be used for treatment, storage, and disposal of hazardous wastes; the design capacity of such processes; and the specific hazardous wastes to be handled at a facility. The RCRA Hazardous Waste Part A Permit Application [EPA Form 8700-23] (Part A Permit Application) is submitted by completing the two forms included in this booklet: the RCRA Subtitle C Site Identification Form (Site ID Form) and the Hazardous Waste Permit Information Form.

The Part A Permit Application serves as a vehicle through which an owner or operator may submit facility-specific information to the regulatory authority and keep this information current. As specified by 40 CFR 270.14 through 270.27, the Part B Permit Application requires detailed site-specific information such as geologic, hydrologic, and engineering data. The Part B Permit Application is submitted in narrative form.

HOW MANY PERMIT APPLICATIONS SHOULD I FILE?

You need submit only one RCRA Hazardous Waste Permit Application (Part A and Part B) per facility, provided that you describe all of the activities at that facility. If you conduct hazardous waste activity(ies) at more than one facility, you must submit a separate RCRA Hazardous Waste Permit Application (Part A and Part B) for each facility location. You also must have an EPA Identification Number for each of the facilities.

NOTE

Only one RCRA Hazardous Waste Permit Application is required per facility. At some point, you may be required to submit revised applications to update your first Part A Permit Application submission. At any given time, the first submission and any subsequent revised submissions represent the Part A Permit Application for your facility.

CAN I REQUEST THAT THIS INFORMATION BE KEPT CONFIDENTIAL?

All information submitted in this form will be subject to public disclosure, to the extent provided by the Freedom of Information Act, 5 U.S.C. Section 552, and the EPA's Business Confidentiality Regulations, 40 CFR Part 2 and 40 CFR 270.12. Claims of confidentiality for the name and address of any permit applicant or permittee will be denied. Persons filing this form may make claims of confidentiality for certain information. Such claims must be clearly indicated by submitting an attachment listing the specific information for which confidential treatment is requested at the time of filing. This attachment must include a written substantiation of the claim for confidentiality that answers the following questions:

- Which sections of the Part A Permit Application form contain the information you claim is entitled to confidential treatment?
- For how long is confidential treatment desired for the information?
- What measures have you taken to guard against undesired disclosure of the information to others?
- To what extent has the information been disclosed to others, and what precautions have been taken in connection with that disclosure?
- Has the EPA or any other Federal agency made a pertinent confidentiality determination? If so, include a copy of such determination or reference to it, if available.
- Will disclosure of the information be likely to result in substantial harmful effects on your competitive position? If so, what would those harmful effects be and why should they be viewed as substantial? Explain the causal relationship between disclosure and the harmful effects.

Information covered by confidentiality claim and the above substantiation will be disclosed by the EPA only to the extent and by means of the procedures set forth in 40 CFR Part 2 and 40 CFR 270.12.

If no claim of confidentiality or no substantiation accompanies the information when it is submitted, the EPA may make the information available to the public without further notice to the submitter.

WHERE SHOULD I SEND MY COMPLETED PERMIT APPLICATION?

You should submit the RCRA Hazardous Waste Permit Application to your State or EPA Regional contact. A list of State Contacts can be found at:

http://www.epa.gov/osw/inforesources/data/form8700/contact.pdf.

Many States use the form included at the end of this booklet; some also require additional information. Other States require that you complete and submit a State-specific form. The Contact list indicates which form to use. Even if you use the included form, you should check with your State to determine if you need to submit additional information. Also, contact your State if you have any questions about your submission.

WHEN SHOULD I FILE MY PERMIT APPLICATION?

As required by 40 CFR 270.10, the deadlines for filing RCRA Hazardous Waste Permit Applications are:

EXISTING FACILITIES

Under 40 CFR 270.10(e), existing facilities must submit a Part A Permit Application no later than six months following the publication of regulations that subject the facility to the requirement to have a RCRA hazardous waste permit.

NEW FACILITIES

Under 40 CFR 270.10(f), new facilities must submit both Part A and Part B Permit Applications at least 180 days before commencing physical construction of the facility. A permit must be received before construction begins.

WHEN SHOULD MY PERMIT APPLICATION BE REVISED?

FACILITIES OPERATING UNDER INTERIM STATUS

In accordance with 40 CFR 270.72(a), the owner or operator of a facility operating under interim status must submit a Revised Part A Permit Application at the following times:

- Prior to treating, storing, or disposing of new hazardous wastes not previously identified in the
 facility's Part A Permit Application. Similarly, when the EPA (or a State with an authorized RCRA
 program) promulgates a rule listing or identifying new hazardous wastes, facilities managing
 these wastes must revise their Part A Permit Application to reflect this activity.
- Prior to increasing the design capacity of the processes used at the facility. The EPA Regional Administrator (or the State Director, for an authorized State) must approve changes in capacity before they take effect at the facility.
- Prior to changing existing processes or adding new processes for treating, storing, and disposing
 of hazardous wastes at the facility. Changes in treatment, storage, and disposal practices must
 be approved by the Regional Administrator (or State Director) before they are implemented by a
 facility.
- Prior to undergoing a change in ownership or operational control of a facility.
- Whenever facility changes occur in accordance with an interim status corrective action order issued by the EPA, an authorized State, or by a court in a judicial action brought by the EPA or the State.
- When a facility adds units for the treatment, storage, and disposal of hazardous waste that are newly regulated by the EPA or a State. A Revised Part A Permit Application must be submitted on or before the date on which the unit becomes subject to the new requirements.

Changes in the quantity of hazardous waste currently specified in the first Part A Permit Application can be made without submitting a Revised Part A Permit Application, provided the quantity does not exceed the design capacities of the processes specified in the first Part A Permit Application or a subsequent Part A Permit Application.

Failure to furnish all information required to process a RCRA Hazardous Waste Permit Application is grounds for termination of interim status.

FACILITIES OPERATING UNDER A RCRA HAZARDOUS WASTE PERMIT

Owners or operators of facilities operating under a RCRA Hazardous Waste Permit may modify their permit at any time, in accordance with the specific requirements in 40 CFR 270.42. Appendix I to 40 CFR 270.42 divides the various types of permit modifications into Classes 1, 2, and 3, based on the complexity of facility changes necessitating a permit modification. Class 1 modifications are minor changes that keep the permit current with changes that occur to the facility or its operation. Class 2 and 3 modifications involve more significant changes in facility operations.

In all cases when a facility owner or operator requests a permit modification, however, he or she must submit the information required in the Part A Permit Application (in 40 CFR 270.13) as part of the modification submittal.

Finally, under 40 CFR 270.10(h), facilities with a RCRA Hazardous Waste Permit must submit a new application (Part A and Part B) at least 180 days prior to the expiration date of the permit.

INSTRUCTIONS FOR FILLING OUT THE RCRA SUBTITLE C SITE IDENTIFICATION FORM (SITE ID FORM)

WHO MUST SUBMIT THIS FORM

All sites required to submit any of the following must submit the RCRA Subtitle C Site Identification Form (Site ID Form):

- Initial Notification of Regulated Waste Activity;
- Subsequent Notification of Regulated Waste Activity;
- First RCRA Hazardous Waste Part A Permit Application;
- Revised RCRA Hazardous Waste Part A Permit Application;
- Hazardous Waste Report;
- Notification for eligible academic entities opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K (if in an eligible State); and
- Notification for facilities managing hazardous secondary material pursuant to 40 CFR 260.42 (if in an eligible State).

Some States have requirements in addition to, or that are different from the Federal requirements. To obtain the appropriate forms or ask questions, refer to a list of contacts at: http://www.epa.gov/epawaste/inforesources/data/form8700/contact.pdf.

The list will tell you whether the Federal form or a State form is used, who to contact, and where to mail the completed form.

PURPOSE OF THIS FORM

The Site ID Form provides site-specific information about your facility and is used to obtain an EPA Identification Number under the RCRA Program. The Site ID Form also provides updated information for items that have changed at your site and verifies the information for those items that remain unchanged.

HOW TO FILL OUT THIS FORM

Complete the following Site ID Form items, as applicable to your facility:

- Item 1 your reason for submitting the form
- Item 2 your site's EPA Identification Number
- Item 3 the name of your site
- Item 4 the physical location of your site
- Item 5 the land type of your site

- Item 6 the North American Industry Classification System (NAICS) code(s) for your site
- Item 7 the mailing address for your site
- Item 8 name, title, address, phone number, fax, and e-mail of a contact person at your site
- Item 9 name, address, and phone number of the legal owner(s) and name of the operator(s) of your site
- Item 10 your site's regulated waste activities (enter all that apply)
- Item 11 the description of hazardous waste
- Item 12 your site's hazardous secondary material activity, if you manage any
- Item 13 additional comments on Items 1 12
- Item 14 certification that the information you provided throughout the form is truthful, accurate, and complete
- Addendum to the Site Identification Form notification of hazardous secondary material activity

Type or print, in black ink, all items except the Signature box in Item 14. In Item 14, provide the required ink signatures. Signatures must be original. Stamped or photocopied signatures are not acceptable. Enter your site's EPA Identification Number in the top left-hand corner on all pages of the form; for an Initial Notification for this site, leave the EPA identification Number blank. Use Item 13 – Comments to clarify or provide additional information for any entry. When entering information in the comments section, enter the item number and box letter to which the comment refers. If you must use additional sheets for comments, enter your site's EPA Identification Number in the top left-hand corner of each sheet.

ITEM-BY-ITEM INSTRUCTIONS

ITEM 1 - REASON FOR SUBMITTAL

Place an "X" in the appropriate box(es) to indicate whether this form is your Initial Notification (i.e., this is your first time submitting site identification information / to obtain an EPA Identification Number for this location); a Subsequent Notification (to update your site identification information); a component of a First or a Revised Hazardous Waste Part A Permit Application; or a component of the Hazardous Waste Report.

TO PROVIDE AN INITIAL NOTIFICATION (FIRST TIME SUBMITTING SITE IDENTIFICATION INFORMATION / TO OBTAIN AN EPA IDENTIFICATION NUMBER FOR THIS LOCATION)

- If your waste activity is regulated under Subtitle C of the Resource Conservation and Recovery
 Act (RCRA) and the rules promulgated pursuant to the Act (specifically 40 CFR Parts 260-299),
 you must submit this form to notify the appropriate State or EPA Regional Office of your
 regulated waste activities and obtain an EPA Identification Number.
- If you are an eligible academic entity opting into 40 CFR Part 262, Subpart K for managing laboratory hazardous wastes AND you have never before submitted site identification information, you must submit this form to notify the appropriate State or EPA Regional Office of your activities. Note: You <u>must</u> check with your State to determine if you are eligible to manage laboratory hazardous waste pursuant to 40 CFR Part 262, Subpart K in order for you to notify.

• If you will begin managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25) AND you have never before submitted site identification information, you must submit this form, pursuant to 40 CFR 260.42, to notify the appropriate State or EPA Regional Office of your activities. Note: You must check with your State to determine if you are eligible to manage hazardous secondary material under these exclusions in order for you to notify.

TO PROVIDE A SUBSEQUENT NOTIFICATION (TO UPDATE SITE IDENTIFICATION INFORMATION FOR THIS LOCATION)

- You <u>must</u> use this form to submit a subsequent notification if your site already has an EPA Identification Number and you wish to change information (e.g., generator status, new site contact person, new owner, new mailing address, new regulated waste activity, etc.).
- If you have previously submitted site identification information and are an eligible academic entity opting into or withdrawing from 40 CFR Part 262, Subpart K for managing laboratory hazardous wastes, you must use this form. Note: You <u>must</u> check with your State to determine if you are eligible to manage laboratory hazardous waste pursuant to 40 CFR Part 262, Subpart K in order for you to notify.
- If you have previously submitted site identification information and are notifying (or renotifying) that you will begin managing, are managing, or have stopped managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25), you must submit this form, pursuant to 40 CFR 260.42, to notify the appropriate State or Regional Office of your activities. Note: You must check with your State to determine if you are eligible to manage hazardous secondary material under these exclusions in order for you to notify.

AS A COMPONENT OF A FIRST RCRA HAZARDOUS WASTE PART A PERMIT APPLICATION

If your site is planning to treat, store, or dispose of hazardous waste on-site in a unit that is not exempt from obtaining a hazardous waste permit, you must submit this form as part of the Part A Permit Application. Also, if the activity at this site (treatment, storage, or disposal) became newly regulated under RCRA Subtitle C and the rules promulgated pursuant to the Act (specifically 40 CFR Parts 260-299), you must submit this form as part of the Part A Permit Application.

AS A COMPONENT OF A REVISED RCRA HAZARDOUS WASTE PART A PERMIT APPLICATION

If you must submit a Revised Part A Permit Application to reflect changes that have occurred at your site, you must submit this form as part of your Revised Part A Permit Application. Examples of site changes requiring a Revised Part A Permit Application include managing new wastes not identified in the first submission of the form or changes to existing waste treatment processes. When submitting a Revised Part A Permit Application, please include the Amendment Number in the appropriate space.

AS A COMPONENT OF THE HAZARDOUS WASTE REPORT (IF MARKED, SEE SUB-BULLET BELOW)

If you are required to submit a Hazardous Waste Report indicating the amount of hazardous waste you generate, treat, recycle, dispose, ship off-site, or receive from off-site, you must fill out this form. A Site ID Form submitted with a Hazardous Waste Report is equivalent to a Subsequent Notification.

SITE WAS A TSD FACILITY AND/OR GENERATOR OF ≥ 1,000 KG OF HAZARDOUS WASTE, > 1 KG OF ACUTE HAZARDOUS WASTE, OR > 100 KG OF ACUTE HAZARDOUS WASTE SPILL CLEANUP IN ONE OR MORE MONTHS OF THE REPORT YEAR (OR STATE EQUIVALENT LQG REGULATIONS)

The purpose of this check box is to distinguish between sites that meet the criteria and are required to file a report versus those who file voluntarily or by State-only requirement but were not a treatment, storage, and disposal facility (TSDF) or a Large Quantity Generator (LQG) during the report year. Sites required to file the report should place an "X" in this box, while non-LQG/TSD sites should not. For more information about who must file a report, refer to "WHO MUST FILE THE 2015 HAZARDOUS WASTE REPORT" section of the 2015 Hazardous Waste Report Instructions and Form booklet.

ITEM 2 - SITE EPA ID NUMBER

Provide your EPA Identification Number in Item 2 **for this site**. The first two characters of the EPA Identification Number <u>must</u> be a valid State postal code. Be sure to include your EPA Identification number at the top of all pages of the form (as well as on any attachments to the Site ID Form).

NOTE

If this is your Initial Notification for this site, leave the EPA Identification Number blank and proceed to Item 3.

ITEM 3 AND 4 - SITE NAME AND LOCATION

Provide the legal name of your site and a complete location address. Please note that the address you give for Item 4, Site Location, must be a physical address, not a post office box or route number. Only foreign hazardous waste transporters, with their headquarters located outside the U.S., may provide a Site Location Country outside of the U.S.

NOTE

A new EPA Identification Number is **required** if you change the location of your site.

ITEM 5 - SITE LAND TYPE

Place an "X' in the box that **best describes** the land type of your site. Select only one type: Private, County, District, Federal, Tribal (see below), Municipal, State, or Other. If your site's Land Type could be described as Municipal **and** another Land Type, such as County, District, or Tribal, do not place an "X" in Municipal. Instead, choose the other appropriate Land Type. (For example, if your site's Land Type is both Municipal and County, you would place an "X" in the box for County.) You may explain this in Item 13 – Comments.

Tribal - A member of one of the tribes/entities on the list of Federally recognized American Indian tribes and Alaskan Native entities located at: http://www.epa.gov/tribal/whereyoulive/tribes-a-z.htm.

ITEM 6 - NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODE(S)

Box A must be completed. Completing Boxes B-D is recommended, if applicable.

BOX A

Provide the North American Industry Classification System (NAICS) code that best describes your site's primary business production process for your products or services. Referencing the latest NAICS codes, use the 6-digit code (most specific description) if available for your business; if not, use the 5-digit code; do not enter any four (4) or less digit codes.

BOXES B - D

List other NAICS codes that describe the other business production processes for your site. Referencing the latest NAICS codes, use the 6-digit code (most specific description) if available for your business; if not, use the 5-digit code; do not enter any four (4) or less digit codes.

Check with your accounting or business staff to determine your NAICS code(s); the NAICS code is used in tax reporting and other business reports. You can obtain additional information about NAICS codes at http://www.census.gov/eos/www/naics.

NOTE

Significant changes were made to the NAICS codes in 2012. All sites should confirm their NAICS codes in the new 2012 NAICS code table prior to completing Item 6 – NAICS Codes. You can obtain additional information about the 2012 NAICS codes at http://www.census.gov/eos/www/naics.

ITEM 7 - SITE MAILING ADDRESS

Please enter the Site Mailing Address. If the Mailing Address and the Location of Site (Item 4) are the same, you can enter "Same as Item 4" in the box for Item 7.

ITEM 8 - SITE CONTACT PERSON

Enter the name, title, business address, telephone number, extension, fax number, and e-mail address of the individual who should be contacted regarding the information submitted in the Site ID Form. A Subsequent Notification is recommended when the Site Contact Person changes. **Do not** enter other contact persons here; if there are other persons, who may be contacted about this submission, list them and their other contact information in Item 13 – Comments. If the person completing the Hazardous Waste Report is not the primary site RCRA hazardous waste contact, enter the primary site RCRA hazardous waste contact here and add the contact information for the person completing the Hazardous Waste Report in Item 13 – Comments.

NOTE

This is NOT the Facility Permit Contact information. The Facility Permit Contact information should be entered on the RCRA Hazardous Waste Part A Permit Application.

ITEM 9 - LEGAL OWNER AND OPERATOR OF THE SITE

This section should be used to indicate all owners and operators of this site.

A. NAME OF SITE'S LEGAL OWNER

Provide the name of your site's legal owner(s). This includes owner(s) of the building(s) and land. Please review these definitions:

Owner – The person who owns a RCRA site or part of a RCRA site. Note: This includes the owner(s) of the building(s) and/or land. This may be an individual, company, or business name. See **Person**.

Person – An individual, trust, firm, joint stock company, Federal Agency, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body.

DATE BECAME AN OWNER

Indicate the date on which the above entity became the owner of your site. Enter dates as in this example: For April 22, 2015, enter 04/22/2015. This is a required field and a date <u>must</u> be reported.

OWNER TYPE

Place an "X' in the box that **best describes** the owner type for your site. Select only one type: Private, County, District, Federal, Tribal (see below), Municipal, State, or Other. If your site's Owner Type could be described as Municipal **and** another Owner Type, such as County, District, or Tribal, do not place an "X" in Municipal. Instead, choose the other appropriate Owner Type. (For example, if your site's Owner Type is both Municipal and County, you would place an "X" in the box for County.) You may explain this in Item 13 – Comments.

Tribal - A member of one of the tribes/entities on the list of Federally recognized American Indian tribes and Alaskan Native entities located at: http://www.epa.gov/tribal/whereyoulive/tribes-a-z.htm.

LEGAL OWNER ADDRESS

Enter the address of the legal owner. If the address and the Location of Site (Item 4) are the same, you can enter "Same as Item 4" in the box for Item 9.

Use the Comments section in Item 13 to list any additional owners, their names, the dates they became owners, owner type, mailing address, and which owner(s), if any, are no longer owners since your last submission of this form. If necessary, attach a separate sheet of paper. Remember to enter your site's EPA Identification Number in the top left-hand corner of each sheet.

B. NAME OF SITE'S OPERATOR

Provide the name of your site's operator. Please review these definitions:

Operator – The person responsible for the overall operation of a RCRA site. Note: This is the legal entity which controls the RCRA site operation rather than the plant or site manager. This is usually a company or business name, but may be an individual. See **Person**.

Person – An individual, trust, firm, joint stock company, Federal Agency, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body.

DATE BECAME AN OPERATOR

Indicate the date on which the above entity became the operator of your site. Enter dates as in this example: For April 22, 2015, enter 04/22/2015. This is a required field and a date <u>must</u> be reported.

OPERATOR TYPE

Place an "X' in the box that **best describes** the operator type for your site. Select only one type: Private, County, District, Federal, Tribal (see below), Municipal, State, or Other. If your site's Operator Type could be described as Municipal **and** another Operator Type, such as County, District, or Tribal, do not place an "X" in Municipal. Instead, choose the other appropriate Operator Type. (For example, if your site's Operator Type is both Municipal and County, you would place an "X" in the box for County.) You may explain this in Item 13 – Comments.

Tribal - A member of one of the tribes/entities on the list of Federally recognized American Indian tribes and Alaskan Native entities located at: http://www.epa.gov/tribal/whereyoulive/tribes-a-z.htm.

Use the Comments section in Item 13 to list any additional operators, their names, the dates they became operators, operator type, mailing address, and which operator(s), if any, are no longer operators since your last submission of this form. If necessary, attach a separate sheet of paper. Remember to enter your site's EPA Identification Number in the top left-hand corner of each sheet.

NOTE

A subsequent notification is recommended when the owner or operator of a site changes. Because an EPA Identification Number is site-specific, the new owner will keep the existing EPA Identification Number for that location. If your business moves to another location, the owner or operator must notify the State or EPA Regional Office of this change. Since your business has changed locations, a new EPA Identification Number will be assigned.

ITEM 10 - TYPE OF REGULATED WASTE ACTIVITY

Mark box "Yes" or box "No" as appropriate for all current activities (as of the date submitting the form) at this site; complete any additional boxes as instructed. Current activities mean activities that are in effect when the form is submitted or those that the site plans to begin after EPA Identification Number assignment. The information you provide in Item 10 will be considered current as of the date you certify the form. If the site is no longer a generator as of the date you certify the form, you should mark the "No" (not a generator) box for Generator of Hazardous Waste.

NOTE

You must report your current regulated waste activities as of the date of submitting the Site ID Form. For the Hazardous Waste Report, your current status may be different than the status requiring the report during the calendar year.

A. HAZARDOUS WASTE ACTIVITIES (COMPLETE ALL PARTS 1 THROUGH 10)

NOTE

Listed below are the Federal generator status definitions. If, however, the State where your site is located has definitions different from the Federal definitions, you must use the State definitions.

1. GENERATOR OF HAZARDOUS WASTE (AT YOUR SITE):

If you generate a hazardous waste that is listed in 40 CFR 261.31 through 261.33 or identified by one or more hazardous waste characteristic(s) contained in 40 CFR 261.21 through 261.24, place an "X" in the appropriate box for the quantity of hazardous waste that is generated per calendar month. The regulations for hazardous waste generators are found in 40 CFR 261.5 for conditionally exempt small quantity generators (CESQGs) and in 40 CFR Part 262 for both small quantity generators (SQGs) and large quantity generators (LQGs). Consult these regulations and your State for details about how the regulations apply to your situation. Below is a brief description of the three types of hazardous waste generators.

If "Yes", place an "X" in only one of the following – a, b, or c.

a. LQG: Large Quantity Generator

For purposes of providing information in this form, the site is a Large Quantity Generator (LQG) if the site generates **any** of the following amounts in a calendar month:

- (i) Greater than or equal to 1,000 kilograms (kg; 2,200 pounds [lbs]) of non-acute RCRA hazardous waste; **or**
- (ii) Greater than 1 kg (2.2 lbs) of any RCRA acute hazardous waste listed in sections 261.31 or 261.33(e); **or**
- (iii) Greater than 100 kg (220 lbs) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous wastes listed in sections 261.31 or 261.33(e).

As discussed earlier, a RCRA LQG is a site that is neither a CESQG nor a SQG. For purposes of clarity, we describe above the situations when a site would be a LQG.

NOTE

If, in addition to being a LQG, you recycle hazardous wastes at your site, mark both this box and Item 10.A.7.

Hazardous secondary material managed under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25) DOES NOT count towards your generator status. However, you <u>must</u> check with your State to determine if you are eligible to manage hazardous secondary material under these exclusions.

b. SQG: Small Quantity Generator

This site is a SQG if the site meets **all** of the following criteria:

- (i) Generates, in any calendar month, more than 100 kg (220 lbs) but less than 1,000 kg (2,200 lbs) of RCRA hazardous waste; **and**
- (ii) Does not generate, in any calendar month, more than 1 kg (2.2 lbs.) of acute hazardous waste listed in sections 261.31 or 261.33(e); and
- (iii) Does not generate more than 100 kg (220 lbs) of material from the cleanup of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous wastes listed in sections 261.31 or 261.33(e).

NOTE

The definition of a SQG found at 40 CFR 260.10 is outdated. The EPA plans to make the appropriate conforming change in the future. Moreover, here in this document, for purposes of clarity, we include those situations where a SQG also may have generated amounts of acute hazardous wastes and still maintain its regulatory status as a SQG.

c. CESQG: Conditionally Exempt Small Quantity Generator

This site is a CESQG if the site generates less than or equal to the following amounts in a calendar month:

- (i) 100 kg (220 lbs) of hazardous waste; and
- (ii) 1 kg (2.2 lbs) of acute hazardous wastes listed in sections 261.31, or 261.33(e); and
- (iii) 100 kg (220 lbs) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous wastes listed in sections 261.31, or 261.33(e).

NOTE

A CESQG is defined at 40 CFR 261.5(a) as a site that generates less than or equal to 100 kg (220 lbs) of hazardous waste. However, the regulations at 40 CFR 261.5(e) discuss situations where a CESQG could be subject to full regulation. For purposes of clarity, we describe all those situations where a site continues to be a CESQG.

If you generate acute hazardous wastes listed in 40 CFR 261.31, 261.32, or 261.33(e), please refer to 40 CFR 261.5(e) to determine the circumstances under which you must notify the EPA.

If you marked "Yes" above, indicate your other generator activities. Mark "Yes" or "No" for the other hazardous waste activities listed below that may occur at this site. **Complete all parts 2-10.**

2. SHORT-TERM GENERATORS

Mark "Yes" if the site is currently generating hazardous waste only as the result of a one-time, non-recurring, temporary event that is not related to normal production processes. In other words, short-term generators produce hazardous waste from a particular activity for a limited time and then cease conducting that activity. Short-term generators would not be considered episodic generators because episodic generators have the potential to generate on a regular basis (for example, a facility that fluctuates from SQG to LQG in one month is not a short-term generator). Examples of short-term generators include: (1) one-time highway bridge waste generation; (2) underground storage tank removals; (3) generation of off-spec or out-of-date chemicals at a site that normally doesn't generate hazardous waste; (4) remediation or spill clean-up at sites with no previous RCRA EPA Identification Number; and (5) site or production process decommissions by a new operator. If you mark "Yes", you must provide an explanation of your short-term generation event in Item 13 – Comments.

3. U.S. IMPORTER OF HAZARDOUS WASTE

Mark "Yes" if you import hazardous waste from a foreign country into the U.S. Refer to 40 CFR 262.60 for additional information.

4. MIXED WASTE GENERATOR

Mark "Yes" if you are a generator of mixed waste (waste that is both hazardous and radioactive). RCRA defines "mixed waste" as waste that contains both hazardous waste and source, special nuclear, or by-product material subject to the Atomic Energy Act (AEA), RCRA Section 1004(41), 42 U.S.C. 6903 (63 FR 17414; April 9, 1998). See the "DEFINITIONS" section.

5. TRANSPORTER OF HAZARDOUS WASTE

a. Transporter

You transport hazardous waste within the U.S. The Federal regulations for hazardous waste transporters are found in 40 CFR Part 263.

b. Transfer Facility (at your site)

You are a hazardous waste transfer facility, at your site, if you hold manifested hazardous waste(s) at your site for a period of ten (10) days or less while the waste is in transit. The Federal regulations for hazardous waste transfer facilities are found in 40 CFR 263.12.

6. TREATER, STORER, OR DISPOSER OF HAZARDOUS WASTE (AT YOUR SITE)

If you treat, store, or dispose of hazardous waste, mark "Yes." A RCRA Hazardous Waste Part B Permit is **required** for this activity. Contact the appropriate office for your State for more information. The Federal regulations for owners and operators of permitted treatment, storage, and disposal facilities (TSDFs) are found in 40 CFR Parts 264, 265, 266, and 270.

Mark "No" if any of the following conditions are true for your facility:

• This facility does not receive hazardous waste from other generators and ships all waste off-site for management within the regulatory timeframe.

- This facility is only involved with on-going post-closure activities, corrective actions under the Hazardous and Solid Waste Amendments of 1984 (HSWA), or a consent order under a nontraditional permit or without a RCRA permit being required.
- Receives waste from off-site but does not store greater than 10 days before re-shipping (i.e., transfer facility).

NOTE

If your site is a destination facility for universal wastes in addition to being a TSDF for other RCRA hazardous wastes, mark "Yes" for both this box **and** Item 10.B.2.

7. RECYCLER OF HAZARDOUS WASTE (AT YOUR SITE)

If you recycle regulated hazardous wastes (recyclable materials) at your site, mark "Yes." The Federal regulations for owners and operators of sites that recycle hazardous waste are found in 40 CFR 261.6. You also may be subject to other Federal and State regulations; in some cases a permit is required.

NOTE

If your site, in addition to being a recycling site for hazardous waste, is a treater, storer, or disposer of hazardous waste, mark "Yes" for both this box **and** Item 10.A.6. If your site is a destination facility for universal wastes in addition to being a recycling site for other RCRA hazardous wastes, mark "Yes" for both this box **and** Item 10.B.2.

8. EXEMPT BOILER AND/OR INDUSTRIAL FURNACE (AT YOUR SITE)

If "Yes," place an "X" in all that apply.

a. Small Quantity On-Site Burner Exemption

You burn small quantities of hazardous waste in an on-site boiler or industrial furnace in accordance with the conditions in 40 CFR 266.108, place an "X" in the box to indicate that you qualify for the Small Quantity On-Site Burner Exemption.

b. Smelting, Melting, and Refining Furnace Exemption

You process hazardous wastes in a smelting, melting, or refining furnace solely for metals recovery, as described in 40 CFR 266.100(d), or to recover economically significant amounts of precious metals, as described in 40 CFR 266.100(g), or if you process hazardous wastes in a lead recovery furnace to recover lead, as described in 40 CFR 266.100(h), place an "X" in the box to indicate that you qualify for the Smelting, Melting, and Refining Furnace Exemption.

9. UNDERGROUND INJECTION CONTROL (AT YOUR SITE)

If you generate, treat, store, or dispose of hazardous waste and place the waste or its residuals into an underground injection well (e.g., a Class I well) located at your site, mark "Yes." The Federal regulations for owners and operators of underground injection wells are found in 40 CFR Part 148.

10. RECEIVES HAZARDOUS WASTE FROM OFF-SITE (AT YOUR SITE)

If you received hazardous waste from another site, whether this waste was received as a commercial transaction or waste received from a restricted group of off-site generators, mark "Yes."

In addition to the above, mark "Yes" or "No" for the other regulated waste activities listed below that may occur at this site. Complete Items B, C, and D as appropriate.

B. UNIVERSAL WASTE ACTIVITIES (AT YOUR SITE)

Refer to your State-specific requirements and definitions for universal waste. Also, refer to 40 CFR 261.9 and 40 CFR Part 273 for the Federal regulations covering universal waste. **Complete parts 1 and 2.**

1. LARGE QUANTITY HANDLER OF UNIVERSAL WASTE (LQHUW)

You are an LQHUW if you accumulate a total of 5,000 kg or more total of universal wastes (batteries, pesticides, mercury-containing equipment, or lamps — calculated collectively) at any time. This designation is retained through the end of the calendar year in which the 5,000 kg limit is met or exceeded. If "Yes," place an "X" in the appropriate box(es) to indicate the type(s) of universal wastes managed at your site. If your State has other additional universal wastes, indicate what they are by placing an "X" in the corresponding box(es) (10.B.1.e, f, or g).

2. DESTINATION FACILITY FOR UNIVERSAL WASTE

Mark "Yes" if you treat, dispose, or recycle universal wastes on-site. A hazardous waste permit is required if you treat or dispose of universal wastes; a permit may be required if you recycle universal wastes.

NOTE

If your site, in addition to being a destination facility for universal wastes, is also a TSDF for RCRA hazardous wastes, mark "Yes" for both this box **and** Item 10.A.6. In addition, if your site recycles RCRA hazardous wastes, mark "Yes" for both this box **and** Item 10.A.7.

C. USED OIL ACTIVITIES

Mark the appropriate box(es) to indicate which used oil management activities are taking place at this site. The Federal regulations for used oil management are found in 40 CFR Part 279. Complete all parts 1 through 4.

1. USED OIL TRANSPORTER

If "Yes," place an "X" in all that apply.

a. Transporter

You transport used oil within the U.S. The Federal regulations for used oil transporters are found in 40 CFR 279.40-47.

b. Transfer Facility (at your site)

You own or operate a used oil transfer facility. The Federal regulations for used oil transfer facilities are found in 40 279.40-47.

2. USED OIL PROCESSOR AND/OR RE-REFINER (AT YOUR SITE)

If "Yes," place an "X" in all that apply.

a. Processor

You process used oil. The Federal regulations for processors of used oil are found in 40 CFR 279.50-59.

b. Re-refiner

You refine used oil. The Federal regulations for re-refiner of used oil are found in 40 CFR 279.50-59.

3. OFF-SPECIFICATION USED OIL BURNER (AT YOUR SITE)

You burn off-specification used oil fuel. Mark "Yes" to indicate this used oil management activity.

4. USED OIL FUEL MARKETER (AT YOUR SITE)

If "Yes," place an "X" in all that apply.

a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burners You are a marketer who directs shipment of off-specification used oil to off-specification used oil burners. The Federal regulations for off-specification used oil are found in 40 CFR 279.70-75.

b. Marketer Who First Claims the Used Oil Meets the Specification

You are the first to claim that used oil meets the used oil specification established in 40 CFR 279.11.

NOTE

If either of these boxes is marked, you must also notify (or have previously notified) as a used oil transporter (10.C.1), used oil processor/re-refiner (10.C.2), or off-specification used oil fuel burner (10.C.3), unless you are a used oil generator. (Used oil generators are not required to notify.)

D. ELIGIBLE ACADEMIC ENTITIES WITH LABORATORIES – NOTIFICATION FOR OPTING INTO OR WITHDRAWING FROM MANAGING LABORATORY HAZARDOUS WASTES PURSUANT TO 40 CFR PART 262, SUBPART K

Note: Fill out Box D ONLY if you are at least one of the following: a college or university; a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university; or a non-profit research institute that is owned by or has a formal written affiliation agreement with a college or university; AND you have checked with your State to determine if 40 CFR Part 262, Subpart K is

effective in your State and for any State-specific requirements. See EPA's website for more information about these regulations: http://www.epa.gov/wastes/hazard/generation/labwaste/implementation.htm.

Subpart K is an optional alternative set of requirements for eligible academic entities with laboratories. Certain generators (i.e., eligible academic entities defined under (1) below) are eligible to operate under Subpart K for management of their hazardous wastes in laboratories in lieu of 40 CFR 262.34(c) (or 40 CFR 261.5 for CESQGs). Eligible academic entities with laboratories that generate hazardous waste that elect to opt into Subpart K, are currently operating under Subpart K, or subsequently withdraw from Subpart K must complete this section to meet the notification requirements of this Subpart. Refer to 40 CFR 262.203 and 40 CFR 262.204.

NOTE

Eligible academic entities with laboratories must complete a separate Site ID Form for each site (i.e., EPA Identification Number) that is managing hazardous waste under Subpart K. All laboratories with the same EPA Identification Number will be regulated under this Subpart. If eligible academic entities with laboratories withdraw from Subpart K, all laboratories with the same EPA Identification Number associated with the withdrawal from Subpart K will be regulated under 40 CFR 262.34(c) requirements (or 40 CFR 261.5 for CESQGs).

1. OPTING INTO OR CURRENTLY OPERATING UNDER 40 CFR PART 262, SUBPART K FOR THE MANAGEMENT OF HAZARDOUS WASTES IN LABORATORIES

Mark "Yes" for this box if you are an eligible academic entity and you elect to opt into or are currently operating under 40 CFR Part 262, Subpart K for the hazardous wastes generated in your laboratories. If you mark "Yes" for this box, you must place an "X" in at least one of the following to indicate your type of eligible academic entity. Place an "X" in all that apply:

a. College or University

You are an eligible college or university if you are a private or public, post-secondary, degree-granting, academic institution, that is accredited by an accrediting agency listed annually by the U.S. Department of Education.

b. Teaching Hospital that is owned by or has a formal written affiliation agreement with a college or university

You are an eligible teaching hospital if you are a hospital that trains students to become physicians, nurses, or other health personnel and is either: (1) owned by a college or university, or (2) has a master affiliation agreement and program letter of agreement, as defined by the Accreditation Council for Graduate Medical Education, with an accredited medical program or medical school.

c. Non-profit Institute that is owned by or has a formal written affiliation agreement with a college or university

You are an eligible non-profit institute if you are an organization that conducts research as its primary function and files as a non-profit organization under the tax code of 26 U.S.C. 501(c)(3) and is either: (1) owned by a college or university, or (2) has a formal written affiliation agreement with a college or university that establishes a relationship between institutions for the purposes of

research and/or education and is signed by authorized representatives from each institution. A relationship on a project-by-project or grant-by-grant basis is not considered a formal written affiliation agreement.

2. WITHDRAWING FROM 40 CFR PART 262, SUBPART K FOR THE MANAGEMENT OF HAZARDOUS WASTES IN LABORATORIES

Mark "Yes" for this box if you have previously elected to opt into 40 CFR Part 262, Subpart K and are now withdrawing from participation in this optional set of alternative requirements for hazardous waste generation in laboratories. Withdrawing generators will automatically revert to regulation under 40 CFR 262.34(c) requirements (or 40 CFR 261.5 for CESQGs). If marking "Yes" for this box, please include comments in Item 13 – Comments that explain your reasons for withdrawing from Subpart K.

ITEM 11 - DESCRIPTION OF HAZARDOUS WASTES

Complete this item if you marked "Yes" for any activity 1 (a-c), 6, 7, or 8 in Item 10.A. You will need to refer to 40 CFR Part 261 to complete this item. Part 261 identifies those solid wastes which the EPA defines as hazardous and regulates under RCRA. If you need help completing this section, please contact your State Office.

A. WASTE CODES FOR FEDERALLY REGULATED HAZARDOUS WASTES

Please list the waste codes of the Federal hazardous wastes (described in 40 CFR Part 261) handled at your site. List them in the order they are presented in the regulations using the appropriate 4-digit code(s) (e.g., D001, D003, F007, U112).

NOTE

If you handle more hazardous wastes than will fit under Item 11.A, please continue under Item 13 — Comments or on an extra sheet. Remember to include your EPA Identification Number on the top of each page. If you handle a large number of codes, you may copy the list in this booklet and mark the ones that you handle. Attach any additional sheets to the Site ID Form. Remember to include your EPA Identification Number on the top of each page.

B. WASTE CODES FOR STATE-REGULATED (I.E., NON-FEDERAL) HAZARDOUS WASTES

If you manage State-regulated hazardous wastes that have a State waste code, enter the appropriate code(s) in the box(es) provided. Please list the waste codes of the State-regulated hazardous wastes handled at your site in the order they are presented in the regulations.

NOTE

If you handle more hazardous wastes than will fit under Item 11.B, please continue under Item 13 — Comments or on an extra sheet. Remember to include your EPA Identification Number on the top of each page.

ITEM 12 - NOTIFICATION OF HAZARDOUS SECONDARY MATERIAL (HSM) ACTIVITY

Mark "Yes" if you are notifying under 40 CFR 260.42 that you will begin managing, are still managing, or will stop managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25). Mark "No" if you are not notifying under 40 CFR 260.42. Note: You <u>must</u> check with your State to determine if you are eligible to manage hazardous secondary material under these regulations.

NOTE

If you mark "Yes," you must fill out the Addendum to the Site ID Form: Notification of Hazardous Secondary Material Activity. See instructions for this Addendum after Item 14.

ITEM 13 - COMMENTS

Use this section as needed to provide additional information for Items 1 through 12. Include the item number and box letter (if any) for each comment you make. You may attach additional sheets if needed. Remember to include your EPA Identification Number on the top of each page.

ITEM 14 - CERTIFICATION

This certification must be signed and dated by the owner(s), operator(s), responsible official(s), or authorized representative(s) of the site. See 40 CFR 270.11 for more information on signatories in general. See also 40 CFR 270.10(b) for additional Hazardous Waste Part A Permit Application signatory specifics. An "authorized representative" is a person responsible for the overall operation of the site (i.e., a plant manager or superintendent, or a person of equal responsibility).

NOTE

All Site ID Form submissions must include this certification to be complete.

ADDENDUM TO THE SITE IDENTIFICATION FORM: NOTIFICATION OF HAZARDOUS SECONDARY MATERIAL ACTIVITY

YOU MUST FILL OUT THIS SECTION IF:

- You are located in a State that allows you to manage excluded hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 261.4(a)(23), (24), or (25). See
 http://www.epa.gov/epawaste/hazard/dsw/statespf.htm for a list of eligible States; AND
- You will begin managing, are still managing, or will stop managing excluded hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25) and must notify the appropriate State or Regional Office of your activities, pursuant to 40 CFR 260.42. These regulations exclude certain hazardous secondary material being reclaimed from the RCRA Subtitle C definition of solid waste provided certain requirements and conditions are met. See EPA's website for more information about these regulations: http://www.epa.gov/osw/hazard/dsw/rulemaking.htm.

Complete all parts 1 - 3.

You must be managing excluded hazardous secondary material in compliance with 40 CFR 261.2(a)(2)(ii), 261.4(a)(23), (24), and/or (25) (or State equivalent). <u>Do not include any information regarding your hazardous wastes in this section.</u> See 73 FR 64668 or http://www.epa.gov/epawaste/hazard/dsw/impresource.htm for more information on these exclusions.

NOTE

You must submit a completed Site ID Form, including this Addendum, prior to operating under the exclusion(s) and by March 1 of each even-numbered year thereafter to your regulatory authority using the Site ID Form as pursuant to 40 CFR 260.42. Persons who must satisfy this notification requirement can submit this information at the same time as their Hazardous Waste Report (which is also due by March 1 of each even-numbered year).

If you stop managing hazardous secondary material in accordance with the exclusion(s) and do not expect to manage any amount of hazardous secondary material under the exclusion(s) for at least one year, you must also submit a completed Site ID Form, including this Addendum, within thirty (30) days pursuant to 40 CFR 260.42.

Remember to include your EPA Identification Number on the top of each page.

ITEM 1 – INDICATE REASON FOR NOTIFICATION (INCLUDE DATES WHERE REQUESTED)

Place an "X" in the box for the reason that applies to you:

FACILITY <u>WILL BEGIN MANAGING</u> EXCLUDED HAZARDOUS SECONDARY MATERIAL AS OF (MM/DD/YYYY)

Place an "X" in this box if you are notifying that you will begin managing hazardous secondary material under the exclusion(s).

- Facilities must notify prior to operating under the exclusion(s).
- If placing an "X" in this box, list the date (mm/dd/yyyy) when you will begin managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25). Note: If the facility had previously notified that it will stop managing hazardous secondary material in the past but will now begin anew, list the next planned start date.

FACILITY <u>IS STILL MANAGING</u> EXCLUDED HAZARDOUS SECONDARY MATERIAL/RENOTIFYING AS REQUIRED BY MARCH 1 OF EACH EVEN-NUMBERED YEAR

Place an "X" in this box if you are re-notifying that you are still managing hazardous secondary material under the exclusion(s). Note: You must have previously notified that you began managing hazardous secondary material in order to check this box.

- Facilities must notify by March 1st of each even-numbered year.
- If placing an "X" in this box, you do not have to list a date.

FACILITY HAS STOPPED MANAGING EXCLUDED HAZARDOUS SECONDARY MATERIAL AS OF (MM/DD/YYYY) AND IS NOTIFYING AS REQUIRED

Place an "X" in this box, if you are notifying that you have stopped managing hazardous secondary material under the exclusion(s) and do not expect to manage any amount of hazardous secondary material for at least one year (pursuant to 40 CFR 260.42(b)). List the date when you stopped managing hazardous secondary material. Enter the date in "mm/dd/yyyy" format.

- Facilities must notify within 30 days of when they stopped managing hazardous secondary material. You are considered to have stopped managing hazardous secondary material if:

 (1) you stop managing hazardous secondary material completely (e.g., you cease operations);
 (2) you choose to manage the hazardous secondary material as hazardous waste;
 (3) you undergo closure and request release from financial assurance per 40 CFR 261.143(h); or (4) you temporarily suspend management of hazardous secondary material for at least one year.
- Only place an "X" in this box if you have stopped managing all hazardous secondary material
 under the exclusion(s). For example, if your facility only stopped managing one hazardous
 secondary material, but continued to manage another hazardous secondary material, you would

leave this box blank since your facility continues to manage some amount of hazardous secondary material.

• If you submit a notification that you have stopped managing hazardous secondary material, you do not need to re-notify (unless you choose to manage hazardous secondary material again, in which case you would have to submit a notification prior to managing). After submitting a stop notification, you can leave the Addendum blank for subsequent submissions, including any subsequent Hazardous Waste Report submissions.

ITEM 2 - DESCRIPTION OF EXCLUDED HAZARDOUS SECONDARY MATERIAL (HSM) ACTIVITY

In the table provided on the Addendum to the Site Identification Form, list your appropriate facility code, each waste code for the hazardous secondary material you manage, the estimated and actual quantities in short tons for each hazardous secondary material, and the appropriate land-based code for how you manage the hazardous secondary material. Do not include any information regarding your hazardous wastes in this section. See examples below on how to answer this question.

a. Facility Code

Using the facility codes, found in the "HAZARDOUS SECONDARY MATERIAL (HSM) FACILITY CODES" section of this booklet, enter the appropriate 2-digit code(s) that correctly describes your facility. If more than one code applies to your facility, enter each 2-digit code on a separate row. Each hazardous secondary material should be reported by facility code.

b. Waste Code(s) for HSM

Use the box provided to enter the appropriate 4-digit hazardous waste code(s) that would apply to your hazardous secondary material if you managed it as hazardous waste (i.e., the waste code(s) that would apply if you did not manage your material in accordance with 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25)).

NOTE

If you list more codes or manage more hazardous secondary material than will fit in the table under Item 2, please continue under Item 13 – Comments, or on an extra sheet. Remember to include your EPA Identification Number on the top of each page.

c. Estimate Short Tons of Excluded HSM to be Managed Annually

In the box provided, enter your <u>estimated</u> tonnage (using short tons) of hazardous secondary material you expect to manage annually. Convert all physical quantities (e.g., gallons, cubic yards, kilograms, metric tons, etc.) to short tons (1 short ton = 2,000 pounds) and round to the nearest ton (no decimals). Note: Your estimated tonnage should be for the entire amount of hazardous secondary material to be reclaimed <u>NOT</u> just the quantity of constituent or product reclaimed.

d. Actual Short Tons of Excluded HSM Managed During the Most Recent Odd-Numbered Year

Report the tonnage (using short tons) of each hazardous secondary material you actually managed during the most recent odd-numbered year. For example, if you are submitting this notification on February 20, 2016, enter the amount you actually managed during 2015 (i.e., the tonnage you managed from January 1, 2015 to December 31, 2015). Convert all physical quantities (e.g., gallons, cubic yards, kilograms, metric tons, etc.) to short tons (1 short ton = 2,000 pounds) and round to the nearest ton (no decimals). Note: Your actual tonnage should be for the entire amount of hazardous secondary material that was sent for reclamation NOT just the quantity of constituent or product reclaimed. If this is your initial notification, enter "0."

e. Land-based Unit Code

Using the land-based unit codes, found in the "HAZARDOUS SECONDARY MATERIAL (HSM) LAND BASED UNIT CODES" section of this booklet, enter in the 2-digit code that best describes the land-based unit you use or will use to manage the hazardous secondary material. If you do not use any land-based units, enter "NA." If you use the code "OT" (Other), please describe your land-based unit in Item 13 – Comments. If more than one land-based unit code applies to a hazardous secondary material, list it separately using another row.

EXAMPLES FOR REPORTING HAZARDOUS SECONDARY MATERIAL ACTIVITY

EXAMPLE 1

A pharmaceutical manufacturer generates spent solvents that are characteristic for ignitability (D001). The manufacturer plans to manage spent solvents under 40 CFR 261.2(a)(2)(ii) and 261.4(a)(24) by sending some amount to a reclaimer within its own company and the rest off-site to a reclamation facility within the U.S. The manufacturer will not manage any spent solvents in a land-based unit. Following the regulations, the manufacturer submits an initial notification prior to managing its spent solvents under the exclusions. The facility would report its hazardous secondary material activity as follows:

Facility code (answer using codes listed in the Code List section of the instructions)	b. Waste Code(s) for hazardous secondary material (HSM)	c. Estimated short tons of HSM to be managed annually	d. Actual short tons of HSM that was managed during the most recent odd- numbered year	e. Land-based unit code (answer using codes listed in the Code List section of the instructions)
02	D001	15	0	NA
06	D001	40	0	NA

EXAMPLE 2

A steel manufacturer generates electric arc furnace dust and spent pickle liquor from one of its steel operations. The manufacturer sends electric arc furnace dust (K061) off-site to a reclamation facility within the U.S. and reclaims spent pickle liquor (K062) on-site. Neither hazardous secondary material is managed in a land-based unit. The steel manufacturer has managed both hazardous secondary material under 40 CFR 261.2(a)(2)(ii) and 261.4(a)(24) for a number of years and it is now time to re-notify. The facility would report its hazardous secondary material activity as follows:

a. Facility code (answer using codes listed in the Code List section of the instructions)	b. Waste Code(s) for hazardous secondary material (HSM)	c. Estimated short tons of HSM to be managed annually	d. Actual short tons of HSM that was managed during the most recent odd- numbered year	e. Land-based unit code (answer using codes listed in the Code List section of the instructions)
01	K062	60	52	NA
06	K061	20,000	22,468	NA

EXAMPLE 3

A reclamation facility has been receiving and reclaiming spent solvents under 40 CFR 261.2(a)(2)(ii) and 261.4(a)(24) for a number of years. The facility receives and reclaims spent solvents from multiple hazardous secondary material generators, some of which are within the same company. No spent solvents are managed in a land-based unit. It is now time to re-notify. The facility would report its hazardous secondary material activity as follows:

a. Facility code (answer using codes listed in the Code List section of the instructions)	b. Waste Code(s) for hazardous secondary material (HSM)	c. Estimated short tons of HSM to be managed annually	d. Actual short tons of HSM that was managed during the most recent odd- numbered year	e. Land-based unit code (answer using codes listed in the Code List section of the instructions)
03	D001; F002; F003; F005	6,000	7,533	NA
03	D001; D035; F002; F003	1,500	918	NA
07	D001; F002; F003; F005	3,000	3,509	NA
07	D001; D038; F002; F003	1.000	523	NA

EXAMPLE 4

A smelting operation generates furnace bricks that are characteristic for chromium (D007) and sends them off-site for reclamation. Before shipping the bricks off-site, the facility manages some of the bricks in a containment building and the rest in a pile on the land. The facility has been managing the bricks under 40 CFR 261.4(a)(24) for a number of years and must now re-notify. The facility would report its activity as follows:

a. Facility code (answer using codes listed in the Code List section of the instructions)	b. Waste Code(s) for hazardous secondary material (HSM)	c. Estimated short tons of HSM to be managed annually	d. Actual short tons of HSM that was managed during the most recent odd- numbered year	e. Land-based unit code (answer using codes listed in the Code List section of the instructions)
06	D007	200	235	NA
06	D007	115	126	PL

EXAMPLE 5

An intermediate facility has been managing wastewater treatment sludges from electroplating operations (F006) for the past seven years but, due to company consolidation, it will soon shut down. In accordance with 40 CFR 260.42, the facility notifies that it will stop managing hazardous secondary material. The facility would report its activity as follows:

a. Facility code (answer using codes listed in the Code List section of the instructions)	b. Waste Code(s) for hazardous secondary material (HSM)	c. Estimated short tons of HSM to be managed annually	d. Actual short tons of HSM that was managed during the most recent odd- numbered year	e. Land-based unit code (answer using codes listed in the Code List section of the instructions)
08	F005	0	5,034	NA

ITEM 3 - FACILITY HAS FINANCIAL ASSURANCE PURSUANT TO 40 CFR 261.4(A)(24)(VI)

Financial assurance is required for reclaimers (07, 11) and intermediate (08) facilities managing hazardous secondary material under 40 CFR 261.4(a)(24) and (25). See EPA's website for more information about these regulations: http://www.epa.gov/epawaste/hazard/dsw/impresource.htm.

- Mark "Yes," if you have financial assurance pursuant to 40 CFR 261.4(a)(24)(vi) <u>AND</u> you use at least one facility code that is 07, 08, or 11 in Item 2.a above. For example, the facilities in Examples 3 and 5 above are required to have financial assurance because the facility codes are 07 and 08, respectively.
- Mark "No," if you do <u>NOT</u> have financial assurance pursuant to 40 CFR 261.4(a)(24)(vi). Note: Reclaimers (07, 11) and intermediate (08) facilities <u>must</u> have financial assurance in order to manage hazardous secondary material under 40 CFR 261.4(a)(24) and (25). Answering "No" to this question may mean you are in violation of these regulations if you report facility codes 07, 08, or 11. For example, the facilities in Examples 1, 2, and 4 above are not required to have financial assurance because these facilities did not report facility codes of 07, 08, or 11.

INSTRUCTIONS FOR FILLING OUT THE HAZARDOUS WASTE PERMIT INFORMATION FORM

GENERAL INSTRUCTIONS

Please type or print, leaving only one blank box between words. Abbreviate, if necessary, to stay within the number of boxes allowed for each item. Some items in the form require narrative explanation. If more space is necessary to answer a question, use the space provided in Item 13 and reference the item number to which the additional information applies or attach a separate sheet entitled "Additional Information." Remember to include your EPA Identification Number and Site Name in the upper left-hand corner of each attached page.

Unless otherwise specified in the instructions to the form, each item must be answered. To indicate that each item has been considered, enter "NA" for "not applicable," if a particular item does not fit the circumstances or characteristics of your facility or activity.

For a Revised Part A Permit Application, circle the item numbers with new information or changes.

ITEM-BY-ITEM INSTRUCTIONS

ITEM 1 - FACILITY PERMIT CONTACT

Give the name, title, work telephone number, and e-mail of a person who is thoroughly familiar with the activities at the facility that require a RCRA Hazardous Waste Permit and with the facts reported in the Hazardous Waste Permit Information Form. This person must be available to be contacted by offices reviewing the permit application, if necessary. If the Facility Permit Contact person is the same as the Site Contact Person identified in Item 8 of the RCRA Subtitle C Site Identification Form (Site ID Form), you may print "Same as Site Contact" in this box.

ITEM 2 - FACILITY PERMIT CONTACT MAILING ADDRESS

Enter the mailing address for the facility permit contact. If the mailing address is the same as the Site Mailing Address (Item 7) on the Site ID Form, you may print "Same as Site Mailing Address" in this box.

ITEM 3 – OPERATOR MAILING ADDRESS AND TELEPHONE NUMBER

Enter the mailing address and telephone number of the facility operator identified in Item 9.B of the Site ID Form.

ITEM 4 - FACILITY EXISTENCE DATE

Enter the appropriate date that applies to your facility from the following:

- The date that hazardous waste operations at the facility commenced;
- The date construction on the facility commenced; or
- The date operation is expected to begin.

ITEM 5 - OTHER ENVIRONMENTAL PERMITS

A. PERMIT TYPE

Using the codes listed below, enter a letter on the form for all other environmental permits the facility has received, or for which the facility has filed an application, even if the permit has not yet been received.

- N = NPDES (National Pollutant Discharge Elimination System) Clean Water Act
- P = PSD (Prevention of Significant Deterioration) Clean Air Act
- R = RCRA (Resource Conservation and Recovery Act)
- U = UIC (Underground Injection Control) Safe Drinking Water Act
- F = EPA 404 (Dredge or Fill Permits under Section 404 of the Clean Water Act)
- E = Other relevant environmental permits. List any other relevant Federal (e.g., permits under the Ocean Dumping Act), State (e.g., State permits for new air emission sources in nonattainment areas under Part D of the Clean Air Act or State permits under Section 404 of the Clean Water Act), or local environmental permits or applications.

B. PERMIT NUMBER

Give the number of each presently effective permit issued to the facility for each program, or if you have previously filed an application, but have not yet received a permit, give the number of the application and note this in the description. You may list additional permit numbers on a separate sheet of paper if you have more than one currently effective permit for your facility under a particular permit program. Remember to include your EPA Identification Number and Site Name in the upper left-hand corner of each attached page.

C. DESCRIPTION

Use the space provided for any additional information identifying or describing the permits.

ITEM 6 - NATURE OF BUSINESS

Briefly describe the nature of your business (e.g., products produced or services provided). If more space is needed, please attach additional sheets. Remember to include your EPA Identification Number and Site Name in the upper left-hand corner of each attached page.

ITEM 7 - PROCESS CODES AND DESIGN CAPACITIES

The information in Item 7 describes all the processes that will be used to treat, store, or dispose of hazardous waste at the facility. The process code and design capacity of each process must be provided as part of the description. The design capacity of injection wells and landfills at existing facilities should be measured as the remaining, unused capacity. Tank storage should refer to each tank, not each tank farm. Please indicate the location of each process listed in Item 7 on either the map provided for Item 10 or the photographs provided for Item 12. Use the line number from Item 7 to indicate where the process(es) are located. See the form for detailed instructions on Item 7.

NOTE

Submission of a Revised Part A Permit Application is required before processes for treating, storing, or disposing of hazardous wastes are changed; before new processes are added; and/or before the design capacities of these processes are increased.

ITEM 8 - OTHER PROCESSES

Use this space to describe other processes that did not have a specific process code listed in Item 7.A of the form. Follow the instructions for Item 7.A on the form for other process codes (i.e., D99, S99, T04, and X99 process codes). Describe the other processes in Item 13 – Comments.

ITEM 9 - DESCRIPTION OF HAZARDOUS WASTES

This information describes all the hazardous wastes, using their hazardous waste codes, that will be treated, stored, or disposed at the facility. In addition, the processes that will be used to treat, store, or dispose of each hazardous waste and the estimated annual quantity of each hazardous waste must be provided. The form contains three pages to capture the information for Item 9: Page 4 of 6, which has detailed instructions; Page 5 of 6, which is to be filled out; and Page 5_ of _, which is used if additional pages are needed. If additional pages are needed, the pages should be numbered as follows: Page 5a of 6, Page 5b of 6, Page 5c of 6, etc. See the form for detailed instructions on Item 9.

NOTE

Submission of a Revised Part A Permit Application is required before a facility begins treating, storing, or disposing of new hazardous wastes not previously identified in the facility's Part A Permit Application. Changes in the quantity of hazardous waste previously specified in the Part A Permit Application can be made without submitting a Revised Part A Permit Application, provided the quantity does not exceed the process design capacities specified in the first Part A submission.

ITEM 10 - MAP

Provide a topographic map or maps of the area extending to a least one mile beyond the property boundaries of the facility. The map must clearly show the following:

- The legal boundaries of the facility;
- The location and serial number of each of your existing and proposed intake and discharge structures;
- All hazardous waste management facilities;
- Location of all processes listed in Items 7 and 8 identified by process code;
- Each well where you inject fluids underground; and
- All springs and surface water bodies in the area, plus all drinking water wells within ¼ mile of the facility which are identified in the public record or otherwise known to you.

If an intake or discharge structure, hazardous waste disposal site, or injection well associated with the facility is located more than one mile from the plant, include it on the map, if possible. If not, attach additional sheets describing the location of the structure, disposal site, or well, and identify the U.S. Geological Survey (or other) maps corresponding to the location. Remember to include your EPA Identification Number and Site Name in the upper left-hand corner of each attached page.

On each map, include the map scale, a meridian arrow showing north, and latitude and longitude at the nearest whole second. On all maps of rivers, show the direction of the current, and in tidal waters, show the directions of the ebb and flow tides. Use a 7-1/2 minute series map published by the U.S. Geological Survey. If a 7-1/2 minute series map has not been published for your facility site, then you may use a 15-minute series map from the U.S. Geological Survey. If neither a 7-1/2 nor 15-minute series map has been published for your facility site, use a plant map or other appropriate map, and include all the requested information; in this case, briefly describe land uses in the map area (e.g., residential, commercial).

For information about obtaining maps, contact the U.S. Geological Survey at (888) 275-8747 or see the U.S. Geological Survey web site at http://www.usgs.gov/pubprod.

You may trace your map from a geological survey chart, or other map meeting the above specifications. If you do, your map should bear a note showing the number or title of the map or chart from which it was traced. Include the names of nearby towns, water bodies, and other prominent points.

ITEM 11 - FACILITY DRAWING

All existing facilities must include a drawing showing the general layout of the facility. This drawing should be approximately to scale and fit on an 8 ½" x 11" sheet of paper. The drawing should show the following:

- The property boundaries of the facility;
- The areas occupied by all storage, treatment, or disposal operations that will be used during interim status;
- The name of each operation (e.g., multiple hearth incinerator, drum storage area, etc.);
- Areas of past storage, treatment, or disposal operations;
- Areas of future storage, treatment, or disposal operations; and
- The approximate dimensions of the property boundaries and all storage, treatment, and disposal areas. (Where applicable, use the process codes listed in Items 7 and 8 to indicate the location of all storage, treatment, and disposal areas.)

NOTE

New facilities do not have to complete Item 11.

ITEM 12 - PHOTOGRAPHS

All existing facilities must include photographs that clearly delineate all existing structures; all existing areas for storing, treating, or disposing of hazardous waste; and all known sites of future storage, treatment, or disposal operations. Photographs may be color or black and white, ground-level or aerial. Indicate the date the photograph was taken on the back of each photograph. Use the process codes listed in Items 7 and 8 to indicate the location of all storage, treatment, and disposal areas.

NOTE

New facilities do not have to complete Item 11.

ITEM 13 - COMMENTS

Use this space for any additional comments and attach additional sheets if necessary. Remember to include your EPA Identification Number and Site Name in the upper left-hand corner of each attached page.

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RCRA Hazardous Waste Part A Permit Application

OTHER REFERENCE INFORMATION

AND

CODE LISTS

EXCLUDED WASTES

This section presents a partial list of excluded materials and wastes. This list includes materials excluded from the definition of solid waste in 40 CFR 261.4(a) and solid wastes excluded from the definition of hazardous waste in 40 CFR 261.4(b). In addition, it also includes specific solid waste samples that are excluded from the definition of hazardous waste in 40 CFR 261.4(d)-(f). Finally, this list includes specific hazardous wastes, as described in 40 CFR 261.4(c), that are exempted from certain RCRA Subtitle C regulations.

Agricultural Waste Fertilizer	Household Waste	Secondary Material Returned to
§261.4(b)(2)	§261.4(b)(1)(i)-(ii)	Original Process
9201.4(0)(2)	3201.4(D)(1)(I)-(II)	§261.4(a)(8)
Analytical Samples	HTMR Condenser Residue	3201.7(0)(0)
§261.4(d)	§261.4(a)(11)	Secondary Material from Mineral
	5 · (-)(-)	Processing
Arsenic Treated Wood and Wood	In situ Mining Materials	§261.4(a)(17)
Products	§261.4(a)(5)	
§261.4(b)(9)		Shredded Circuit Boards Being Recycled
	Irrigation Return Flows	§261.4(a)(14)
Cement Kiln Dust	§261.4(a)(3)	
§261.4(b)(8)		Spent Caustics from Petroleum Refining
	Kraft Mill Steam Stripper Condensates	§261.4(a)(19)
Coking By-products	§261.4(a)(15)	
§261.4(a)(10)		Spent Wood Preserving Solutions and
	Leachate	Wastewaters
Comparable/Syn gas Fuels	§261.4(b)(15)	§261.4(a)(9)
§261.4(a)(16)		
	Mining and Mineral Process Wastes	Sulfuric Acid
Domestic Sewage	§261.4(b)(7)	§261.4(a)(7)
§261.4(a)(1)		
Dundand Matarial	Mining Overburden	Treatability Study Samples
Dredged Material	§261.4(b)(3)	§261.4(e)
§261.4(g)	Nuclear Material	Troatability Studios at Laboratories and
Drilling Fluid	§261.4(a)(4)	Treatability Studies at Laboratories and Testing Facilities
§261.4(b)(5)	9201.4(a)(4)	§261.4(f)
3201.7(0)(3)	Oil Filters	3201.4(1)
Excluded Scrap Metal Being Recycled	§261.4(b)(13)	Trivalent Chromium Waste
§261.4(a)(13)	3231. 1(0)(13)	§261.4(b)(6)
3=01: ((4)(15)	Petrochemical Recovered Oil	32021.1(0)(0)
Exported Wastes	§261.4(a)(18)	Used Oil Distillation Bottoms
§262.56		§261.4(b)(14)
	Petroleum-contaminated Media and	,
Fossil Fuel Emission Control Waste	Debris	Wastes Generated in Storage Tanks,
§261.4(b)(4)	§261.4(b)(10)	Transport Vehicles, Pipelines, or
		Manufacturing Process Units
Hazardous Secondary Material	Petroleum Refining	§261.4(c)
Generated and Reclaimed Under the	§261.4(a)(12)	
Control of the Generator		Wastewater Point Source Discharge
40 CFR 261.2(a)(2)(ii)	Pulping Liquor	§261.4(a)(2)
40 CFR 261.4(a)(23)	§261.4(a)(6)	
Hazardous Secondary Material	Refrigerants	
Transferred Off-site for Reclamation	§261.4(b)(12)	
40 CFR 261.4(a)(24)		

40 CFR 261.4(a)(25)

DEFINITIONS

This section contains definitions of terms helpful for completing the form. For terms defined in the Code of Federal Regulations (CFR), the appropriate citation is provided.

ACCUMULATION – A site that does not hold RCRA Interim Status or a RCRA permit may accumulate hazardous waste for a short period of time before shipping it off-site. The waste must be accumulated in either tanks or containers; it may not be accumulated in surface impoundments.

Generators of more than 1,000 kilograms (kg; 2,200 pounds [lbs]) of hazardous waste per month may accumulate their waste for up to 90 days before shipping it off-site. Generators of 100 kg (220 lbs) to 1,000 kg (2,200 lbs) of hazardous waste per month may accumulate their waste for up to 180 days before shipping it off-site. If the nearest treatment, storage, disposal, or recycling facility to which they can send their waste is more than 200 miles away, they may accumulate their waste for 270 days. See 40 CFR 262.34.

Act or RCRA – The Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. Section 6901 et seq.

Acute Hazardous Waste – Any hazardous waste with an EPA hazardous waste code beginning with the letter "P" (40 CFR 261.33(e)) or any of the following "F" codes: F020, F021, F022, F023, F026, and F027 (40 CFR 261.31). These wastes are subject to stringent quantity standards for accumulation and generation (40 CFR 261.5(e)).

AUTHORIZED REPRESENTATIVE — The person responsible for the overall operation of the site or an operational unit (i.e., part of a site), e.g., superintendent or plant manager, or person of equivalent responsibility.

AUTHORIZED STATE – A State that has obtained authorization from the EPA to direct its own RCRA program.

BOILER – An enclosed device using controlled flame combustion and having the following characteristics:

- The unit has physical provisions for recovering and exporting energy in the form of steam, heated fluids, or heated gases;
- The unit's combustion chamber and primary energy recovery section(s) are of integral design (i.e., they are physically formed into one manufactured or assembled unit);
- The unit continuously maintains an energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel;
- The unit exports and utilizes at least 75 percent of the recovered energy, calculated on an annual basis (excluding recovered heat used internally in the same unit, for example, to preheat fuel or combustion air or drive fans or feedwater pumps); or
- The unit is one which the Regional Administrator has determined, on a case-by-case basis, to be a boiler, after considering the standards in 40 CFR 260.32.

By-product Material – A by-product material is (1) any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material; and (2) the tailings or wastes produced by the

extraction or concentration of uranium or thorium from any ore processed primarily for its source material content (defined in the Atomic Energy Act of 1954).

CODE OF FEDERAL REGULATIONS (CFR) — Codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the Federal Government. The Code is divided into 50 titles which represent broad areas subject to Federal regulation. Each title is divided into chapters that usually bear the name of the issuing agency. Each chapter is further subdivided into parts covering specific regulatory areas. The CFR title applicable for the Hazardous Waste Report is "40," as in "40 CFR 262.34."

CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR (CESQG) OF HAZARDOUS WASTE is a generator who generates less than or equal to the following amounts in a calendar month:

- (i) 100 kilograms (kg; 220 pounds [lbs]) of hazardous waste; and
- (ii) 1 kg (2.2 lbs) of acute hazardous wastes listed in sections 261.31, or 261.33(e); and
- (iii) 100 kg (220 lbs) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous wastes listed in sections 261.31, or 261.33(e).
- CONFIDENTIAL BUSINESS INFORMATION (CBI) Information a facility does not wish to make available to the general public for competitive business reasons. Confidential Business Information (CBI) may be claimed for certain information in your submittal. A claim may be made in accordance with 40 CFR Part 2, Subpart B.
- **DELISTED WASTE** Site-specific wastes excluded from regulation under 40 CFR 260.20 and 260.22. A waste at a particular generating site may be excluded by petitioning the EPA Administrator for a regulatory amendment. These wastes are listed in Appendix IX of 40 CFR Part 261.
- DISPOSAL The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.
- ELIGIBLE ACADEMIC ENTITY A college or university, or a non-profit research institute that is owned by or has a formal written affiliation with a college or university, or a teaching hospital that is owned by or has a formal written affiliation with a college or university pursuant to 40 CFR Part 262, Subpart K (See 40 CFR 262.200).
- **ENVIRONMENTAL PROTECTION AGENCY (EPA)** The EPA, also called U.S. EPA, means the U.S. Environmental Protection Agency. Some State environmental authorities may be called the EPA also, as in "Illinois EPA."
- EPA IDENTIFICATION (ID) NUMBER The number assigned by the EPA to each hazardous waste generator, hazardous waste transporter, and treatment, storage, or disposal facility; U.S. importer of hazardous waste; mixed waste (hazardous and radioactive) generator; recycler of hazardous waste; exempt boiler and/or industrial furnace burning or processing hazardous waste; large quantity handler of or destination facility for universal wastes; disposer of hazardous waste with an underground injection permit; used oil transporter, used oil processor/re-refiner, off-specification used oil fuel burner,

used oil fuel marketer; eligible academic entity managing laboratory hazardous waste under Subpart K; or site undergoing corrective action. Additionally, facilities that must notify using the Site ID Form and Addendum to the Site Identification Form that they are managing hazardous secondary material will also be assigned an EPA Identification Number.

EXCLUDED WASTES – Wastes excluded from the definition of solid or hazardous waste under 40 CFR 261.3 and 261.4. For a partial listing, see the "EXCLUDED WASTES" section of this booklet.

HAZARDOUS WASTE - A hazardous waste as defined in 40 CFR 261.3.

HAZARDOUS SECONDARY MATERIAL (HSM) — A secondary material (e.g., spent material, by-product, or sludge) that, when discarded, would be identified as hazardous waste under 40 CFR Part 261. Facilities managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25) must complete the Addendum to the Site Identification Form: Notification for Managing Hazardous Secondary Material. You must check with your State to determine if you are eligible to manage hazardous secondary material under these exclusions (see also http://www.epa.gov/epawaste/hazard/dsw/statespf.htm).

HAZARDOUS WASTE GENERATOR – Any person, by site, whose act or process produces hazardous waste identified or listed in 40 CFR Part 261.

HAZARDOUS WASTE NUMBER OR CODE, EPA – The number (or code) assigned by the EPA to each hazardous waste listed in 40 CFR Part 261, Subpart D and to each characteristic identified in 40 CFR Part 261, Subpart C. The codes consist of one letter (D, F, P, U, or K) and three numbers. For a list of the EPA hazardous waste codes see the "EPA HAZARDOUS WASTE CODES" section of this booklet.

HAZARDOUS WASTE NUMBER OR CODE, STATE — The number (or code) assigned by the State to each hazardous waste listed in the State regulations. Obtain a list of the States waste codes from your State.

HAZARDOUS WASTE STORAGE – The holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.

HAZARDOUS WASTE TRANSFER FACILITY - Refer to "Transfer Facility" definition.

HAZARDOUS WASTE TRANSPORTER – Refer to "Transporter" definition.

HAZARDOUS WASTE TREATMENT – Any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such hazardous waste, or so as to recover energy or material resources from the hazardous waste, or so as to render such hazardous waste nonhazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume. Such term includes any activity or processing designed to change the physical form or composition of hazardous waste so as to render it nonhazardous.

INCINERATION – Burning of certain types of solid, liquid, or gaseous materials; or a treatment technology involving destruction of waste by controlled burning at high temperatures (e.g., burning sludge to

remove the water and reduce the remaining residues to a safe, non-burnable ash that can be disposed safely on land, in some waters, or in underground locations).

INDUSTRIAL FURNACE – Any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy: cement kilns; lime kilns; aggregate kilns; phosphate kilns; coke ovens; blast furnaces; smelting, melting, and refining furnaces; titanium dioxide chloride process oxidation reactors; methane reforming furnaces; pulping liquor recovery furnaces; combustion devices used in the recovery of sulfur values from spent sulfuric acid; halogen acid furnaces, as defined under industrial furnace in 40 CFR 260.10; and such other devices as the Administrator may add to this list.

Interim (Permit) Status – Period during which the owner/operator of an existing TSD facility is treated as having been issued a RCRA permit even though he/she has not yet received a final determination. An existing facility should have automatically qualified for interim status if the owner/operator filed both timely "notification" and the first part (Part A) of the RCRA permit application. Interim status continues until a final determination is made to issue or deny the permit. Owner/operator of new facilities cannot by definition qualify for interim status; rather, they need a RCRA permit prior to beginning construction of a hazardous waste management facility.

LARGE QUANTITY GENERATOR (LQG) OF HAZARDOUS WASTE —is a generator who generates any of the following amounts in a calendar month:

- (i) Greater than or equal to 1,000 kilograms (kg; 2,200 pounds [lbs]) or more of hazardous waste; or
- (ii) Greater than 1 kg (2.2 lbs) of any acute hazardous wastes listed in §§ 261.31 or 261.33 (e); or
- (iii) Greater than 100 kg (220 lbs) of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous wastes listed in sections 261.31 or 261.33(e).

Large Quantity Handler of Universal Waste (LQHUW) — A universal waste handler (as defined in 40 CFR 273.9) who accumulates 5,000 kilograms (kg) or more total of universal wastes (batteries, pesticides, mercury-containing equipment, or lamps — calculated collectively) at any time. This designation is retained through the end of the calendar year in which the 5,000 kg limit is met or exceeded.

Management, or Hazardous Waste Management – Systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, or disposal of hazardous waste (40 CFR 260.10).

MANIFEST, UNIFORM HAZARDOUS WASTE – The shipment document EPA Form 8700-22 and, if necessary, Form 8700-22A, originated and signed by a generator in accordance with the instructions included in the Appendix to 40 CFR Part 262. The "cradle-to-grave" paperwork must accompany a shipment of hazardous waste as it moves from the generator to the transporter and eventually to the hazardous waste management facility.

MIXED WASTE – Waste that contains both hazardous and source, special nuclear, or by-product material subject to the Atomic Energy Act (AEA), RCRA section 1004(41), 42 U.S.C. 6903 (63 FR 17414; April 9, 1998).

- MUNICIPALITY A city, village, town, borough, county, parish, district, association, Indian tribe or authorized Indian tribal organization, designated and approved management agency under Section 208 of the Clean Water Act, or any other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes.
- **OFF-SITE FACILITY** A hazardous waste treatment, storage, disposal, or recycling area located at a place away from the generating site.
- OFF-SPECIFICATION USED OIL BURNER A site where used oil not meeting the specification requirements in 40 CFR 279.11 (off-specification used oil) is burned for energy recovery in devices identified in Section 279.61(a).
- OFF-SPECIFICATION USED OIL FUEL Used oil fuel that does not meet the specification provided under 40 CFR 279.11.
- ON-SITE FACILITY A hazardous waste treatment, storage, disposal, or recycling area located on the generating site.
- ON-SPECIFICATION USED OIL FUEL Used oil fuel that meets the specification provided under 40 CFR 279.11.
- **OPERATOR** The person responsible for the overall operation of a RCRA site. Note: This is the legal entity which controls the RCRA site operation rather than the plant or site manager. This is usually a company or business name, not an individual. See **Person**.
- Owner The person who owns a RCRA site or part of a RCRA site. Note: This includes the owner(s) of the building(s) and/or land. This may be an individual, company, or business name. See **Person**.
- **PERSON** An individual, trust, firm, joint stock company, Federal Agency, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body.
- RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) The Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (RCRA) (40 CFR 270.2). It is the Federal statute that regulates the generation, treatment, storage, disposal, recycling, and/or transportation of solid and hazardous waste.
- RCRA INTERIM (PERMIT) STATUS Refer to "Interim (Permit) Status" definition.
- RCRA PERMIT A complete RCRA permit is comprised of an operating permit for hazardous waste treatment, storage, and disposal, and a corrective action permit addressing releases from solid waste management unit (SWMUs). To apply for a permit, a site must file a two-part application (Part A and Part B). A facility is not considered to have a complete RCRA permit until both parts have been issued.
- RCRA SUBTITLE C SITE (RCRA SITE OR SITE) The physical plant or location at which one or more of the following regulated waste activities occurs: the generation, transportation, treatment, storage, or

disposal of hazardous wastes; recycling of hazardous wastes; U.S. importer of hazardous waste; mixed waste (hazardous and radioactive) generator; exempt boiler and/or industrial furnace burning or processing hazardous waste; large quantity handler of or destination facility for universal wastes; disposing hazardous waste with an underground injection permit; the transportation (and temporary storage during transportation), processing/re-refining, burning, or marketing of used oil; eligible academic entity managing laboratory hazardous waste under Subpart K; facility managing hazardous secondary material being reclaimed that must comply with certain requirements and conditions; or undergoing corrective action.

A site may consist of several treatment, storage, or disposal operational units. For entities that only transport regulated wastes, the term site refers to the headquarters of that entity's operations.

RECYCLING — Use, reuse, or reclamation of a material (40 CFR 261.1(c)(7)). "Reclamation" is the processing or regeneration of a material to recover a usable product (e.g., recovery of lead values from spent batteries, regeneration of spent solvents) (40 CFR 261.1(c)(4)). A material is "used or reused" if it is either: (1) employed as an ingredient (including use as an intermediate) in an industrial process to make a product (e.g., distillation bottoms from one process used as feedstock in another process) (40 CFR 261.1(c)(5)). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary material); or (2) a commercial product (e.g., spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

SMALL QUANTITY GENERATOR (SQG) OF HAZARDOUS WASTE — is a generator if the site meets **all** of the following criteria:

- (i) Generates, in any calendar month, more than 100 kilograms (kg; 220 pounds [lbs]) but less than 1,000 kg (2,200 lbs) of RCRA hazardous waste; **and**
- (ii) Does not generate, in any calendar month, more than 1 kg (2.2 lbs) of acute hazardous waste listed in sections261.31 or 261.33(e); **and**
- (iii) Does not generate more than 100 kg (220 lbs) of material from the cleanup of any residue or contaminated soil, waste, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous wastes listed in sections 261.31 or 261.33(e).

SMALL QUANTITY ON-SITE BURNER EXEMPTION — The persons who burn small quantity of hazardous waste in an on-site boiler or industrial furnace, in accordance with 40 CFR 266.108, are conditionally exempt from regulation for that activity.

SMELTING, MELTING, AND REFINING FURNACE EXEMPTION — Under 40 CFR 266.100(c), owners or operators of smelting, melting, and refining furnaces that process hazardous wastes solely for metals recovery are conditionally exempt from regulation, except for 40 CFR 266.101 and 266.112, provided they comply with limited requirements set forth in Section 266.100(c). Similarly, 40 CFR 266.100(f) provides that owners or operators of smelting, melting, and refining furnaces that process hazardous wastes for the recovery of precious metals are conditionally exempt from regulation, except for 40 CFR 266.112, provided they comply with limited requirements specified in Section 266.100(f).

SOLID WASTE – Any garbage, refuse, or sludge, or other materials not excluded under 40 CFR 261.4(a). Exclusions include, for example, domestic sewage and any mixture of other wastes that pass

through a sewer system to a publicly owned treatment works (POTWs); industrial wastewater discharges that are point source discharges subject to regulation under the Clean Water Act; irrigation return flows; nuclear materials defined by the Atomic Energy Act; and in situ mining materials (see the "EXCLUDED WASTES" section of this booklet). Wastewaters being collected, stored, or treated before discharge and sludges generated by wastewater treatment are not excluded. The EPA defines hazardous waste as a subset of solid waste.

SOURCE MATERIAL – As defined by the Atomic Energy Act of 1954: (1) Uranium, thorium, or any other material determined by the Nuclear Regulatory Commission pursuant to the provisions of Section 2091 of this title to be source material; or (2) ores containing one or more of the foregoing materials in such concentration as the Commission may by regulation determine from time to time.

Special Nuclear Material — As defined by the Atomic Energy Act of 1954: (1) plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the Nuclear Regulatory Commission, pursuant to the provisions of Section 2071 of this title, determines to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any of the foregoing, but does not include source material.

SUBPART K – An alternative set of generator requirements for managing laboratory hazardous waste at eligible academic entities. Generators that are eligible academic entities with laboratories may elect to opt into 40 CFR 262 Subpart K and manage their laboratory hazardous waste under Subpart K in lieu of 40 CFR 262.34(c) (or 40 CFR 261.5 for CESQGs). In order for eligible academic entities (see definition) to opt into Subpart K or subsequently withdraw from Subpart K, they must use the Site ID Form to notify the appropriate State or EPA Regional Office. Refer to 40 CFR 262.203 and 262.204. Note: You must check with your State to determine if you are eligible to manage laboratory hazardous waste pursuant to 40 CFR Part 262 Subpart K and for any State-specific requirements.

TOLLING – Tolling arrangements describe a particular type of recycling contract between two companies. Specifically, the "tolling" company certifies that it has a contract with a manufacturer to produce a product, and that manufacturing process generates a residual material that can be recycled by the tolling company. If the tolling company certifies that the contract specifies that the tolling company owns and has responsibility for the recyclable material once it is generated, and the material is returned to the tolling company for reclamation, and subsequently recycled, the material is excluded from regulation (under 40 CFR 261.2(a)(2)(ii) or 261.4(a)(23)), provided certain requirements are met.

TRANSFER FACILITY — Any transportation-related facility including loading docks, parking areas, storage areas, and other similar areas where shipments of hazardous waste are held for 10 days or less during the normal course of transportation (40 CFR 260.10 and 40 CFR 263.12).

TRANSPORTER – A person engaged in the off-site transportation of hazardous waste by air, rail, highway, or water.

UNDERGROUND INJECTION CONTROL – The subsurface emplacement of fluids through a bored, drilled or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension. Underground injection wells are regulated under both the Safe Drinking Water Act and the Resource Conservation and Recovery Act (see 40 CFR Part 148).

UNITED STATES IMPORTER – Any person who imports hazardous waste from a foreign country into the U.S. This does not include hazardous waste shipped from a foreign Department of Defense site, Maquiladora, U.S. territory or protectorate.

UNIVERSAL WASTE – Any of the following hazardous wastes that are managed under the universal waste requirements of 40 CFR Part 273: batteries, pesticides, mercury-containing equipment, and lamps. Some States may have State-specific universal wastes defined as well.

USED OIL – Any oil that has been refined from crude oil, or any synthetic oil, that has been used, and as a result of such use, is contaminated by physical or chemical impurities.

USED OIL FUEL MARKETER – Any person who conducts either of the following activities:

- 1. Directs a shipment of off-specification used oil from their site to an off-specification used oil burner; or
- 2. First claims that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in 40 CFR 279.11.

USED OIL MANAGEMENT ACTIVITIES – For the purposes of the Site ID Form, includes used oil transportation; used oil processing and re-refining; burning off-specification used oil fuel; and used oil fuel marketing.

USED OIL PROCESSING – Chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived products. Processing includes, but is not limited to: blending used oil with virgin petroleum products, blending used oils to meet the fuel specification, filtration, simple distillation, chemical or physical separation, and re-refining.

USED OIL PROCESSOR – A site that processes on-specification or off-specification used oil.

USED OIL RE-REFINER – A site that produces lubricating oils and greases, industrial fuel, asphalt extender, gasoline, and other products from on-specification or off-specification used oil.

USED OIL TRANSFER FACILITY — Any transportation-related facility, including loading docks, parking areas, storage areas, and other areas where shipments of used oil are held for more than 24 hours during the normal course of transportation and not longer than 35 days. Transfer facilities that store used oil for more than 35 days are subject to regulation under 40 CFR Part 279, Subpart F.

USED OIL TRANSPORTER – Any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities. Used oil transporters may consolidate or aggregate loads of used oil for purposes of transportation but, with the following exception, may not process used oil. Used oil transporters may conduct incidental processing operations that occur in the normal course of used oil transportation (e.g., settling and water separation), but that are not designed to produce (or make more amenable for production of) used oil-derived products or used oil fuel.

EPA HAZARDOUS WASTE CODES

A list of all the hazardous waste codes is shown below. See the regulations for details.

CHARACTERISTICS OF HAZARDOUS WASTE (SEE 40 CFR 261.24) – **DXXX**

HAZARDOUS WASTE FROM NON-SPECIFIC SOURCES (SEE 40 CFR 261.31) – FXXX

HAZARDOUS WASTE FROM SPECIFIC SOURCES (SEE 40 CFR 261.32) - KXXX

DISCARDED COMMERCIAL CHEMICAL PRODUCTS, OFF-SPECIFICATION SPECIES, CONTAINER RESIDUES, AND SPILL RESIDUES THEREOF – ACUTE HAZARDOUS WASTE (SEE 40 CFR 261.33) – PXXX

DISCARDED COMMERCIAL CHEMICAL PRODUCTS, OFF-SPECIFICATION SPECIES, CONTAINER RESIDUES, AND SPILL RESIDUES THEREOF – TOXIC WASTES (SEE 40 CFR 261.33) – UXXX

							•/						
D001	F001	K001	V047	V122	D001	DOEO	D100	11001	11040	LIOOF	114.43	111.00	11247
D001	F001	K001	K047	K123	P001	P050	P106	U001	U048	U095	U143	U189	U247
D002	F002	K002	K048	K124	P002	P051	P108	U002	U049	U096	U144	U190	U248
D003	F003	K003	K049	K125	P003	P054	P109	U003	U050	U097	U145	U191	U249
D004	F004	K004	K050	K126	P004	P056	P110	U004	U051	U098	U146	U192	U271
D005	F005	K005	K051	K131	P005	P057	P111	U005	U052	U099	U147	U193	U278
D006	F006	K006	K052	K132	P006	P058	P112	U006	U053	U101	U148	U194	U279
D007	F007	K007	K060	K136	P007	P059	P113	U007	U055	U102	U149	U196	U280
D008	F008	K008	K061	K141	P008	P060	P114	U008	U056	U103	U150	U197	U328
D009	F009	K009	K062	K142	P009	P062	P115	U009	U057	U105	U151	U200	U353
D010	F010	K010	K069	K143	P010	P063	P116	U010	U058	U106	U152	U201	U359
D011	F011	K011	K071	K144	P011	P064	P118	U011	U059	U107	U153	U202	U364
D012	F012	K013	K073	K145	P012	P065	P119	U012	U060	U108	U154	U203	U367
D013	F019	K014	K083	K147	P013	P066	P120	U014	U061	U109	U155	U204	U372
D014	F020	K015	K084	K148	P014	P067	P121	U015	U062	U110	U156	U205	U373
D015	F021	K016	K085	K149	P015	P068	P122	U016	U063	U111	U157	U206	U387
D016	F022	K017	K086	K150	P016	P069	P123	U017	U064	U112	U158	U207	U389
D017	F023	K018	K087	K151	P017	P070	P127	U018	U066	U113	U159	U208	U394
D018	F024	K019	K088	K156	P018	P071	P128	U019	U067	U114	U160	U209	U395
D019	F025	K020	K093	K157	P020	P072	P185	U020	U068	U115	U161	U210	U404
D020	F026	K021	K094	K158	P021	P073	P188	U021	U069	U116	U162	U211	U409
D021	F027	K022	K095	K159	P022	P074	P189	U022	U070	U117	U163	U213	U410
D022	F028	K023	K096	K161	P023	P075	P190	U023	U071	U118	U164	U214	U411
D023	F032	K024	K097	K169	P024	P076	P191	U024	U072	U119	U165	U215	
D024	F034	K025	K098	K170	P026	P077	P192	U025	U073	U120	U166	U216	
D025	F035	K026	K099	K171	P027	P078	P194	U026	U074	U121	U167	U217	
D026	F037	K027	K100	K172	P028	P081	P196	U027	U075	U122	U168	U218	
D027	F038	K028	K100	K174	P029	P082	P197	U028	U076	U123	U169	U219	
D028	F039	K029	K101	K175	P030	P084	P198	U029	U077	U124	U170	U220	
D029		K030	K102	K176	P031	P085	P199	U030	U078	U125	U171	U221	
D030		K031	K103	K177	P033	P087	P201	U031	U079	U126	U172	U222	
D031		K032	K104	K178	P034	P088	P202	U032	U080	U127	U173	U223	
D032		K033	K105	K181	P036	P089	P203	U033	U081	U128	U174	U225	
D033		K034	K106		P037	P092	P204	U034	U082	U129	U176	U226	
D034		K035	K107		P038	P093	P205	U035	U083	U130	U177	U227	
D035		K036	K108		P039	P094		U036	U084	U131	U178	U228	
D036		K037	K109		P040	P095		U037	U085	U132	U179	U234	
D037		K038	K110		P041	P096		U038	U086	U133	U180	U235	
D038		K039	K111		P042	P097		U039	U087	U134	U181	U236	
D039		K040	K112		P043	P098		U041	U088	U135	U182	U237	
D040		K041	K113		P044	P099		U042	U089	U136	U183	U238	
D041		K042	K114		P045	P101		U043	U090	U137	U184	U239	
D042		K043	K115		P046	P102		U044	U091	U138	U185	U240	
D043		K044	K116		P047	P103		U045	U092	U140	U186	U243	
		K045	K117		P048	P104		U046	U093	U141	U187	U244	
		K046	K118		P049	P105		U047	U094	U142	U188	U246	

HAZARDOUS SECONDARY MATERIAL (HSM) FACILITY CODES

Facility codes describe the specific regulation a facility uses to manage its hazardous secondary material (HSM) and the type of activity the facility performs under the regulation (e.g., generator, reclaimer). Review the groups and pick the appropriate code. If more than one facility code applies to you, enter each code on a separate row under Item 2 of the Addendum to the Site Identification Form.

Under	Control of the Generator Exclusion (40 CFR 261.2(a)(2)(ii) or 261.4(a)(23))
Code	Facility Code Description
01	HSM Generator reclaiming HSM "on-site": This code applies if you generate and reclaim hazardous secondary material at your generating facility. See also paragraph (1) in the Federal definition of "Hazardous secondary material generated and reclaimed under the control of the generator" in 40 CFR Part 260.10.
02	HSM Generator transferring HSM to reclaimer within the "same company": This code applies if you generate hazardous secondary material and send the material for reclamation to a different facility that is either controlled by you or controlled by the same person that controls your generating facility. See also paragraph (2) in the Federal definition of "Hazardous secondary material generated and reclaimed under the control of the generator" in 40 CFR Part 260.10.
03	Reclaimer receiving HSM from HSM generator within the "same company": This code applies if you receive and reclaim hazardous secondary material from a different facility that either controls you or is controlled by the same person that controls you. See also paragraph (2) in the Federal definition of "Hazardous secondary material generated and reclaimed under the control of the generator" in 40 CFR Part 260.10.
04	Tolling Contractor reclaiming HSM pursuant to a tolling contract: This code applies if you are a tolling contractor that reclaims hazardous secondary material pursuant to a written contract with a toll manufacturer. See also paragraph (3) in the Federal definition of "Hazardous secondary material generated and reclaimed under the control of the generator" in 40 CFR Part 260.10.
05	Toll Manufacturer managing HSM pursuant to a tolling contract: This code applies if you generate and send hazardous secondary material for reclamation to a tolling contractor pursuant to a written contract. See also paragraph (3) in the Federal definition of "Hazardous secondary material generated and reclaimed under the control of the generator" in 40 CFR Part 260.10.

Transf	Transfer-based Exclusion (40 CFR 261.4(a)(24))						
Code	Facility Code Description						
06	HSM Generator transferring HSM off-site to a domestic reclamation facility: This code applies if you generate and						
	send hazardous secondary material for reclamation to an off-site domestic reclamation facility.						
07	Reclaimer receiving HSM from off-site: This code applies if you reclaim hazardous secondary material received from						
	an off-site domestic hazardous secondary material generator or other domestic facility.						
08	Intermediate facility: This code applies if you receive hazardous secondary material from an off-site domestic						
	hazardous secondary material generator or another domestic facility and you store it for more than ten days. This						
	code does not apply if you generate or reclaim the hazardous secondary material.						

Imports/Exports (40 CFR 261.4(a)(24) or (25))					
Code	Facility Code Description				
09	HSM Generator exporting HSM off-site to a foreign reclamation facility: This code applies if you generate and export				
	hazardous secondary material for reclamation to a foreign reclamation facility.				
10	HSM Generator importing HSM from a foreign entity to send to another domestic reclamation facility: This code				
	applies if you import hazardous secondary material from a foreign entity and send the material for reclamation to a				
	domestic reclamation facility.				
11	HSM Generator AND Reclaimer of imported HSM: This code applies if you import hazardous secondary material from				
	a foreign entity and reclaim the material at your facility.				

HAZARDOUS SECONDARY MATERIAL (HSM) LAND-BASED UNIT CODES

A 2-digit code that best describes the land-based unit you use or will use to manage the hazardous secondary material.

Code	Land-based Unit Code Description
NA	Do not use land-based units to manage hazardous secondary material.
SI	Use surface impoundment(s) to manage hazardous secondary material. A surface impoundment is a natural topographic depression, man-made excavation or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid hazardous secondary materials or materials containing free liquids and which is not an injection well.
PL	Use pile(s) to manage hazardous secondary material. Pile means any non-containerized accumulation of solid, non-flowing hazardous secondary material that is used for storage and is not a containment building.
ОТ	Use other land-based unit(s) to manage hazardous secondary material.

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FO The Sta	ND MPLETED RM TO: e Appropriate ate or Regional ice.	United States Env RCRA SUBTITLE C			,	THE PROTECTION
1.	Reason for Submittal	Reason for Submittal: To provide an Initial Notification (first for this location)	st time submitti	ng site identification	information / to obtai	n an EPA ID number
E	MARK ALL BOX(ES) THAT APPLY	 □ To provide a Subsequent Notification □ As a component of a First RCRA Haz □ As a component of a Revised RCRA □ As a component of the Hazardous W □ Site was a TSD facility and/or get 	azardous Wasi A Hazardous V Waste Report (generator of >1	te Part A Permit Appl Vaste Part A Permit A If marked, see sub-b ,000 kg of hazardous	ication Application (Amendmullet below) waste, >1 kg of acu	nent #) ute hazardous waste, or
		>100 kg of acute hazardous was LQG regulations)	aste spili cieani	up in one or more mo	onths of the report ye	ear (or State equivalent
2.	Site EPA ID Number	EPA ID Number				
3.	Site Name	Name:				
4.	Site Location	Street Address:				
	Information	City, Town, or Village:				County:
		State: Coun	intry:			Zip Code:
5.	Site Land Type	Private County District	Federal	Tribal [☐ Municipal ☐St	ate Other
6.	NAICS Code(s) for the Site	A.		c.		
	(at least 5-digit codes)	B.		D.		
7.		Street or P.O. Box:				
	Address	City, Town, or Village:				
		State: Coun	intry:			Zip Code:
8.	Site Contact	First Name: MI:	Last			
	Person	Title:				
		Street or P.O. Box:				
		City, Town or Village:				
		State: Coun	intry:			Zip Code:
		Email:				
		Phone:	Ext.:			Fax:
9.	Legal Owner and Operator	A. Name of Site's Legal Owner:				Date Became Owner:
	of the Site	Owner Type: Private County Di	District D _F	ederal Tribal	Municipal	State Other
		Street or P.O. Box:				
		City, Town, or Village:			P	Phone:
		State: Coun	intry:			ip Code:
		B. Name of Site's Operator:				Date Became Operator:
		Operator Private County	District F	ederal Tribal	Municipal	State Other

EPA ID Number			OMB#: 2050-0024; Expires 01/31/2017
	I Waste Activity (at your site) o" for all current activities (as of th	e date submitting the	form); complete any additional boxes as instructed.
A. Hazardous Waste	Activities; Complete all parts 1-10.		
	erator of Hazardous Waste es," mark only one of the following	յ – a, b, or c.	Y N 5. Transporter of Hazardous Waste If "Yes," mark all that apply.
☐ a. LO	QG: Generates, in any calendar (2,200 lbs/mo.) or more of h. Generates, in any calendar (accumulates at any time, mo (2.2 lbs/mo) of acute hazard Generates, in any calendar (accumulates at any time, mo (220 lbs/mo) of acute hazard material.	azardous waste; or month, or ore than 1 kg/mo lous waste; or month, or ore than 100 kg/mo	a. Transporter b. Transfer Facility (at your site) Y □ N □ 6. Treater, Storer, or Disposer of Hazardous Waste Note: A hazardous waste Part B permit is required for these activities. Y □ N □ 7. Recycler of Hazardous Waste
☐ b. SC			
_	ESQG: Less than 100 kg/mo (220 lk hazardous waste.		8. Exempt Boiler and/or Industrial Furnace If "Yes," mark all that apply. a. Small Quantity On-site Burner
Y N 2. Short- event a	Term Generator (generate from a shand not from on-going processes). If ation in the Comments section.	ort-term or one-time	Exemption b. Smelting, Melting, and Refining Furnace Exemption
Y N 3. United	d States Importer of Hazardous Wa	ste	Y N 9. Underground Injection Control
Y N 4. Mixed	Waste (hazardous and radioactive) Generator	Y N 10. Receives Hazardous Waste from Off-site
B. Universal Waste A	Activities; Complete all parts 1-2.		C. Used Oil Activities; Complete all parts 1-4.
ac re ty	arge Quantity Handler of Universal ccumulate 5,000 kg or more) [refer egulations to determine what is regones of universal waste managed a lark all that apply.	to your State ulated]. Indicate	Y N 1. Used Oil Transporter If "Yes," mark all that apply. a. Transporter b. Transfer Facility (at your site)
b. c. d. e. f.	Batteries Pesticides Mercury containing equipment Lamps Other (specify) Other (specify) Other (specify)		2. Used Oil Processor and/or Re-refiner If "Yes," mark all that apply. a. Processor b. Re-refiner Y N 3. Off-Specification Used Oil Burner Y N 4. Used Oil Fuel Marketer If "Yes," mark all that apply.
N	estination Facility for Universal Waote: A hazardous waste permit may ctivity.		a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner b. Marketer Who First Claims the Used Oil Meets the Specifications

E	PA ID Nui	mber] [OME	3#: 2050	0-0024	; Expires (01/31/2017
D.	Eligible wastes								Notifi	catio	on fo	or opt	ing in	to or w	ithdra	wing f	rom ma	naging	labor	atory haza	ardous
		ou can (-														
	•	you ar	e at le	ast on ith a c	e of th	ne folle e or u	owing:													mal affiliati ation agree	on ement with
	•	you ha	ve che	ecked	with y	our S	tate to	dete	rmine	if 40	O CF	R Pa	rt 262	Subpar	t K is e	ffective	e in you	r state			
Υ[N																			stes in labo t apply:	oratories
		☐a.	Colle	ge or l	Unive	rsity															
		☐b.	Teach	ning H	lospita	al tha	ıt is ov	wned	by o	r has	s a f	orma	l writt	en affili	ation	agreer	nent wi	th a co	llege	or univers	ity
		C.	Non-p	orofit I	Institu	ite th	at is c	wnec	d by c	or ha	is a	form	al writ	ten affi	liation	agree	ment w	ith a co	ollege	or univer	sity
Υ[N	2. Witl	ndrawi	ng fro	m 40 (CFR I	Part 20	62 Su	ıbpart	K fo	r the	e man	agem	ent of ha	azardo	us was	stes in la	aborato	ries		
11.	Descrip	tion of	Hazar	dous	Waste	е															
Α.		e. List t	hem ir																	astes hand nal page if	
	ориссо																				
В.		us was	tes ha																	Regulated I page if m	
				_			_	_		_	_		· <u> </u>			· <u> </u>					

Notifica	ion of Hazardous Secondary Materia	II (HSM) Activity	
Y N	Are you notifying under 40 CFR 260.4 secondary material under 40 CFR 261	2 that you will begin managing, are managing, 2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25)?	or will stop managing hazardous
	If "Yes," you must fill out the Addendu Material.	m to the Site Identification Form: Notification fo	r Managing Hazardous Secondary
13. Comme	nts		
\			
accorda on my i informa penaltie	ince with a system designed to assure nquiry of the person or persons who ma tion submitted is, to the best of my knowns as for submitting false information, inclu-	at this document and all attachments were prep that qualified personnel properly gather and ev anage the system, or those persons directly res wledge and belief, true, accurate, and complete ding the possibility of fines and imprisonment for Il owner(s) and operator(s) must sign (see 40 Co	aluate the information submitted Based sponsible for gathering the information, the set. I am aware that there are significant for knowing violations. For the RCRA
Signature authorized	of legal owner, operator, or an representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
11/4	the F (miner	William Connors,	10/21/2015
		SVP Facilities Regulatory Compliance	

EPA ID Number						1 1		- []	1	1	OMB#: 2050-0024: Ex	oires 01/31/2017
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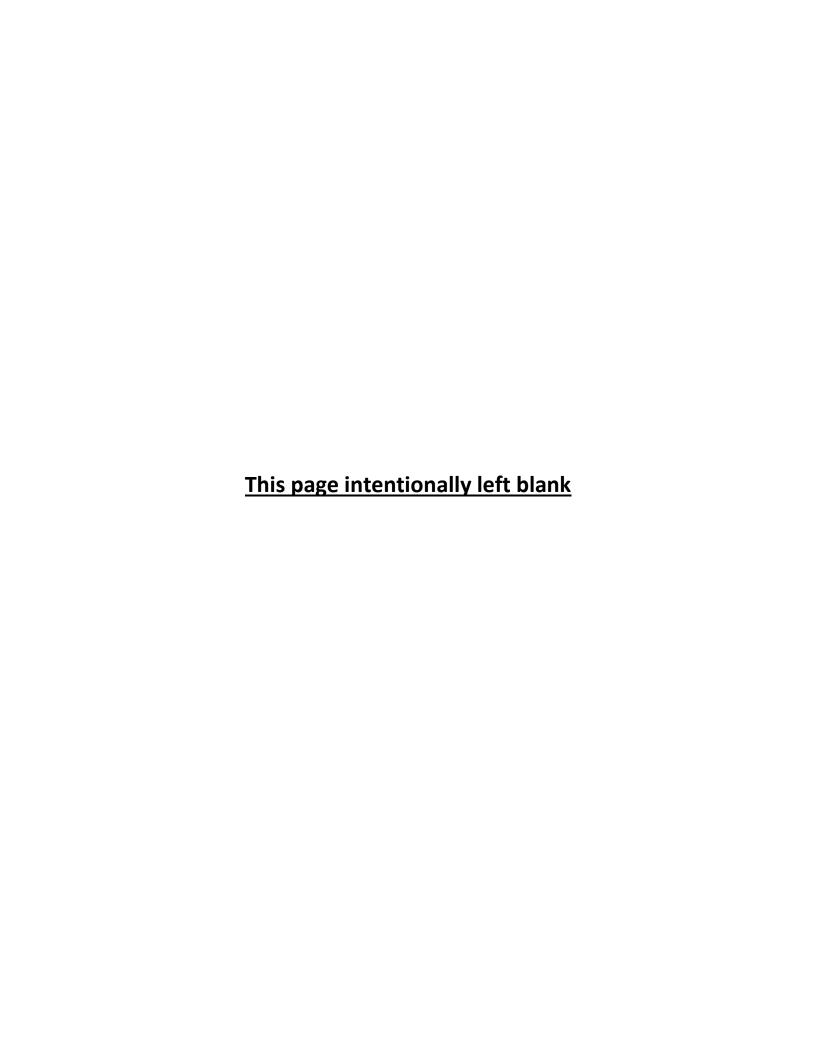
ADDENDUM TO THE SITE IDENTIFICATION FORM: NOTIFICATION OF HAZARDOUS SECONDARY MATERIAL ACTIVITY



ONLY fill out this form if:

- You are located in a State that allows you to manage excluded hazardous secondary material (HSM) under 40 CFR 261.2(a)(2)(ii), 261.4(a)(23), (24), or (25) (or state equivalent). See http://www.epa.gov/epawaste/hazard/dsw/statespf.htm for a list of eligible states; AND
- You are or will be managing excluded HSM in compliance with 40 CFR 261.2(a)(2)(ii), 261.4(a)(23), (24), or (25) (or state equivalent) or you have stopped managing excluded HSM in compliance with the exclusion(s) and do not expect to manage any amount of excluded HSM under the exclusion(s) for at least one year. Do not include any information regarding your hazardous waste activities in this section

waste activit	iles in this section.			
1. Indicate reason	for notification. Include dates where red	quested.		
Facility will b	pegin managing excluded HSM as of	(mm/dd/yyyy).		
☐ Facility is sti	II managing excluded HSM/re-notifying as r	equired by March 1 of each	even-numbered vear.	
Facility has	stopped managing excluded HSM as of	(mm/dd/yyyy) a	ind is notifying as required	l.
	xcluded HSM activity. Please list the app onot include any information regarding you			
a. Facility code (answer using codes listed in the Code List section of the instructions)	b. Waste code(s) for HSM	c. Estimated short tons of excluded HSM to be managed annually	d. Actual short tons of excluded HSM that was managed during the most recent odd- numbered year	e. Land-based unit code (answer using codes listed in the Code List section of the instructions)
	ncial assurance pursuant to 40 CFR 261 lities managing excluded HSM under 40 CF		urance is required for recl	aimers and
Y N Does	this facility have financial assurance pursua	ant to 40 CFR 261.4(a)(24)(v	ri)?	
EPA Form 8700-12,	8700-13 A/B, 8700-23		Addendu	m Page of



A ID Number																OMB#: 2050-0024; Expires 01/31/20
	НА	ZA	RE												n Agen	cy I ON FORM
. Facility Permit Contact	Fire	st Na	ıme:	1							MI:		Las	st Na	ıme:	
	Со	ntact	t Titl	e:								ı				
	Pho	one:										E	(t.:			Email:
Facility Permit Contact Mailing	Str	eet o	r P.	О. В	ox:											
Address	Cit	y, To	wn,	or \	/illa	ge:										
	Sta	te:														
	Co	untry	/ :											Z	Zip Code	9 :
Operator Mailing Address and	Str	eet o	r P.	О. В	ox:											
Telephone Number	Cit	y, To	wn,	or \	/illa	ge:										
	Sta	te:												Р	Phone:	
	Со	untry	/ :											z	Zip Code	9 :
. Facility Existence Date	Fac	ility	Exis	sten	ce C	Date	(mı	m/de	d/vv	vv):						
. Other Environmenta																
A. Facility Type (Enter code)	B. Permit Number										C. Description					
												+				
		1	1		ļ											

7. Process Codes and Design Capacities - Enter information in the Section on Form Page 3

- A. <u>PROCESS CODE</u> Enter the code from the list of process codes below that best describes each process to be used at the facility. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in Item 8.
- B. PROCESS DESIGN CAPACITY For each code entered in Item 7.A; enter the capacity of the process.
 - 1. <u>AMOUNT</u> Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.
 - 2. <u>UNIT OF MEASURE</u> For each amount entered in Item 7.B(1), enter the code in Item 7.B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.
- C. PROCESS TOTAL NUMBER OF UNITS Enter the total number of units for each corresponding process code.

Process Code	Process	Proces	te Unit of Measure for s Design Capacity	Process Code	Proces		Appropriate Unit of Measure for Process Design Capacity
		oosal			eatment (Continu	ıed)	(for T81 – T94)
D79	Underground Injection Well Disposal	Liters Per D	•	T81	Cement Kiln		Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour;
D80	Landfill		ectares-meter; Acres; s; Hectares; Cubic	T82	Lime Kiln		Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; BTU Per Hour; Liters Per Hour;
D81	Land Treatment	Acres or He	ctares	T83	Aggregate Kiln		Kilograms Per Hour; or Million BTU Per Hour
D82	Ocean Disposal	Gallons Per	Day or Liters Per Day	T84	Phosphate Kiln		Tioui
D83	Surface Impoundment Disposal	Gallons; Lite Cubic Yards	ers; Cubic Meters; or	T85	Coke Oven		
D99	Other Disposal	Any Unit of	Measure Listed Below	T86	Blast Furnace		
	Sto	rage		T87	Smelting, Meltin	g, or Refining	g Furnace
S01	Container	Cubic Yards		T88	Titanium Dioxide	e Chloride Ox	kidation Reactor
S02	Tank Storage	Gallons; Lite Cubic Yards	ers; Cubic Meters; or	T89	Methane Reform	•	
S03	Waste Pile		or Cubic Meters	T90	Pulping Liquor F	Recovery Furi	nace
S04	Surface Impoundment	Cubic Yards		T91	Combustion Dev Sulfuric Acid	vice Used in t	the Recovery of Sulfur Values from Spent
S05	Drip Pad	Hectares; or	ers; Cubic Meters; Cubic Yards	T92	Halogen Acid Fu	urnaces	
S06	Containment Building Storage	Cubic Yards	or Cubic Meters	T93	Other Industrial	Furnaces Lis	ted in 40 CFR 260.10
S99	Other Storage	Any Unit of	Measure Listed Below	T94	Containment Bu Treatment	ilding	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per
	Trea	tment					Hour; BTU Per Hour; Pounds Per Hour;
T01 T02	Tank Treatment Surface Impoundment		Day; Liters Per Day Day; Liters Per Day				Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million BTU Per Hour
T00		OL . T				Miscellaneo	us (Subpart X)
T03	Incinerator	Per Hour; G Per Hour; B' Per Hour; S	Per Hour; Metric Tons allons Per Hour; Liters TUs Per Hour; Pounds nort Tons Per Day;	X01	Open Burning/O Detonation		Any Unit of Measure Listed Below
T04	Other Treatment	Day; Metric Million BTU	er Hour; Gallons Per Tons Per Hour; or Per Hour Day; Liters Per Day;	X02	Mechanical Prod	cessing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per
104	Carol Hoddinent	Pounds Per Hour; Kilogr Tons Per Da BTUs Per H	Hour; Short Tons Per ams Per Hour; Metric ay; Short Tons Per Day; our; Gallons Per Day; our; or Million BTU Per	X03	Thermal Unit		Hour; or Gallons Per Day Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; BTU Per Hour; or Million BTU
T80	Boiler		ers; Gallons Per Hour; our; BTUs Per Hour; or Per Hour	X04	Geologic Repos	itory	Per Hour Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters
				X99	Other Subpart X		Any Unit of Measure Listed Below
Unit of Me	easure Unit of Me	asure Code	Unit of Measure		Measure Code	Unit of Mea	asure Unit of Measure Code
Gallons		G	Short Tons Per Hour		D	Cubic Yard	lsY
	er Hour		Short Tons Per Day				ersC
	er Day		Metric Tons Per Hour Metric Tons Per Day				B A
	Hour		Pounds Per Hour				Q
	Day		Kilograms Per Hour				eterF
			Million BTU Per Hour.			BTU Per He	ourl

EPA	A ID Nu	ımber	Ĺ				OMB#: 2050-0	0024; 1	Expir	es 01	/31/2	2017	
7. I	Proces	s Cod	es an	d Des	ign Capacities (Continued)								
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	ine	A.	Proc. Code		B. PROCESS DESIGN CAPAC	ITY	C. Process Total		or Of	ficial	Use	Only	
Nu	mber	(Fro	m list a		(1) Amount (Specify)	(2) Unit of Measure	Number of Units					· · · · ·	
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	2												
	3												
	4												
	5												
	6												
	7												
	8												
	9												
1	0												
1	1												
1	2												
1	3												
No	te: If y	ou ne e line	ed to sequ	list me entiall	ore than 13 process codes, attach an addit y, taking into account any lines that will be	ional sheet(s) with e used for "other" p	the information in porocess (i.e., D99, S	the sa 99, TO	me fo 04, ar	orma nd X9	t as 19) in	abov Iten	/e. 1 8.
No: Nun	te: If y	e line	sequ	entiall	ore than 13 process codes, attach an addit y, taking into account any lines that will be w instructions from Item 7 for D99, S99, T0	e used for "other" p	process (i.e., D99, S	the sa 99, TO	me fo	orma nd X9	et as 19) in	abov Iten	/e. 1 8.
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Non Num 8. L Nu (Ent	te: If ynber the Other ine mber er #s in uence	Proce A. Pr	seque	entiali (Follo	y, taking into account any lines that will be w instructions from Item 7 for D99, S99, T0 B. PROCESS DESIGN CAPACITY	e used for "other" p 4, and X99 process (2) Unit of	crocess (i.e., D99, S codes)	99, TO)4, ar	d X9	99) in	Iten	n 8.
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9. Description of Hazardous Wastes - Enter Information in the Sections on Form Page 5

- A. EPA HAZARDOUS WASTE NUMBER Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. ESTIMATED ANNUAL QUANTITY For each listed waste entered in Item 9.A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in Item 9.A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE For each quantity entered in Item 9.B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	Р	KILOGRAMS	K
TONS	Т	METRIC TONS	М

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in Item 9.A, select the code(s) from the list of process codes contained in Items 7.A and 8.A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all listed hazardous wastes.

For non-listed waste: For each characteristic or toxic contaminant entered in Item 9.A, select the code(s) from the list of process codes contained in Items 7.A and 8.A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

- 1. Enter the first two as described above.
- 2. Enter "000" in the extreme right box of Item 9.D(1).
- 3. Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 9.E.
- 2. PROCESS DESCRIPTION: If code is not listed for a process that will be used, describe the process in Item 9.D(2) or in Item 9.E(2).

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER – Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- Select one of the EPA Hazardous Waste Numbers and enter it in Item 9.A. On the same line complete Items 9.B, 9.C, and 9.D by estimating the total annual quantity of the waste and describing all the processes to be used to store, treat, and/or dispose of the waste.
- 2. In Item 9.A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In Item 9.D.2 on that line enter "included with above" and make no other entries on that line.
- 3. Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING Item 9 (shown in line numbers X-1, X-2, X-3, and X-4 below) – A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA Hazardous Waste No.			lous	B. Estimated Annual	C. Unit of Measure		D. PROCESSES									
Number		(Enter code)			Qty of Waste	(Enter code)	(1) PROCESS CODES (Enter Code)									(2) PROCESS DESCRIPTION (If code is not entered in 9.D(1))	
Х	1	K	0	5	4	900	Р	Т	0	3	D	8	0				
Х	2	D	0	0	2	400	Р	Т	0	3	D	8	0				
Х	3	D	0	0	1	100	Р	Т	0	3	D	8	0				
Х	4	D	0	0	2												Included With Above

Line Number			lazard		B. Estimated	C. Unit of Measure (Enter code)		al sheet(s) as necessary; number pages as 5a, etc.) D. PROCESSES								
		Wast	te No. code)		Annual Qty of Waste		(1) PROCESS CODES (Enter Code)									(2) PROCESS DESCRIPTION (If code is not entered in 9.D(1))
	1															
	2															
	3															
	4															
	5															
	6															
	7															
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-	1	1		1	1		1	1	l	l	1	l	1	l	l	

EPA ID Number																Ol	MB#	: 205	0-0024; Expires 01/31/2017			
9. D	9. Description of Hazardous Wastes (Continued. Use additional sheet(s) as necessary; number pages as 5a, etc.)																					
Line Number			EPA Hazardous B. Estimated					C. Unit of			D. PROCESSES											
		(Wast Enter	e No. code)		Annual Qty of Waste				Measure (Enter code)		(1) PROCESS CODES (Enter Code)									(2) PROCESS DESCRIPTION (If code is not entered in 9.D.1)	

EPA	ID Number OMB#: 2050-0024; Expires 01/31/2017
10	Мар
10.	Attach to this application a topographical map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all spring, rivers, and other surface water bodies in this map area. See instructions for precise requirements.
11.	Facility Drawing
	All existing facilities must include a scale drawing of the facility (see instructions for more detail).
12.	Photographs
	All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, and disposal areas; and sites of future storage, treatment, or disposal areas (see instructions for more detail).
13.	Comments

TULSA DISPOSAL, LLC.

TULSA, OKLAHOMA

TAB VI

GENERAL DESCRIPTION

In Compliance With 40 CFR 270.14

Revised October 2015

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6.0 - GENERAL DESCRIPTION OF THE FACILITY ODEQ Item Number B-1, B-10, B-11 40 CFR 270.14

Tab VI provides general information, including background and history for Tulsa Disposal, LLC (the Facility) as required by 40 CFR 270.14(b)(1). The location of the Facility is shown in Appendix 2, Figure 1.

6.1. BACKGROUND AND HISTORY

The Facility was established in 1979 as Hydrocarbon Recyclers, Inc. (HRI) to recycle waste oil. Waste solvent storage and recycling operations were added in 1983. In 1987, a new processing plant for waste oil was completed. Processing activities were conducted in two separate plant areas until June 3, 1996, when operations ceased. On May 30, 1997, the Facility underwent a name change. The company name was changed from Hydrocarbon Recyclers, Inc. to Laidlaw Environmental Services (Tulsa), Inc. to reflect the acquisition of the Facility by Laidlaw. The Facility underwent a second name change on July 2, 1998, when the name was changed to Safety-Kleen (Tulsa), Inc. to reflect the merger between Safety-Kleen Corp. and Laidlaw. The Facility underwent a third name change name to Tulsa Disposal, LLC to reflect the acquisition by Clean Harbors Environmental Services, Inc. on September 6, 2002. Although not included under the facility RCRA Part B Permit, the facility was used as a 10 day transfer facility until operations ceased in February 2000.

Tulsa Disposal, LLC is a limited liability company organized on May 1, 2002 under the laws of the State of Delaware and registered to do business in Oklahoma as a foreign limited liability company under registration filing number 3700693619. Tulsa Disposal, LLC was created prior to the actual purchase of the property on September 6, 2002. Tulsa Disposal, LLC is a wholly owned subsidiary of Clean Harbors Disposal Services, Inc. Clean Harbors Disposal Services, Inc. is a wholly owned subsidiary of Clean Harbors, Inc.

Processing activities were conducted in two separate plant areas. These included the solvent operations in the solvent recycling plant, and non-hazardous industrial wastewater treatment in the former waste oil plant. Historically, three major types of waste streams were handled at the Facility: chlorinated solvents, nonchlorinated solvents (including paint and lacquer thinners), and waste oils.

In 1988, Science Application International Corporation (SAIC), on behalf of the United States Environmental Protection Agency Region VI (EPA,) prepared a RCRA Facility Assessment (RFA) and Preliminary Review and Visual Site Inspection (PR/VSI) report (May, 1988). In the PR/VSI, a total of 53

solid waste management units (SWMUs) were identified. No areas of concern were identified in the PR/VSI. The 53 SWMUs were subsequently consolidated into six SWMUs by the Oklahoma State Department of Health (OSDH) and the Facility (Appendix 2, Figure 2).

At the request of the OSDH, field, soil, and groundwater quality investigations were conducted at the Facility in 1992 and during a RCRA Facility Investigation (RFI) conducted in 1993 and 1994 to characterize the site hydrogeology and the distribution of volatile organic compounds (VOCs) in soil and groundwater. The investigations included the installation of soil borings and groundwater monitoring wells.

In March 1995, Laidlaw Environmental Service's, Inc. (Laidlaw) submitted an Interim Measures Work Plan for the Facility outlining actions necessary to minimize further migration of contaminants. Interim Measure field investigations were conducted at SWMU 1 and off site in 1995 to further characterize the site hydrogeology and lateral distribution of VOCs in groundwater. The Interim Measure, which was approved by the Oklahoma Department of Environmental Quality (ODEQ) on May 25, 1995, was a trench recovery system consisting of one containment trench along the north and west perimeter of the Facility and one recovery trench near the suspected VOC source area at SWMU 1 (Appendix 2, Figure 2). The groundwater extraction trenches were completed on July 2, 1996, and began operating on October 9, 1996.

As part of the Interim Measure, quarterly monitoring was instituted at the Facility. The quarterly groundwater and Interim-Measure monitoring consisted of measuring flow volumes from the two groundwater extraction trenches, measuring groundwater levels, collecting groundwater samples, analyzing groundwater samples for VOCs and operation and maintenance of the system. With the approval of ODEQ, monitoring is now conducted semi-annually.

In August 1998, Laidlaw submitted a Corrective Measure Study Report (CMS) to the ODEQ evaluating eight corrective measure alternatives for the Tulsa Facility. After reviewing each alternative, Laidlaw recommended the operation of the existing corrective measure described in the approved CMS (October 1998). ODEQ approved the interim measure as the final measure in a letter dated October 13, 1998.

6.2. FACILITY LOCATION

The Tulsa Disposal, LLC site is located at 5354 West 46th Street South, Tulsa County, Oklahoma in Township 19 North, Range 12 East, Section 29 (Appendix 2, Figure 1).

The Tulsa Facility is located on a 10-acre site in Tulsa County outside the Tulsa city limits. The Facility location and property boundaries are shown in Appendix 2, Figure 2. The area of the plant formerly used as the process area was located on approximately 1.5 acres. The former process area and surrounding land slopes gently from the southeast to the northwest.

6.2.1. FLOOD ZONE

The Facility is located outside the 100-year flood plain as shown in Appendix 2, Figure 3 (map modified from mapping provided by Environmental Data Resources, Inc.). The elevation of the 100-year flood is approximately 700 feet; the lowest elevation on the Facility site is approximately 725 feet.

6.2.2. CLIMATE

Data from the Tulsa Airport on local climate and meteorological data has been compiled by the National Oceanic and Atmospheric Administration. The Local Climatological and Meteorological Data for Tulsa, Oklahoma is included in Appendix 3, Attachment 2.

6.2.3. LAND USE

The nearest residence to the site is located one-quarter mile south of the plant. Land use in the area is primarily commercial, industrial, and agricultural. Surrounding land use is shown in Appendix 2, Figure 4.

6.2.4. POLITICAL JURISDICTION

The Facility is located in First Congressional District of Oklahoma, Tulsa County Commission District 2, Senate District 37, House District 68 and Precinct 802.

6.2.5. SOIL

Surficial soils in the area of the Facility consist of tight clay, and subsurface sediments consist of alternating layers of shale and clay (Laidlaw, 1994). Depth to ground water (brine) in the area is approximately 450 feet, and drinking water quality aquifers are not present in the area of the Facility. No water wells are located within one mile of the former Facility.

Additional information regarding soil and groundwater is presented in the approved RFI Workplan and the ODEQ-approved RFI Final Report (Laidlaw, 1994).

6.3. FACILITY ACCESS

Access to the plant is on West 46th Street 0.38 mile west of 49th West Avenue. The 30 feet of roadway adjacent to 49th West Avenue is composed of reinforced concrete (8 inches) and covers the Sun Oil Company pipeline right-of-way; the remainder of the roadway was built in compliance with county specifications. The road includes the surface (36 feet) and right-of-way (60 feet). The road base consists of approximately 9 inches of stabilized and compacted limestone with approximately 6 inches of crushed rock above the limestone and is topped with approximately 5 inches of asphaltic cement applied in two separate lifts. Load-bearing capacity of the road is 80,000 pounds.

6.4. TRAFFIC PATTERNS

Current traffic at the Facility is limited to site inspections, groundwater sampling, and operation and maintenance of the Corrective Measure. Traffic entering the site is typically no more than one or two vehicles per operating day.

6.5. PROCESSES

All processes referenced in the Facility RCRA permit of August 13, 1993 have ceased, and processing equipment has been removed. Processes and equipment related to Corrective Measures are discussed under Tab XIII - Corrective Measures.

TULSA DISPOSAL, LLC TULSA, OKLAHOMA

TAB VII

WASTE ANALYSIS PLAN

In Compliance With 40 CFR 270.14 (b) (2 and 3)

Revised October 2015

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7.0 - WASTE ANALYSIS PLAN ODEQ Item Number B-2, B-3 40 CFR 270.14 (b)(2 and 3)

Tab VII provides a description of the waste analysis plan for Tulsa Disposal, LLC (the Facility). Because waste management operations at the Facility ceased in June 1996, the Waste Analysis Plan (as required by 40 CFR 270.14 (b)(3)) is limited to waste generated in connection with the operation of the groundwater pumping, recovery and treatment system and the wells used to monitor the effectiveness of this system. Analysis of waste generated during final closure of the facility is described in Tab XI.

The original Waste Analysis Plan covered waste analysis procedures for the Facility until waste handling operations were ceased on June 3 1996. Previous activities at the Facility have included the solvent operations in the solvent recycling plant, waste oil treatment in the waste oil plant, and, when waste oil treatment operations were discontinued, non-hazardous industrial wastewater treatment in the former waste oil plant. Three major types of waste streams have historically been managed by these activities:

- chlorinated solvents;
- non-chlorinated solvents (including paint and lacquer thinners); and
- waste oils.

The objective of this Waste Analysis Plan is to describe the constant waste streams generated from the groundwater pumped from the Corrective Measure system with the water discharged to the City of Tulsa, Oklahoma Publicly Owned Treatment Works (POTW) and the solids removed from the site via a licensed hazardous waste commercial transporter.

Groundwater from the four recovery sumps (RS-1 through RS-2) is collected in the 500,000 gallon V-69 storage tank. The recovered water is then batch treated through a granular activated carbon system to remove volatile organic carbon (VOCs), prior to discharge to the POTW. As required by the City of Tulsa POTW Permit No. 3620, treated water is sampled at the designated sample chamber located approximately 75 feet west and 6 feet north of the south double swing gate at Beard Avenue. The effluent has remained so stable over the years that the POTW Permit has a minimum sample collection frequency of at least once per year. The analytical methods or parameters may change as the permit is renewed and updated but the Facility will operate in accordance with the permit conditions as required by the City of Tulsa Permit. As required, an ODEQ certified laboratory is used for analyzing samples required by the Facility's permit.

Two solid waste streams are removed from the facility. The first stream, granular activated carbon that was used to remove volatile organic carbon from the groundwater is replaced in the system on an annual basis. Monitoring constituents in the groundwater confirms that break through in the carbon does not

occur within a one year timeframe. The characterization is based on the compounds found in the groundwater while collecting data for the Corrective Measures Study. The chemicals of concern are all spent solvents, (F001 to F005) which was the nature of HRI's business, and 1, 1 dichloroethane (U076) and 1, 2 dichloroethane (U077).

The second waste stream is debris and personal protective equipment (PPE) used for sampling and working around the groundwater system. This waste stream is considered hazardous by association with the contaminated groundwater.

Appendix 3, Attachment 3 provides a Groundwater Sampling and Analysis Plan (SAP) based on the current Resource Conservation and Recovery Act (RCRA)-approved Corrective Measure activities. The Sampling and Analysis Plan provides a description of the procedures to be used in the groundwater monitoring events and for the regulatory agency-approved discharge of groundwater containing volatile organic compounds at the Facility. The objective of the SAP is to provide a sampling, analysis, operation, and maintenance plan for the Corrective Measure at the Facility in fulfillment of 40 CFR 270.14 (c). Since it is a separate document, the SAP can be amended by mutual written consent of the Oklahoma Department of Environmental Quality (ODEQ) and the Facility without a permit modification being required.

Because the Facility is under partial closure and no longer handles hazardous waste, the SAP included as Appendix 3, Attachment 3 covers tasks related to groundwater sampling and analysis. The objectives of the groundwater monitoring program are:

- Define the groundwater flow direction and gradient in the shallow saturated zone;
- Assess the hydraulic impact of the containment and recovery trenches;
- Assess the distribution and migration of contaminants identified in the groundwater at the Facility during the RCRA Facility Investigation (RFI) and subsequent investigations;
- Delineate VOC concentration gradients across the Facility and downgradient of the Facility;
- Verify any significant changes in concentrations from previous sampling events;
- Assess the groundwater and VOC mass removal for the containment and recovery trenches;
- Adequately maintain the Corrective Measure containment and recovery trenches in order to ensure attainment of Corrective Measures objectives; and
- Determine when Corrective Measures may cease.

TULSA DISPOSAL, LLC TULSA, OKLAHOMA

TAB VIII

GENERAL INSPECTION PLAN

In Compliance With 40 CFR 270.14 (b)(5)

Revised October 2015

TAB VIII – GENERAL INSPECTION PLAN Revised October 2015

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8.0 - GENERAL INSPECTION PLAN ODEQ Item Number B-4, B-5 40 CFR 270.14(b)(5)

Tab VIII provides information on the current general inspection program for Tulsa Disposal, LLC (the Facility) as required by 40 CFR 270.14(b)(5).

8.1. GENERAL

The inspection plan was prepared for the Facility based on current activities at the Facility. Current activities are limited to operation of the groundwater treatment and recovery system including all associated monitoring wells and remediation equipment. The inspection program enables the Facility to detect, prevent, or respond to malfunctions in the recovery system.

8.2. GROUNDWATER EXTRACTION AND TREATMENT SYSTEM INSPECTION

The groundwater remediation system at the Facility will be visually inspected at least twice per month to ensure the system is functioning properly. The bi-monthly system inspections consist of the following:

- 1) The control panel will be inspected to ensure that recovered groundwater is being pumped to the 500,000-gallon holding tank (Tank V-69).
- 2) The water level in Tank V-69 will be monitored using a level gauge to ensure that sufficient space is maintained in the tank.
- 3) The secondary containment for the unused Tank V-68 will be monitored for accumulation of excess precipitation. If excess precipitation is observed, then a sump pump will be used to transfer the precipitation into Tank V-69 or through the granular activated carbon system.
- 4) Tank V-69 and associated piping will be examined for punctures, cracks, and overall external condition.
- 5) During the corrective action monitoring, each groundwater monitoring well will be visually inspected to verify each well is locked and has not been subjected to vandalism or exterior deterioration.

8.3. SECURITY INSPECTION

Facility fences, gates, warning signs, alarm systems, and motion sensors will be checked monthly to ensure each is in good condition and functioning properly. If malfunctions in the security equipment are detected, the Facility Authorized Representative will be contacted, and arrangements will be made to correct the problem.

TULSA DISPOSAL, LLC TULSA, OKLAHOMA

TAB IX

CONTINGENCY PLAN

In Compliance With 40 CFR 270.14 (b) (7)

Revised October 2015

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9.0 - CONTINGENCY PLAN ODEQ Item Number B-7 40 CFR 270.14(b)(7)

Tab IX provides contingency and emergency response information for Tulsa Disposal, LLC (the Facility) as required by 40 CFR 270.14(b)(7). This Contingency Plan will be included with the Final Renewal Permit for the Facility, but is also intended to serve as a stand-alone document for use by emergency responders.

9.1. GENERAL

This Contingency Plan was prepared based on current conditions at the Facility. Current conditions consist of the Corrective Measure approved by the Oklahoma Department of Environmental Quality (ODEQ) on October 13, 1998, and that is currently operating at the Facility. The Corrective Measure activities include groundwater recovery system operation and monitoring and are part of the Facility's approved Resource Conservation and Recovery Act (RCRA) corrective action. The Corrective Measure was implemented to prevent further migration of contaminants, and to limit the threat to human health and the environment.

As described in Tab VI, all waste handling at the Facility ceased in June 1996. With the exception of the Corrective Measure, all waste processing and handling equipment was removed as outlined in Appendix 3, Attachment 4.

9.1.1. NAME AND ADDRESS OF FACILITY

The name and address of the Facility is:

Tulsa Disposal, LLC 5354 West 46th Street South Tulsa, Oklahoma 74107.

9.1.2. FACILITY TYPE

The Facility is an inactive waste handling facility with an ongoing corrective action program under RCRA.

9.1.3. CURRENT OWNER AND OPERATOR

Tulsa Disposal, LLC 42 Longwater Drive Norwell, Massachusetts 02061

9.1.4. CORRECTIVE ACTION STATUS

The approved Corrective Measure consists of one containment trench along the north and west perimeter of the Facility and one recovery trench near the VOC source area at SWMU 1. The groundwater extraction trenches were completed on July 2, 1996, as an Interim Measure and began operating on October 9, 1996. A description of corrective measures is included in Tab XIII of the Application.

As part of the Corrective Measure, semi-annual monitoring is conducted at the Facility. The groundwater and Corrective-measure monitoring consists of measuring flow volumes from the two groundwater extraction trenches, measuring groundwater levels, collecting groundwater samples, analyzing groundwater samples for VOCs and operation and maintenance of the system.

Impacted groundwater recovered from the containment and recovery trenches and generated during semiannual groundwater sampling events is temporarily stored on site in one 500,000-gallon storage tank. The groundwater is treated through the carbon adsorption system and batch-discharged to the Publicly Owned Treatment Works facility.

9.1.5. HAZARDOUS SPILL HISTORY

In August 1991, Hydrocarbon Recycling Inc. notified the Oklahoma State Department of Health (OSDH) of a potential release from the Solvent Plant formerly located at the Facility. Information regarding this potential release and subsequent investigations is discussed in the RCRA Facility Investigation report (October 1994). Insofar as is known, no other reportable hazardous spills have occurred at the Facility.

9.1.6. EMERGENCY RESPONSE AUTHORIZATION

The Facility Contact (identified in Appendix 1, Table 1) shall act as the primary Emergency Response Coordinator (ERC). In the event that the ERC is unavailable, the persons listed in Table 1 shall assume the duties of the ERC (in the order listed). The ERC has full authority to act on the Facility's behalf in responding to any emergency at the site.

Appendix 1, Table 2 presents a list of agencies and agency contacts to be notified in the event of an emergency requiring a response as described below.

9.1.7. SECURITY

Current security at the Tulsa Facility consists of a six-foot-high perimeter chain link fence. Gates are securely locked and checked during inspections as scheduled and described in Tab VIII.

9.2. ANTICIPATED EMERGENCIES

Based on the current corrective actions at the Tulsa Facility, the following will be considered potential emergencies and/or a threat to human health and the environment.

- 1) Violent storms;
- 2) Fire;
- 3) Leaks from the 500,000-gallon groundwater recovery holding tank and associated piping; and
- 4) Human contact with impacted groundwater.

9.3. INCIDENT PREVENTION

9.3.1. VIOLENT STORMS

Violent storms include tornadoes and thunderstorms with lightening. The following measures will be implemented to prevent harm to individuals at the Facility:

- 1) Weather forecasts will be monitored by personnel working at the Facility for severe storm warnings issued by the National Weather Service (NWS); and
- 2) In the event of a storm warning or observed violent weather, personnel working at the Facility will seek shelter in a place of safety.

For tornadoes, there is no structurally secure place of safety at the Facility; consequently, if a funnel cloud is observed or a tornado warning is issued, personnel will evacuate and secure the site.

9.3.2. FIRE

The following fundamental and appropriate precautions for fire prevention will be maintained when personnel are on site:

- 1) Smoking is prohibited; 'No Smoking' signs are prominently posted where required;
- 2) Non-sparking tools and grounding of electrical units will be used during corrective activities;
- 3) All electrical components within the plant conform to the National Electric Code (1981) and are installed and maintained in a safe manner; and
- 4) Fire fighting equipment includes hand held fire extinguishers located throughout the site as well as in buildings. Water for fire fighting is available from three city hydrants on the east side of the plant (Appendix 2, Figure 5).

9.3.3. LEAK PREVENTION

The potential for leaks at the Facility is estimated to be low. One 500,000-gallon holding tank used as storage for recovered groundwater is maintained on site. The following measures will be used to prevent leaks from the tank and/or associated piping.

- 1) The tank and associated piping will be examined routinely in accordance with the General Inspection Schedule (Tab VIII) for punctures, cracks, and overall external condition;
- 2) If a problem is encountered during the tank examination, maintenance will be performed immediately;
- 3) The 500,000-gallon-tank is double-walled, which provides secondary containment; and
- 4) Tank water levels are monitored by personnel during routine inspections and corrective action activities.

9.3.4. HUMAN CONTACT WITH IMPACTED GROUNDWATER

To minimize the potential for personnel to come in contact with impacted groundwater, the following measures will be adhered to:

- 1) All personnel will be properly trained in sampling techniques and operation and maintenance as they relate to corrective action activities on site. This will be done as outlined in the Waste Analysis Plan (Tab VII)or Sampling and Analysis Plan (Appendix 3, Attachment 3);
- 2) All sampling personnel will have completed the 40-Hour Health and Safety Course in accordance with 29 CFR 1910.120; and
- 3) Appropriate Personal Protective Equipment (to be determined by the on-site Field Manager) will be worn by personnel during corrective action activities.

9.4. EQUIPMENT

9.4.1. WARNING SIGNS

ODEQ and RCRA regulations require that Warning Signs be posted at each entrance of the Facility. These signs read "Warning - Unauthorized Personnel Keep Out".

9.4.2. EMERGENCY AND SAFETY EQUIPMENT

Safety equipment and basic first aid supplies as determined by the ERC will be brought on site by personnel conducting site inspections and semi-annual corrective action activities such as groundwater sampling. Should an injury occur, the immediate well-being of the injured party is the prime consideration. Emergency phone numbers and the route to the nearest hospital will be available on site. Emergency phone numbers and directions to the nearest hospital are included in Appendix 1, Table 2, and a map in Appendix 2, Figure 6.

9.5. EMERGENCY PROCEDURES FOR ANTICIPATED EVENTS

9.5.1. VIOLENT STORMS

In the event of inclement weather, any personnel on site will adhere to the following procedures.

- 1) Personnel on site will take shelter immediately in a place of safety. For tornadoes, this means evacuating and securing the Facility. For thunderstorms, a vehicle is the appropriate place of safety;
- 2) If necessary and time allows, the proper local authorities will be contacted;
- 3) The acting ERC, Site Supervisor, and appropriate emergency personnel should be contacted following the weather event if damage or human injury occurs;
- 4) Following the weather event, the ERC will inspect the Facility and the groundwater treatment and recovery system for damage; and
- 5) In the event of damage, the ERC will prepare a preliminary assessment report describing the damage and outlining a schedule for damage repair. This will be prepared within 24 hours of the event.

9.5.2. FIRES

Should a fire occur at the Facility, the acting ERC and/or the personnel on site will comply with the following procedures:

- 1) Contact the local Fire Department;
- 2) Evacuate the Facility; and
- 3) Contact the ERC and Site Supervisor.

9.5.3. LEAKS

In the event of a leak from the 500,000-gallon holding tank, the ERC or acting ERC and/or personnel on site will be responsible for the following:

- 1) Take immediate response action to stop flow or release of spilled material;
- 2) Activate necessary containment procedures using absorbent pads as a dike preventing flow to drains or waterways;
- 3) Notify Site Supervisor and Emergency Response Coordinator (ERC); and
- 4) Acquire any additional assistance needed to prevent harm to human-health and the environment.

The ERC or acting ERC is responsible for the activities listed below:

- 1) Assist in spill control if required;
- 2) Coordinate cleanup with outside assistance if required;
- 3) Arrange for disposal of any proper contaminated materials;
- 4) Notify governmental agencies as required by existing rules and regulations; and
- 5) Preparing an incident report if required.

9.5.4. HUMAN CONTACT WITH IMPACTED GROUNDWATER

Should on-site personnel come in contact with impacted groundwater, the personnel will adhere to the following procedures:

- 1) The area of the body that came in contact with the impacted groundwater will be rinsed thoroughly with deionized water;
- 2) If appropriate, personnel should seek medical treatment for injuries sustained; and
- 3) The ERC and Site Supervisor should be contacted.

9.5.5. EVACUATION

The ERC, acting ERC, or most senior person at the Facility will determine if an evacuation is required based on the nature of the emergency. The Facility area should be evacuated in the event of an emergency such as a major fire or a major storm (such as a tornado).

When an evacuation is deemed necessary, all personnel on site will leave the Facility. In the event of violent weather, personnel will seek shelter. The acting ERC will make sure all personnel are accounted for. Additional action after a Facility emergency evacuation will depend on the nature of the emergency.

9.6. MANAGEMENT

9.6.1. ARRANGEMENTS WITH LOCAL AGENCIES

The Tulsa Fire Department has agreed to respond to an emergency at the site in accordance with its policy for such service to properties outside the city limits. Law enforcement and traffic control will be provided by the Tulsa County Sheriff's Department. The Sheriff's Department will limit access to the Facility by blocking West 46th Street during an emergency. Other agency assistance may be coordinated through the Tulsa Area Emergency Management Agency (LEPC). The appropriate local agencies (Appendix 2, Table 2) will be given a current copy of this Emergency Response Plan.

The Concentra Urgent Care – Town West minor emergency clinic, located at 5682 West Skelly Drive, will be used for medical services in the event of a medical emergency. Concentra Urgent Care - Town West will receive one copy of this Emergency Response Plan.

In the event that an ERC is not present, the operator or operator-helper (Acting ERC) shall have full authority to call upon the Fire Department, Sheriff's Department, or any other emergency agency for assistance.

9.6.2. DISTRIBUTION OF THE CONTINGENCY PLAN

One copy of this contingency plan will be maintained in the plant office at all times; all designated ERC's will have a copy. Copies of the plan will be provided to LEPC, the City of Tulsa Fire Department, the Tulsa City-County Health Department, the Tulsa County Sheriff's office and a local emergency care center.

9.6.3. PLAN UPDATE AND REVIEW

The plan will be updated when:

- The facility changes its design, construction, operation, maintenance or other circumstances that potentially change the response necessary in an emergency.
- The list of emergency coordinators changes.
- The plan fails in an emergency.

Revisions to the plan will be initiated immediately upon updating. Appropriate authorities will be notified of the revisions and assumed acceptable unless a written response of objection is received.

TULSA DISPOSAL, LLC TULSA, OKLAHOMA

TAB X

PERSONNEL TRAINING

In Compliance With 40 CFR 270.14 (b)(12)

Revised October 2015

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10.0 - PERSONNEL TRAINING ODEQ Item Number B-12 40 CFR 270.14(b)(12)

Tab X includes information on personnel training for Tulsa Disposal, LLC (the Facility) as required by 40 CFR 270.14 (b)(12) and the permit renewal.

10.1. PERSONNEL TRAINING

The personnel training program is based on current activities at the Facility. These are limited to operation, maintenance, and monitoring of the Corrective Measure. As described in Tab VI, all waste handling operations at the Facility ceased in June 1996.

10.2. REQUIREMENTS

All Clean Harbors personnel and subcontractors entering and working at the Facility in connection with monitoring activities and operation of the corrective measure will have successfully completed the 40-Hour Health and Safety Course and the 8-Hour Refresher Health and Safety Course, in accordance with 29 CFR 1910.120, as required. While at the Facility, such personnel will carry written proof of compliance with this requirement or have current training records on file with Clean Harbors Environmental Services, Inc.

All personnel involved with semi-annual monitoring will be properly trained in sampling techniques and operation and maintenance as they relate to Corrective Measure activities.

All personnel will be trained in and will be familiar with the incident prevention and emergency procedures outlined in the Contingency Plan (Tab IX).

It is the responsibility of the Emergency Response Coordinator (ERC) identified in the Contingency Plan (Tab IX) to assure compliance with these requirements.

TULSA DISPOSAL, LLC TULSA, OKLAHOMA

TAB XI

CLOSURE PLAN

In Compliance With 40 CFR 270.14 (b)(13)

Revised October 2015

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11.0 – CLOSURE PLAN ODEQ Item Number B-13 40 CFR 270.14 (b)(13)

The Tulsa Disposal, LLC facility (the Facility) is an inactive hazardous waste recycling and handling facility. The only permitted unit, which is operated at the Facility, is an approved corrective action system for contaminated groundwater. Upon completion of corrective action, Clean Harbors will decommission and close the corrective action system in accordance with the closure requirements of 40 CFR 270.14(b)(13) and 40 CFR 264 Subpart G. Closure of the corrective action system at this Facility will be carried out in accordance with the steps outlined in this plan. Appendix 2, Figure 7 and Appendix 1, Table 3 contain an estimated schedule and cost for the completion of final closure, respectively.

11.1. PURPOSE

This closure plan identifies the steps necessary to complete closure of the corrective action system. Additionally, this closure plan includes provisions for re-use of portions of the closed unit on site or off site. Clean Harbors will remove all hazardous wastes and residuals from the Facility to a level determined to be protective of human health and the environment; therefore, upon completion of closure activities, the need for further maintenance and care will be minimized or eliminated.

The corrective action system is the only unit at the Facility subject to closure. The previous permitted waste handling units ceased operation in June 1996 (Appendix 3, Attachments 5 and 6). Laidlaw Environmental Services, Inc. conducted closure activities in accordance with the ODEQ-approved closure plan contained in Appendix XII of the 1993 Permit Application (Appendix 3, Attachment 4). The ODEQ issued a letter approving partial closure for the Facility on March 17, 1997 (Appendix 3, Attachment 7).

11.2. DESCRIPTION OF CORRECTIVE ACTION SYSTEM

The corrective system consists of one 540-foot long containment trench located along the north and west perimeter of the Facility, and one 70-foot long recovery trench located on the northwest corner of the solvent recycling area. The layout of the trench system is shown in Appendix 2, Figure 8. The trenches consist of trench-observation wells, filter media, perforated conduit at the bottom of the trenches, recovery sumps, mechanical and operational controls, and double-containment discharge piping. Recovered groundwater is pumped via a dual-lined underground piping system to an aboveground 500,000-gallon storage tank (Tank V-69). The collected groundwater is then treated through carbon adsorption. The carbon adsorption unit is approximately six feet high and five feet in diameter, and holds

approximately 2,000 pounds of granular activated carbon. From the carbon unit, the water is discharged to the City of Tulsa Publicly Owned Treatment Works (POTW) under industrial pretreatment and discharge permit (Permit Number 3620). Tank V-69 and the carbon adsorption unit are associated with the permitted POTW discharge, and as such, are not permitted hazardous waste management units.

37 monitoring wells were installed for site assessment purposes during the RCRA Facility Investigation. All wells not previously plugged and abandoned, with ODEQ approval, will be plugged and abandoned during closure.

11.3. CORRECTIVE ACTION SYSTEM CLOSURE

Decommissioning and closure of the corrective action system will occur when the ODEQ site-specific target levels (SSTLs) are met. It is presumed this will result in a "no further action" determination by the ODEQ. The following components of the corrective action system will be decommissioned and closed:

- Trench observation wells;
- Containment and recovery trenches;
- Monitoring wells;
- Carbon adsorption treatment system;
- Aboveground storage tanks V-68 and V-69; and
- Ancillary Equipment.

Closure activities will be conducted under the oversight of an Oklahoma-registered Professional Engineer (PE) in accordance with the approved closure plan.

11.3.1. TRENCH OBSERVATION WELL AND MONITORING WELL CLOSURE

There are currently 14 trench observation wells and 37 groundwater monitoring wells used to measure water levels during routine groundwater monitoring. The trench observation wells are 2-inch diameter, polyvinyl chloride (PVC) wells completed at approximately 13 to 18 feet below land surface. The monitoring wells are 2-inch or 4-inch diameter PVC wells completed at 10 to 65 feet below land surface. Each well will be abandoned using the following method:

- The total depth and diameter of each well will be verified prior to closure;
- The casing and screen of each well will be removed from the borehole, and the borehole will be grouted with a cement-bentonite mixture from the bottom of the borehole to the surface using a tremie pipe. If the casing and screen cannot readily be removed, then the well casing will be cut

to approximately one-foot below land surface, and the well will be pressure-grouted as described above;

- All screen and casing that can readily be removed from the wells will be pressure washed (water/detergent solution) and rinsed (water) and then disposed of at an ODEQ-approved facility;
- Abandonment will be conducted by a certified and licensed drilling contractor; and
- All abandonment activities will be observed and documented by a qualified geologist or engineer.

11.3.2. TRENCH CLOSURE

The containment trench and recovery trench will be closed in place by grouting. The trenches will be closed as follows:

- Prior to grouting the trenches, any recovered groundwater remaining in the four recovery sumps and associated pumps and piping will be transferred to Tank V-69;
- The sumps, pumps, and ancillary equipment (water level indicators, floats, meters, etc.) will be disassembled and decontaminated using high pressure water or steam. The decontamination water will be containerized and transferred to Tank V-69 for final treatment and discharge;
- The filter media, perforated conduit located at the base of the trenches, and the underground discharge piping will be pressure-grouted and abandoned in place; and
- Abandonment of the lines will be conducted by certified and licensed contractors and all associated activities will be observed and documented by a qualified geologist or engineer.

11.3.3. ABOVEGROUND TANKS (V-68 AND V-69) AND ASSOCIATED PIPING

The aboveground storage tanks V-68 and V-69 are not required to be permitted as hazardous waste storage tanks. However, as part of the corrective action system decommissioning and closure, the tanks will be emptied and cleaned in accordance with the following activities. The aboveground tanks will not necessarily be removed or scrapped. The following activities will be performed during partial or final closure (as appropriate). The activities will be sequenced to minimize the amount of liquids and cleaning residuals that may be discharged to POTW in accordance with the Facility's discharge permit. The remaining materials will be disposed of at an ODEQ-approved facility.

The following steps will result in closing the tanks:

- Remove the remaining material from the tanks undergoing closure, and discharge to the carbon adsorption system for treatment and discharge to POTW;
- Provide access to the tanks undergoing decontamination;

- Visually inspect the tank, secondary containment, and appurtenant piping and equipment for evidence of staining and residue;
- Pressure wash (water/detergent solution) and rinse (water), and as necessary scrape and squeegee the tank interiors, removing all residual waste material and rinsate;
- Disconnect and decontaminate applicable appurtenant piping and pumping equipment and clean the concrete secondary containment (if appropriate) around the tanks undergoing decontamination. Appurtenant piping and equipment will also be pressure washed with detergent-water solution and rinsed with water; and
- Transport and dispose all waste material generated during the project. Liquids will be discharged to the POTW. All associated cleaning equipment will be thoroughly rinsed with a detergent solution and the rinsate will be collected and properly disposed.

The secondary containment area will be inspected during partial and final closure activities. If visual inspection during closure indicates an absence of waste-related staining, cleaning of the secondary containment area may be deemed unnecessary. The secondary containment area will be thoroughly cleaned (i.e. scrubbed, scraped, pressure washed and rinsed) to the extent practicable, if waste-related staining is observed during closure activities.

11.3.3.1. REMOVAL OF WASTE MATERIAL AND OPENING OF THE TANKS

The contents of the tanks will be removed using a pump, vacuum pump unit or similar equipment. The waste will be discharged to the POTW or a disposal facility.

To gain access to aboveground tanks, the manways at the sides of the tank will be used. Depending on the type of opening and the condition of the equipment, a variety of tools may be used to open the manway. Care must be exercised to minimize spark generation when working on the tank.

Prior to entering a tank, personnel should have full-face respiratory protection and protective clothing. Procedures for tank entry purging or venting the tank are described in API RP 1604 *Removal and Disposal of Used Petroleum Storage Tank*, API PUB 1604 *Cleaning Petroleum Storage Tanks* and OSHA *Permit Required Confined Spaces* (29 CFR Section 1910.146). The tanks will then be inspected to determine the approximate quantity and physical conditions of any remaining waste material.

11.3.3.2. REMOVAL OF RESIDUAL WASTE AND CLEANING OF TANKS

Before removing any residual waste from the tank, all piping and appurtenant equipment will be flushed with a detergent water-solution, and then rinsed with water. The method used to remove the residual

waste material from the tanks will depend on the physical properties and quantities of that material. Prior to any person entering the tank, an effort will be made to remove as much liquid and sediment as possible.

Subsequent to removing the majority of the material from the tank, it may be necessary to use a high pressure wash system and a detergent water-solution to rinse residual material from the walls and floor of the tank. The evacuated material and the rinse solution will be discharged to the POTW or a disposal facility. The quantity of wash/rinse water used will be kept to a minimum in order to limit the amount of waste material.

Storage tanks are considered confined spaces (as defined in 29 CFR 1910) and confined space entry requires special procedures (29 CFR 1910.146):

- Tanks are to be washed, neutralized and/or purged (where a flammable atmosphere is present) prior to being entered;
- Supply valves must be closed and tagged and bleeder valves left open; or supply piping should be disconnected:
- Pumps or motors normally activated by automatic controls shall be operated manually to be sure they have been disconnected. Appurtenant power switches should be locked and tagged "Off";
- All sources of ignition must be removed from tanks where flammable vapors may be present;
- Under circumstances where "hot work" (welding, burning, grinding, etc.) is to be performed in or
 on the vessel, a test for combustible gases shall be taken. In all tank entering situations, an
 oxygen deficiency test shall also be performed prior to tank entry. Tests for combustible gas
 concentration and oxygen deficiency will be performed by the supervisor of the area in which the
 work is being done;
- There must be a set of wristlets or a rescue harness and sufficient rope at the job site to effect a rescue. Any other rescue equipment considered necessary must also be on the job site;
- Workers should wear rescue harnesses if entering a tank to enable easy rescue. In tanks with small openings, only wristlets may be used. In cases where there are agitator shafts, drums or other hazards in which the lifeline would be entangled and the supervisor in charge feels that wearing the lifeline may entrap a man and increase the hazard, the wearing of a harness or wristlets may be eliminated;
- Appropriate personal protective equipment and supplied air breathing devices should be used during tank entry. In cases of short-term entry for inspection or removal of objects, a self-contained breathing apparatus (SCBA) is recommended;
- When a ladder is required to enter a tank, the ladder must be secured and not removed while anyone is in the vessel. In cases where a rigid ladder could become an obstacle, a chain ladder may be used;
- Adequate illumination must be provided and a flashlight or other battery operated light must also be on hand to provide illumination for a safe exit in the event of an electrical power failure;

- All electrical equipment to be used inside the tank must be in good repair and grounded;
- Other people working in the immediate area will be informed of the work being done, and they must inform the watcher or supervisor immediately of any unusual occurrence, which makes it necessary to evacuate the tank;
- The Watcher or Standby Observer System must be implemented. It consists of the following:
 - (1) Workers inside a confined space must be under the constant observation of a fully instructed watcher.
 - (2) Before anyone enters the tank, an entry authorization must be obtained from the person in charge and a rescue harness or wristlets must be used on the job.
 - (3) The watcher must also know the location of the nearest telephone (with emergency numbers posted), eyewash and/or shower, fire extinguisher and oxygen inhalator. For all "hot work" on a tank, the watcher must be instructed how to shut down the welding/burning equipment.
 - (4) As long as anyone is inside the vessel, the watcher must remain in continuous contact with the worker. *He/she is not to leave the job site except to report an emergency*. In the event of an emergency, he/she does not enter the tank until help is available.
- All welding and burning equipment must be provided with a shutoff under the control of the
 watcher; and the watcher must be shown how to shut off the equipment if it becomes necessary.
 Welding and burning equipment will only be taken into a tank immediately prior to its use and
 must be removed from the tank immediately after the job is finished; and
- For all "hot work" inside a tank, a properly executed permit, if needed, must be displayed at the job site and standard welding and burning safety precautions will always be followed.

Following removal of the residual waste, the tank will be pressure washed with detergent-water solution and rinsed with tap water. Washing/rinsing will continue until the tank, associated piping and appurtenances appear visually clean. If to be removed and scrapped, the tank will be considered properly decontaminated when free of waste-related residue/staining and visually clean to the extent practicable.

If the tank is to be reused, the final rinsate will be sampled to determine the cleanliness of the tank. The final rinsate sample(s) will be submitted to a qualified laboratory and analyzed for the applicable toxicity characteristic (40 CFR 261.24) parameters (i.e. volatile organic compounds) using SW-846 Methods. If the sample analytical results indicate the final rinsate does not exhibit the toxicity characteristics of hazardous waste, the tank will be considered properly decontaminated and suitable for reuse.

The residual waste materials and rinsate will be collected and discharged to the POTW or a disposal facility. The quantity of wash/rinse water that may be generated has been estimated at approximately 5,000 gallons per tank.

11.3.3.3. CLEANING AND INSPECTION OF SECONDARY CONTAINMENT AREAS

The diked areas will be dry swept prior to decontamination. All cracked areas shall be sealed prior to commencement of cleaning to prevent migration of rinsate out of the containment area. The containment dike and floor area will be pressure washed using a detergent-water solution and rinsed with water at final closure. Following the final wash/rinse, the area will be inspected to determine the effectiveness and completeness of decontamination. If necessary, the containment area will be rewashed/rinsed until visually clean. The containment area will be considered properly decontaminated when free of waste-related residue/staining and visually clean to the extent practicable.

11.3.4. CARBON ADSORPTION UNIT CLOSURE

Subsequent to treating and batch discharging the last of the recovered groundwater, the activated carbon unit will be closed as follows.

- The activated carbon will be vacuumed out and transferred to 55-gallon drums. The carbon will then be transferred into cubic yard bags, and properly labeled as hazardous waste;
- The carbon will be shipped to an ODEQ-approved disposal and/or recycling facility for processing and/or disposal;
- The unit housing will be disassembled and decontaminated with high pressure water and/or steam. The residual from the steam-cleaning will be containerized for proper off-site recycling or disposal at an ODEQ-approved facility; and
- The carbon housing unit and ancillary equipment will be disassembled and removed for possible reuse at another company facility or for disposal as scrap metal.

11.4. WASTE ANALYSIS

Decontamination water and rinsate are the only closure wastes requiring analysis prior to disposal. It is proposed to discharge these wastes to the POTW in the same manner as currently used for treated groundwater from the facility. Consequently, samples of rinsate and decontamination water will be collected and tested for the parameters specified in the facility's POTW discharge permit in effect at the time of closure. Sampling frequency will also be determined by the discharge permit.

11.5. FACILITY CLOSURE SCHEDULE AND CERTIFICATION

Clean Harbors will commence Facility closure upon notification from the ODEQ that no further corrective action is necessary at the site. Within 90 days of notification of no further action, Clean Harbors will commence closure activities. Clean Harbors will complete the planned closure activities in accordance with the approved closure plan within 180 days after receiving notification of no further action. A tentative schedule is presented in Appendix 2, Figure 7. If necessary, a request for closure period extension may be submitted to ODEQ for review and approval. The request for closure period extension will be prepared in accordance with 40 CFR 264.113.

Within 60 days of completion of the planned closure activities, Clean Harbors will prepare and submit to the ODEQ, a closure report summarizing the closure activities. This report will include a description of the unit(s) which underwent closure, field tasks performed, field log, sampling protocols, results of analyses, a summary of the Facility status, quantity of waste removed, and supporting documentation including manifests and photographic documentation.

When closure is completed, Clean Harbors Environmental Services, Inc. shall submit to the ODEQ certification, both by the operator and by an independent registered Professional Engineer, that the Facility has been closed in accordance with the approved closure plan. The closure progress/certification report will also document any modifications or deviations from the approved plan(s).

TULSA DISPOSAL, LLC TULSA, OKLAHOMA

TAB XII

FINANCIAL ASSURANCE

In Compliance With 40 CFR 270.14(b)(15)

Revised October 2015

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12.0 - FINANCIAL ASSURANCE ODEQ Item Numbers B-15, B-17 40 CFR 270.14(b)(15)

12.1 FINANCIAL ASSURANCE

Tulsa Disposal, LLC (the Facility) utilizes a Financial Guarantee Bond to satisfy regulatory requirements to provide financial assurance for closure of the Facility. The Financial Guarantee Bond provides financial assurance for closure, post-closure, and/or corrective action for the facility. The policy conforms in all respects with the requirements of Oklahoma Administrative Code 252:205 and the requirements of 40 CFR 264, Subpart H, to the extent incorporated into such rules. Copies of the Financial Guarantee Bond are found in Appendix 3, Attachment 8. The closure cost estimate is outlined in Appendix 1, Table 3 for the site groundwater and corrective measure actions.

All other RCRA units at the facility covered in the Part B permit have been certified clean closed and approved as such in a letter issued by ODEQ on March 17, 1997 (Appendix 3, Attachment 7).

12.2 INSURANCE

The Facility maintains liability insurance for sudden and non-sudden accidental occurrences as an obligation to demonstrate financial responsibility under the Oklahoma Hazardous Waste Management Act and OAC 252:205 and 40 CFR §264.147.

Clean Harbors, Inc. has a corporate program to provide insurance needs for its RCRA permitted subsidiaries through a qualified insurance company called Indian Harbor Insurance Company. All policies are written with Clean Harbors, Inc. as the named insured and the individual subsidiaries are added to the policy by endorsement.

A copy of the insurance certificate appears in Appendix 3, Attachment 8.

TULSA DISPOSAL, LLC TULSA, OKLAHOMA

TAB XIII

CORRECTIVE MEASURES

In Compliance With 40 CFR 270.14 (c)

Revised October 2015

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13.1. INTRODUCTION

Corrective measures at the Tulsa Disposal, LLC facility, the Facility, while approved separately from this permit, are herein described including a detailed description of the approved Corrective Measure that has been implemented. The Corrective Measure is designed to contain volatile organic compounds (VOCs) on-site and to reduce contaminant mass in the saturated clay-clayey shale unit at Solid Waste Management Unit 1 (SWMU 1).

The Corrective Measure Study, Appendix 3, Attachment 9, was approved by the Oklahoma Department of Environmental Quality (ODEQ) in an October 13, 1998 letter to Safety-Kleen (Tulsa), Inc. Approval was granted separately from this permit thereby allowing the Corrective Measure, in its entirety, including sampling locations, frequency, and analytes, to be amended based on the written consent of the ODEQ and the Facility without a permit modification being required.

Tab XIII has been prepared in accordance with 40 CFR 270.14(c)(1-8). It presents:

- A summary of environmental investigations at the Facility;
- A description of the ODEQ-approved groundwater site-specific target levels and Corrective Measure including objectives;
- A discussion of effectiveness of the Corrective Measure; and
- A discussion of the criteria for determining when Corrective Measure objectives have been achieved.

13.2. SITE HISTORY

13.2.1. FORMER FACILITY OPERATIONS

The Facility (Appendix 2, Figure 9) began operations in 1979 as Hydrocarbon Recyclers, Inc. (HRI) to recycle waste oil. Waste solvent storage and recycling operations were added in 1983. In 1987, a new processing plant for waste oil was completed. Processing activities were conducted in two separate plant areas until June 3, 1996, when operations ceased. On May 30, 1997, the Facility underwent a name change. The company name was changed from Hydrocarbon Recyclers, Inc. to Laidlaw Environmental Services

(Tulsa), Inc. to reflect the acquisition of the Facility by Laidlaw. The Facility underwent a second name change on July 2, 1998, when the name was changed to Safety-Kleen (Tulsa), Inc. to reflect the merger between Safety-Kleen, Inc. and Laidlaw. The name of the facility was changed to Tulsa Disposal, LLC to reflect the acquisition by Clean Harbors, Inc. on September 6, 2002.

Past activities at the Facility have included the solvent operations in the solvent recycling plant, waste oil treatment in the waste oil plant, and, when waste oil treatment operations were discontinued, non-hazardous industrial wastewater treatment in the former waste oil plant. Three major types of waste streams have historically been managed by these activities:

- chlorinated solvents;
- non-chlorinated solvents (including paint and lacquer thinners); and
- · waste oils.

Laidlaw submitted a partial closure plan to the ODEQ on April 18, 1996; the plan was approved by ODEQ on April 19, 1996. The Facility ceased waste handling operations on June 3, 1996, and partial closure in accordance with ODEQ requirements was certified by ODEQ on March 17, 1997.

13.2.2. Initial Investigations

Numerous investigations have been conducted at the Facility in accordance with the corrective action conditions of the existing Part B Permit. A RCRA Facility Assessment (RFA) Preliminary Review and Visual Site Inspection (PR/VSI) Report dated May 1988 was prepared by Science Application International Corporation (SAIC) for EPA Region VI. In the PR/VSI, a total of 53 SWMUs were identified, but no areas of concern were identified. The 53 SWMUs were subsequently consolidated into six SWMUs by the Oklahoma State Department of Health (OSDH) and the Facility.

Discolored water was recovered from beneath the concrete secondary containment liner of the solvent processing area on August 21, 1991. On August 22, 1991, HRI, the operator at the time, notified OSDH of a potential release from the solvent recycling plant at the Facility. Volatile organic compounds (VOCs) were detected in the groundwater immediately below the secondary containment liner.

After the discovery of the potential release, OSDH requested a preliminary investigation, in a September 10, 1991 letter to HRI, to identify any immediate threats to human health or the environment resulting from the potential release. HRI issued the results of the preliminary investigation to OSDH in two letters dated October 10 and November 8, 1991. These included analytical results of samples collected from three locations below the concrete containment pad for the solvent recycling plant. VOCs were detected in the three samples. The VOCs detected included components of materials managed in the recycling plant. However, the source of the contamination discovered below the solvent recycling plant could not

be determined at that time. There was no visual evidence to indicate that contamination existed outside the limits of the concrete secondary containment pad for the solvent recycling plant.

On December 24, 1991, OSDH issued a letter to HRI requesting additional information regarding a potential release of solvents from the solvent plant. OSDH stated additional information was necessary to identify any immediate threats to human health and the environment related to the potential release. OSDH requested the following additional information:

- The groundwater flow direction and velocity in the area of solvent recycling plant;
- Additional data to determine whether the solvents were isolated beneath the solvent recycling plant's concrete secondary containment; and
- Additional data to estimate the potential for contaminant migration to sanitary sewers, and subsequent migration along the sewer lines.

HRI retained USPCI Remedial Services, now Cameron-Cole, LLC, to gather the additional information requested by OSDH in the December 24, 1991, letter. In February USPCI submitted a document titled *Workplan Outline Site Investigation HRI Tulsa Facility* to OSDH for approval. OSDH approved the workplan, and USPCI conducted the field work from May 14 to 16, 1992. The objective of the investigation was to determine if an immediate threat to human health and the environment existed. The investigation consisted of drilling and collecting soil samples from six soil borings (HR-1 through HR-6), constructing groundwater monitoring wells in five of the borings, well development, surveying, and collection of groundwater samples from the newly constructed wells (MW-1 and MW-3 through MW-6). Soil boring and monitor well locations are shown on Appendix 2, Figure 9. The investigation also included identification of potential receptors, migration pathways, and an ecology survey.

Sample results indicated that the concentrations of individual VOCs detected in soil samples ranged from less than 0.005 milligrams per kilogram (mg/kg) to 0.45 mg/kg. The range in the concentration of VOCs detected in soil samples was not indicative of a surface spill in the source area.

VOCs were detected in groundwater samples collected from wells installed in the shallow clay layer and an underlying weathered clayey shale zone within approximately 20 feet of ground surface. Concentrations of individual VOCs detected in monitoring wells east of the solvent recycling plant ranged from less than 0.005 parts per billion (ppb) to 60 ppb. The groundwater flow direction in the clay and clayey shale zones was to the northwest.

The results of the additional preliminary investigation demonstrated that soil and groundwater at the Facility had been impacted by VOCs. However, USPCI concluded that an immediate threat to human health and the environment was not present based on the following:

- VOC impacts to surface soil were negligible;
- Groundwater within a one-mile radius of the Facility was not used as a source of potable water supply;
- No surface water bodies were present at the Facility to support biota; and
- The Facility ecology survey identified no federally listed endangered or threatened fauna of plant species occurring on the Facility.

Based upon the results of the preliminary investigations, USPCI, with the concurrence of OSDH, recommended a RCRA Facility Investigation (RFI) at the Facility.

13.2.3. RCRA FACILITY INVESTIGATION

The goal of the RFI, presented in a USPCI (1993) workplan, was to characterize the Facility hydrogeology and the distribution of VOCs in soil and groundwater. Specifically, the RFI developed site-specific data necessary to characterize the nature and extent of any potential releases of VOCs associated with the following six solid waste management units (SWMUs) (Appendix 2, Figure 9):

- SWMU 1 Solvent Recycling Plant;
- SWMU 2 Former Waste Oil Process Area;
- SWMU 3 Heat Vapor Recovery System;
- SWMU 4 Stormwater Storage Tank 1;
- SWMU 5 Stormwater Storage Tank 2; and
- SWMU 6 Former Drum Storage Area.

The field investigation was conducted at the Facility from August 1993 through July 1994. The investigation included the installation of soil borings HR-2 and HR-15 through HR-18, installation of groundwater monitoring wells MW-1 through MW-25 (Appendix 2, Figure 9), water quality sampling and analyses, and data interpretation. Quarterly groundwater monitoring, which began in November 1993 as part of the RFI, was continued beyond the submittal date of the RFI through December 1994.

Results of the soil-quality investigation indicated that soil in the vicinity of SWMU 1 has been impacted with VOCs. SWMU 1 roughly encompasses the entire width of the property north of the southern edge of the former solvent recycling plant, including the north drum pad and the office building as shown in Appendix 2, Figure 9. The distribution of VOCs in vadose zone soils and in groundwater suggested that releases of VOCs to the unsaturated portions of the near surface clay unit have been principally confined to the solvent recycling and drum storage areas of SWMU 1. The principal source area of the VOCs was believed to be within the limits of the solvent recycling plant (SWMU 1). Soil in the vicinity of SWMU 2 through SWMU 6 was not impacted with VOCs.

Results of the RFI indicated that groundwater beneath and downgradient of SWMU 1 had been impacted by VOCs. The solvent recycling plant encompassing SWMU 1 was identified as the probable source area for the VOCs detected in groundwater. The groundwater sample analytical results from the RFI and more recent sampling events in 1994 indicated that the lateral extent of dissolved VOCs was reasonably well defined. Trichloroethylene was the most prevalent and elevated VOC detected in groundwater samples.

13.2.4 Interim Measure Field Investigations

Based on the results of the RFI, an Interim Measure investigation and implementation program was initiated. Laidlaw submitted an *Interim Measure Plan* for field investigation and Interim Measure installation activities at SWMU 1. The plan was accepted by the Oklahoma Department of Environmental Quality (ODEQ) in their May 25, 1995, letter.

Interim Measure field investigations were conducted at SWMU 1 and off-site between June 5 and 11, 1995, and between October 30 and November 3, 1995, to further characterize the Facility hydrogeology and lateral distribution of VOCs in groundwater preparatory to selecting interim measures. The investigations included the completion of the tasks listed below:

- Constructing eighteen permanent groundwater monitoring wells (MW-26 through MW-43), seven temporary wells (TW-1 through TW-7), and one soil boring (SB-1);
- Collecting soil samples and analyzing for selected physical properties, including horizontal specific permeability to air, vertical hydraulic conductivity and intrinsic permeability, total and effective porosity, volumetric water content, dry and wet bulk density, and total organic carbon content;
- Developing the groundwater monitoring wells, including surveying and collecting initial groundwater-level measurements;
- Sampling groundwater and analyzing for VOCs and general inorganic cations and anions; and
- Conducting an aquifer pumping test and vacuum test.

As a result of the field investigations, the horizontal extent of VOC contamination in the clay-clayey shale unit was well defined. The results indicated the presence of elevated concentrations of VOCs, defined as greater than 1 ppm, in two main areas of the Facility. The first was along the northern portion of the solvent recycling plant (in the area of wells MW-1, MW-26, MW-27, and MW-29). The second was to the north of the north drum pad area (in the area of wells MW-32 and MW-40). Previous results from MW-9 and MW-32 had demonstrated that the concentrations were higher at the top of the clayey shale than they are in the upper portion of the saturated portion in the clay zone.

13.2.5 Interim Measure Installation

The Interim Measure was installed in June and July 1996 (final completion on July 2) and became operational on October 9, 1996. The Interim Measure consisted of a perimeter containment trench and a source area recovery trench at SWMU 1. The trenches were designed to remove groundwater containing VOCs. The hydrostratigraphic zones addressed by the measure are the clay and clayey shale units encountered at shallow depth beneath the Facility. Appendix 2, Figure 9 shows a plan view of the trenches.

The trench recovery system consists of a 70-foot long recovery trench near the northwest corner of the recycling plant and a 540-foot long containment trench along the north and west edges of the Facility property boundary. The recovery trench is located immediately downgradient of the contaminant source. Its purpose is to reduce the levels of contaminants migrating toward the containment trench. The containment trench is located downgradient at the property boundary to recover dissolved VOCs in groundwater and to prevent the further off-site migration of contaminants. Both trenches are completed to a depth below the contact of the clayey shale and shale interface to insure the collection of any contaminants perched on the shale. Groundwater is extracted from the trenches and stored on-site in a 500,000 gallon storage tank, Tank V-69. The collected groundwater is treated through carbon adsorption by the Facility prior to permitted discharge to the City of Tulsa Publicly Operated Treatment Works (POTW) on a batch basis after treatment. A more detailed discussion of the system is provided in Section 13.3.

13.2.6. SITE-SPECIFIC TARGET LEVELS (SSTLS)

On July 12, 1996, Laidlaw submitted a report to the ODEQ entitled *Groundwater Site-Specific Target Level Assessment, Treatment and Recovery Services, Tulsa, Oklahoma, Volumes I and II.* This document proposed site-specific groundwater target levels for the groundwater in the clay-clayey shale units at the Facility and a technical rationale for the SSTLs. The SSTLs were determined for eight chemicals of concern both on-site (which included the Facility and the immediately surrounding property owned by the Facility) and off-site (non-Facility-owned property).

Laidlaw received approval with modifications for the SSTL report in the ODEQ's letter dated February 24, 1997. A revised SSTL document and cover letter were prepared, both dated May 8, 1997, that incorporated the ODEQ modifications. Laidlaw received a draft letter dated December 16, 1997 from the ODEQ allowing for the establishment of SSTLs for chemicals of concern both on-site and off-site from the Laidlaw Facility. On March 20, 1998, Laidlaw prepared a letter to the ODEQ requesting clarification of the SSTLs listed in the draft letter.

On August 5, 1998, Safety-Kleen (as successor to Laidlaw) received approval from the ODEQ for the SSTLs proposed in Table 9 of the revised SSTL document (1997). The approved SSTLs are set at ten times the maximum concentration levels (MCLs) for the off-site chemicals of concern (COCs) and tens to several

tens times drinking water MCLs for the on-site COCs. The off-site SSTLs approved by the ODEQ are:

•	Benzene	0.05 mg/L
•	1,1-Dichloroethylene	0.07 mg/L
•	1, 4-Dioxane	0.03 mg/L
•	Methylene Chloride	0.05 mg/L
•	Tetrachloroethylene	0.05 mg/L
•	1,1,1-Trichloroethane	2.0 mg/L
•	Trichloroethylene	0.05 mg/L
•	Vinyl chloride	0.02 mg/L

These are the VOC concentrations in groundwater that are acceptable to the ODEQ for an off-site receptor on the non-company owned property surrounding the Facility. The values for off-site COCs represent ten times their MCLs, with the exception of the value for 1,4-dioxane, for which a target level concentration of ten times the calculated RCRA Subpart-S Screening Level was used.

The on-site SSTLs are:

•	Benzene	0.50 mg/L
•	1,1-Dichloroethylene	2.4 mg/L
•	1, 4-Dioxane	0.12 mg/L
•	Methylene Chloride	0.25 mg/L
•	Tetrachloroethylene	3.9 mg/L
•	1,1,1-Trichloroethane	37 mg/L
•	Trichloroethylene	0.90 mg/L
•	Vinyl chloride	0.14 mg/L

13.2.7. CORRECTIVE MEASURES STUDY

Following implementation of the Interim Measure, Laidlaw conducted and completed a Corrective Measures Study (CMS). On August 25, 1998, a *Corrective Measures Study (CMS) Report*, Appendix 3, Attachment 9, was submitted to the ODEQ. The report evaluated eight Corrective Measure alternatives for addressing the VOC contamination identified and delineated during the RFI and Interim Measures work. These measures included:

- Slurry trenches;
- Vertical recovery wells;

- Vertical dual-phase recovery wells;
- Horizontal recovery wells;
- A trench recovery system;
- Enhanced liquid bioremediation;
- Air sparging;
- Reaction wall technology; and
- Continued operation of the Interim Measure.

The Corrective Measures were evaluated based on the following criteria:

- Protection of human health and environment;
- Ability to attain Corrective Measures objectives (i.e. SSTLs);
- Control of sources of release;
- Compliance with applicable waste management standards;
- Long-term reliability and effectiveness;
- Reduction in toxicity, mobility, and volume of waste;
- Short-term effectiveness; and
- Cost-effectiveness.

The alternative which best met the Corrective Measure objectives was the continued operation of the Interim Measure. The Interim Measure was designed to hydraulically contain the VOCs in groundwater on-site and to remediate the saturated zone in the clay-clayey shale unit to the ODEQ-approved site-specific target levels. Consequently, it was recommended in the CMS Report that the existing Interim Measure be used as the final remedy for addressing the VOCs in the clay-clayey shale unit. This recommended approach was approved by the ODEQ in an October 13, 1998 letter to Safety-Kleen (Tulsa), Inc.

13.3. CORRECTIVE MEASURE

13.3.1. SYSTEM OBJECTIVES AND OVERVIEW

The Corrective Measure objectives as presented in the CMS include:

- Containing the contaminant, and
- Removing contaminant mass to the greatest extent practicable.

The Corrective Measure consists of one containment trench along the north and west perimeter of the Facility and one recovery trench near the VOC source area at SWMU 1. The conceptual design of the

Corrective Measure was presented in the ODEQ-approved *Interim Measure Plan* dated March 1995. The groundwater extraction trenches were completed on July 2, 1996 and began operating on October 9, 1996. The locations of the containment trench and recovery trench are presented in Appendix 2, Figure 9.

The containment trench is 540 feet in length and is located downgradient of the probable on-site source areas at the property boundary. It recovers dissolved VOCs in groundwater to prevent the further off-site migration of contaminants. The containment trench consists of 10 trench-observation wells (TOW-A through TOW-J), filter media, perforated conduit at the bottom of the trench, three recovery sumps (RS-1, RS-2, and RS-3), mechanical and operational controls, and double-containment discharge piping. The trench observation wells are used to monitor groundwater levels in the trench during the course of groundwater extraction.

The recovery trench is 70 feet in length and is located immediately downgradient of the probable source area in the former solvent recycling plant. Its purpose is to reduce the levels of contaminants migrating toward the containment trench. The recovery trench consists of four trench-observation wells (TOW-K through TOW-N), filter media, perforated conduit at the bottom of the trench, a recovery sump (RS-4), mechanical and operational controls, and double containment discharge piping. Each of the four recovery sumps consists of a recovery sump and an immediately adjacent piezometer for measuring groundwater levels.

To capture perched contaminants, both trenches are completed to a depth below the contact of the clayey-shale and shale interface where the pooling of contaminants would be expected. Contaminated groundwater is recovered by operating the submersible total-fluids recovery pumps in each recovery sump. The relatively porous filter media, perforated conduit, and trench bottoms with slopes directed toward each of the four sumps allow groundwater to flow toward each recovery sump within both trenches.

The groundwater is pumped from the trenches to a 500,000-gallon on-site storage tank, Tank V-69. The collected groundwater is treated through carbon adsorption, and the treated water is discharged to the City of Tulsa Publicly Operated Treatment Works (POTW). The groundwater is discharged in compliance with the POTW discharge permit obtained from the City of Tulsa Public Works Department, Industrial Pretreatment Section.

13.3.1.1. SYSTEM OPERATIONAL CONTROLS

The recovery system is equipped with process controls to operate the recovery pumps and notify maintenance personnel when alarm conditions exist. The pump controls and alarm notification device are installed in the control panel near the northwest corner of the former solvent recycling plant (see Appendix 2, Plate 2). Pump controls and safety interlocks are processed by a programmable logic controller (PLC), which is housed in the control panel. The PLC can be programmed for different

operational configurations which allows the groundwater recovery system to be modified or upgraded with relative ease.

A pressure sensor controls operation of the recovery pump in each well. The pressure sensor has an operating range of approximately 12 inches. When the water level increases in the recovery sump the pressure sensor monitors the pressure caused by the water level above the pressure sensor. When the water level increases above the actuation pressure of the pressure sensor, a signal is sent to the PLC. The PLC then turns the recovery pump "ON". When the water levels drop below the operating range of the pressure sensor, the PLC turns the pump "OFF". To minimize cavitation, and provide adequate pressure head for priming the recovery pumps, the lower operating range of the pressure sensor in each recovery sump has been placed several inches above the intake of each pump.

Five alarm conditions are monitored on the recovery system:

- Loss of electrical power;
- High fluid level in any recovery well;
- High fluid level in vaults RS-1 and RS-3;
- High fluid levels in vaults RS-2 and RS-4; and
- High water pressure in the discharge piping.

Alarm conditions are monitored via an automatic telephone dial-up system which notifies maintenance personnel when one of the alarm conditions exists. In the event of a power outage, the phone monitoring system will switch to an alternate power source and notify maintenance personnel that the power is off.

If a recovery pump should fail to operate properly or a discharge line becomes clogged, the high level alarm in the recovery well will be activated. This alarm will allow the recovery pump to continue operating, but will notify maintenance personnel that this alarm condition exists.

A high fluid level alarm condition from either recovery vault RS-1 or RS-3 indicates that rainwater may have collected in one of the vaults. This alarm will notify maintenance personnel, but will allow all of the recovery pumps to continue operating.

A high fluid level alarm condition from vault RS-2 or RS-4 indicates that rainwater has collected in these vaults or that a discharge line has ruptured. Since a ruptured discharge line would eventually cause the recovered water to overfill the double containment system, an alarm from RS-2 or RS-4 disrupts power to the recovery pumps and the phone monitoring system notifies maintenance personnel that this alarm condition exists.

Groundwater recovered by the system is pumped by the recovery pumps to a 500,000-gallon storage tank (Tank V-69). The storage tank is equipped with a high-level shut-off valve. When the shut-off valve is

actuated, the recovery pumps create an increase of water pressure in the discharge piping. In recovery vault RS-4, a pressure sensor, mounted on the discharge piping, detects an increase in pressure. When a high-pressure signal is detected, the PLC shuts off the recovery pumps and starts a 1-hour timer. After one hour has elapsed, the pumps will re-start. If high pressure does not develop in the discharge line, the pumps will continue to operate until another high pressure event occurs. If eight or more high-pressure events occur in a ten-hour period, then the recovery pumps will be turned off and an alarm will be sent to the maintenance personnel. The pumps will not re-start until the PLC is manually reset.

13.3.2. CORRECTIVE MEASURE MONITORING PROGRAM

The Corrective-Measure monitoring program at the Facility was approved by ODEQ separately from the permit on October 13, 1998. It consists of measuring flow volumes from the two groundwater extraction trenches, measuring groundwater levels, collecting groundwater samples, analyzing the groundwater samples for VOCs, and performing operation and maintenance activities related to the groundwater extraction system. Prior to the start-up of the Interim Measure extraction system on October 9, 1996, baseline groundwater monitoring was conducted between June 24 and 29, 1996. These data were collected to document the pre-pumping groundwater surface and VOC distribution in groundwater.

Groundwater-level and analytical data were collected quarterly between June 1996 and December 1998. Pursuant to the approval of Mr. Greg Garber of the ODEQ in April 1999, the monitoring schedule has been changed to semi-annually. The semi-annual reports will be submitted in July and January of each calendar year, covering the first half and second half of the year, respectively.

In the CMS and subsequent monitoring reports, it has been demonstrated that the containment and recovery trenches maintain hydraulic control of the on-site portion of the VOC plume and effectively remove significant VOC mass from groundwater. As demonstrated by the monitoring events since the start-up of the trench recovery system in June 1996, the VOC plume has steadily and consistently decreased in area and concentration compared to the June 1996 plume. This indicates that the trench recovery system is hydraulically controlling the migration of the VOC plume and recovering significant contaminant mass, as presented in greater detail in Section 13.4.

The monitoring well network is part of the ODEQ-approved Corrective Measure and consists of 37 wells and associated sumps and recovery trench wells. These wells were originally installed for site investigation purposes. The well network is currently sampled and monitored in accordance with the ODEQ-approved Corrective Measure using on-site and off-site monitoring wells to observe system performance and attainment of the SSTLs. The wells have been selected based on their location relative to the groundwater plume, current and past VOC concentrations, and groundwater gradient under pumping and prepumping/static conditions. To monitor the continued effectiveness of the Corrective Measure system to hydraulically contain the impacted groundwater at the site, all of the existing monitoring wells will be

monitored for fluid-levels during each semi-annual monitoring event. In addition, groundwater samples will be collected from on- and off-site wells.

Off-Site (Outside Facility Fenceline) Corrective Action Monitoring Wells

The following wells will be used as off-site monitoring points: MW-20, MW-23, MW-24, MW-25, MW-36, MW-37, MW-38, MW-39, MW-40, MW-41, MW-42, and MW-43. These wells are located downgradient and off-site of the containment recovery trench. The wells will be used to demonstrate attainment of the off-site SSTLs, and the containment of the VOC plume.

On-Site (Inside Facility Fenceline) Corrective Action Monitoring Wells

The following wells will be used as on-site monitoring points: MW-1, MW-3, MW-5, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-21, MW-22, MW-26, MW-28, MW-29, MW-30, MW-31, MW-32, MW-33, MW-34, and MW-35. These wells are located on-site and upgradient of the containment recovery trench and include the wells with the historically highest total VOC concentrations (e.g. well MW-29), in addition to wells with intermediate to low concentrations located between the source recovery trench and the containment trench. The selected wells will provide an accurate depiction of the VOC plume on a semi-annual basis, and will allow demonstration of progress toward the on-site SSTLs.

ODEQ granted permission on March 4, 2004 to plug and abandon monitoring wells MW-7 and MW-9 thus permanently eliminating them from the monitoring program. These wells would be decommissioned, plugged, and abandoned in accordance with the ODEQ standards. The rationale for eliminating these two wells from the semi-annual monitoring program is presented below:

Decommissioning of Deep Monitoring Well MW-7

Tulsa Disposal, LLC proposed that MW-7, screened within the Coffeyville Shale, be abandoned to remove the potential for preferential vertical VOC migration from the upper clay and clayey shale units into the underlying bedrock shale unit. Of special concern was the possibility that VOCs could enter the well and migrate down into the hydraulically separate Coffeyville Shale. It was proposed that MW-7 be decommissioned, plugged, and abandoned in accordance with ODEQ requirements to prevent this well from potentially serving as a conduit from the shallow clay-clayey shale unit into the underlying shale. Although MW-7 showed a decreasing VOC trend (see the total VOC concentration vs. time plot for this well in Appendix 2), Tulsa Disposal, LLC felt that the well may be detrimental to the on-site cleanup. Based on the one-sided Mann-Kendall statistical test for trends, a downward trend was evident from March 1994 through March 2003 with a statistical significance greater than 95%. The well underwent abandonment procedures in July 2005.

Decommissioning of Shallow Monitoring Well MW-9

The Facility also proposed that MW-9 be decommissioned, plugged, and abandoned. Installed early in the site characterization process, it was completed to only 10 feet below ground surface and contains

groundwater only sporadically, generally during summer sampling events. MW-9 has historically been gauged for groundwater level, but it has not been sampled since June 1995 since it produces inadequate sample volumes. Moreover, well MW-9 is immediately adjacent to a newer well, MW-32, which was completed to the shale and thus yields representative water samples on a consistent basis. During the sampling events in which it has been possible to analyze the groundwater from the MW-9, the concentration of constituents were in all cases non-detectable, while MW-32 has generally shown total VOC concentrations greater than 10 mg/l. MW-9 was plugged and abandoned in July 2005 and replaced by MW-32.

Appendix 3, Attachment 3 provides the detailed groundwater Sampling and Analysis Plan (SAP) presenting the field methodologies implemented during the semi-annual events as part of the Corrective Measure. As with all aspects of the Corrective Measure, the SAP can be amended without requiring modification of the permit. However, the SAP is provided for informational purposes.

The sections below provide only a general overview of the monitoring program as a preliminary to the discussion of the demonstration of adequacy of the Corrective Measure and the program for the attainment of site-specific target levels presented in Sections 13.4 and 13.5, respectively. For specifics, reference is made to the SAP.

13.3.2.1. GROUNDWATER SAMPLING

Groundwater samples are collected in accordance with the SAP. Prior to sampling, the depth to groundwater is measured in all applicable on-site and off-site wells, in each of the fourteen trench observation wells (TOW-A through TOW-N), and in the four trench-sump observation wells (RS-1 through RS-4). Prior to sampling, a minimum of three casing volumes are purged from each well except in those wells in which water recovery is extremely slow.

The samples are to be analyzed for VOCs by EPA Method 8260, at an ODEQ-certified analytical testing laboratory. Quality Assurance/Quality Control (QA/QC) samples are also collected and analyzed in accordance with the SAP.

13.3.2.2. CORRECTIVE MEASURE OPERATION AND MAINTENANCE

The operation and maintenance program, Appendix 3, Attachment 10, consists of collecting flow and volume readings, routine maintenance of the system, and groundwater treatment and discharge in accordance with regulatory agency requirements. Cumulative flow readings of the volumes of groundwater pumped from the trenches are collected as part of program. Flow meters are positioned at the discharge point of each recovery sump and in the discharge line after the flow from all sumps is combined. The

groundwater recovered from the two trenches is pumped to Tank V-69. The facility is responsible for managing the recovered groundwater pumped to the storage tank. The groundwater pumped from the trenches is treated through the carbon adsorption system prior to discharge to the POTW. When collecting flow readings, the amount of water stored in the tank is also recorded.

Details regarding monthly maintenance and monitoring are included in each semi- annual report prepared for the Facility.

13.4. DEMONSTRATION OF ADEQUACY OF CORRECTIVE MEASURE

This section presents a summary of the adequacy of the Corrective Measure at achieving CMS objectives. As discussed in detail below, the containment and recovery trenches continue to maintain hydraulic control of the on-site portion of the VOC plume and to effectively remove significant VOC mass from groundwater. The results from the groundwater monitoring program underscore the significant reduction in VOC mass in the water-bearing zone beneath the Facility since the trench recovery system began full-time operation in October 1996. Since this time, the VOC plume has steadily and consistently decreased in area and concentration while the system has recovered significant contaminant mass.

13.4.1. TRENCH HYDRAULICS

Appendix 2, Figure 10 presents a contour map of the pre-pumping (June 1996) groundwater surface at the Facility. The direction of natural groundwater flow under non-pumping conditions for the shallow, unconfined aquifer is predominantly to the west along the western portion of SWMU 1 and to the north-northwest in the north portion of the solid waste management unit. Appendix 2, Figure 11 presents the groundwater surface at the Facility and off-site in April 2015, the first semi-annual monitoring event for 2015. In Appendix 2, Figures 10 and 11, it is apparent that the regional groundwater flow direction and hydraulic gradient are significantly affected by groundwater pumping from the two trenches.

In April 2015, the groundwater elevation difference between trench observation wells TOW-K through TOW-N and the monitor wells adjacent to the recovery trench (MW-6, MW-26, and MW-27) was approximately 11 feet. This result indicates that the hydraulic gradient towards the recovery trench is extremely steep.

The differences in groundwater elevations between the containment trench and adjacent monitoring wells are less dramatic than those at the recovery trench, but are still significant. The differences in the groundwater elevations between the containment trench and adjacent wells MW-10, MW-11, MW-12, and MW-32 ranged from approximately 2 to 10 feet in April 2015 (Appendix 2, Figure 11). The results indicate

relatively steep hydraulic gradients towards the containment trench.

13.4.2. GROUNDWATER ANALYTICAL RESULTS

The comprehensive groundwater analytical results indicate that the VOC plume at SWMU 1 has not migrated off-site at levels above SSTLs for individual VOCs along the western property line or western edge of SWMU 1. Prior to installation of the recovery system, the plume had, however, migrated beyond 46th Street South approximately 150 feet north of SWMU 1, at levels above SSTLs for selected VOCs. Since the June-1996 baseline sampling event, the trench recovery system has been effective in minimizing and reducing further migration of the leading edge of the plume, and containing the plume on company property as well. This is illustrated in Appendix 2, Figures 12 and 13, which present the distribution of total VOCs in shallow groundwater at SWMU 1 and off-site in June 1996 (baseline sampling event) and April 2015, respectively. The analytical results indicate that the Corrective Measure trenches are significantly reducing chemical concentrations in groundwater.

13.4.3. GROUNDWATER PUMPING AND VOC RECOVERY

To estimate the amount of contaminants recovered by each of the four recovery sumps, groundwater volume readings are collected on a weekly basis and groundwater samples are collected from each recovery sump discharge on a semi-annual basis. Groundwater volume readings and cumulative groundwater recovery estimates are compiled semi-annually along with VOC mass recovery of the individual contaminants based on samples collected from sample ports of RS-1, RS-2, RS-3, and RS-4. Between full-time system start-up in October 1996 and June 2015, a total of 213 Kg of VOC contaminant mass was recovered. The amount of mass recovered calculates to an annual recovery rate of approximately 11.4 Kg per year. The cumulative amount of groundwater recovered from the Corrective Measure recovery trenches for the above time period has been approximately 20,600,000 gallons.

13.4.4. IN-SITU BIOLOGICAL REACTOR (ISBR)

To expedite attainment of SSTLs and closure of the site, an in-situ biological reactor (ISBR) pilot-scale system was proposed to ODEQ in the In-Situ Field Treatability Study and Bioplug Testing Workplan dated March 1, 2007. An ISBR is a patented immobilized microbial bioreactor used for in-situ bioremediation of impacted soil and groundwater. The pilot system, consisting of two ISBR wells, was installed and the results of the study were presented in the 2009 First Semi-Annual (January – June) Groundwater and Corrective Measure Monitoring, and In-Situ Biological Reactor Pilot Test Summary Report. An Addendum to Corrective Measures Study (CMS) Report: Bioaugmentation of Groundwater Trench Recovery System Using In-Situ Biological Reactors was submitted to ODEQ on August 20, 2010. The CMS addendum proposed augmenting the trench recovery system with additional ISBR wells in the

primary source area to address the impacted groundwater at the site. The CMS addendum was approved by the ODEQ in its October 4, 2010 letter to Clean Harbors.

In response to an ODEQ request, Clean Harbors submitted a Class 1 Permit Modification, dated July 8, 2014, to the ODEQ for the planned ISBR Interim Measure system that will be used to augment the existing groundwater Corrective Measure at SWMU 1. The permit modification was submitted in accordance with Code of Federal Regulations (CFR) 270.42(d)(1) and pursuant to the ODEQ's request in its May 8, 2014, letter to Clean Harbors addressing the implementation of the ISBR Interim Measure. The permit modification included a description of the planned ISBR Interim Measure system and a general implementation schedule. The permit modification was based on the ODEQ-approved CMS Addendum.

Between August 3 and 14, 2015 and September 7 through 10, 2015, a total of 35 ISBR wells were installed and developed at the site, in accordance with the Class I Permit Modification. The ISBR system will augment the existing trench recovery system and remediate soil and groundwater impacted by the full suite of COCs in the source area beneath the North Drum Pad, Former Solvent Recycling Plant, and other areas of the site exceeding groundwater SSTLs. The design of the full-scale system was based on the operational and performance data gathered during the pilot scale demonstration. The 35-well ISBR system is scheduled to undergo startup testing in November 2015 and become fully operational in December 2015, augmenting the existing groundwater trench recovery system.

13.4.5. SUMMARY

Based on years of site monitoring, it is concluded that the system is operating effectively and meeting the CMS objectives of source removal and hydraulic containment while protecting human health and the environment. The trenches are maintaining hydraulic control of the on-site portion of the VOC plume in groundwater. The results from the hydraulic steady-state capture zone modeling in the CMS show that the containment and recovery trenches together intercept the entire VOC plume on the Facility property and most of the plume off the boundary. The results from the monitoring program indicate decreasing VOC trends in most of the monitoring wells at the Facility.

The containment and recovery trenches continue to effectively remove significant VOC mass from groundwater. During the sampling events, the VOC plume has steadily and consistently decreased in area and concentration compared to the June 1996 plume. This indicates that the trench recovery system is hydraulically controlling the migration of the VOC plume and recovering significant contaminant mass. The addition of the ISBR system should further reduce the Chemicals of Concern to site specific target levels.

13.5. ATTAINMENT OF CORRECTIVE MEASURES OBJECTIVES

This section presents a discussion of the criteria to be used to demonstrate that corrective action is complete. In as much as the Corrective Measure was approved separately from the permit, operation of individual components of the Corrective Measure may be modified and/or ceased, with ODEQ approval and without requiring a permit modification, to optimize the system performance. Thus, the recovery trench might remain in operation longer than the containment trench, or vice versa. In addition, the operating components of the system may be shut down for periods of time to determine if rebound of COC concentrations occur. However, termination of the corrective action program will be determined based on:

- The verification of attainment of the ODEQ-approved SSTLs, or
- When it can be demonstrated that further reducing contaminant mass is no longer feasible, or
- Receipt of a "no further action" letter from ODEQ.

The Corrective Measures objectives (Subsection 13.3.1) are currently being met by the recovery system. The Corrective Measure objectives target both the VOC source and the solute-phase contaminants, while at the same time providing for the protection of human health and the environment and complying with waste management standards. The SSTLs provide thresholds to be met and verified to determine that the corrective action program can be terminated unless it can be demonstrated that reducing contaminant mass is no longer feasible or ODEQ issues a "no further action" letter.

As with all aspects of the Corrective Measure, the determination that Corrective Measures objective have been met are not part of this permit and can be made separate from it with ODEQ approval.

13.5.1. ATTAINMENT OF ON-SITE TARGET LEVELS

The Corrective Measure at the Facility will continue to operate until all wells in the groundwater monitoring program are below the on-site SSTLs listed in Subsection 13.2.6 for two consecutive groundwater monitoring events, when it can be demonstrated that reducing contaminant mass is no longer feasible, or ODEQ issues a "no further action" letter. The first monitoring event providing evidence of contaminant concentrations below SSTLs will be considered preliminary until the second event verifies that the on-site SSTLs have been attained for all eight of the chemicals of concern. At that time the recovery and containment trench recovery system will be shut-off. The system will not be decommissioned, however, until further groundwater monitoring verification has been completed, as presented below.

13.5.2. ATTAINMENT OF OFF-SITE TARGET LEVELS

Once the on-site target levels have been attained and the Corrective Measure has been turned off, natural attenuation will be employed to reduce contaminant levels to below off-site SSTL concentrations. Natural attenuation, resulting from the combined effects of dispersion, retardation, and decay due to biodegradation, takes advantage of nature's ability to intrinsically remediate or degrade VOCs. From the SSTL document, the receptor was a hypothetical irrigation water supply well located 107 meters (351 feet) downgradient from SWMU 1. Thus, once cleanup to the on-site target levels was achieved, chemical concentrations are required to be below off-site groundwater target level concentrations before reaching this hypothetical worst-case receptor. The VOC concentrations in groundwater that were acceptable to the ODEQ for the hypothetical off-site receptor are presented in Subsection 13.2.6.

To provide field verification that the concentrations of the chemicals of concern do not exceed the target concentrations downgradient of SWMU 1, it is proposed that the on and off-site monitoring wells be monitored semi-annually for two years after completion of active remediation and shutdown of the system. This monitoring could be completed as part of the post-closure monitoring for the Facility. The wells will comprise a sentinel well network to verify that off-site target levels are not being exceeded. If the off-site target levels presented in Subsection 13.2.6 above are exceeded in any of these wells, then appropriate contingency action would be taken with the concurrence of ODEQ. In this case, the Corrective Measure could be turned back on or the risk assessment reevaluated to determine what concentrations would be considered acceptable at this distance from the hypothetical closest future receptor. The ODEQ would be contacted in the event of an off-site SSTL exceedance and discussions pursued to determine appropriate contingency action.

13.5.3. DECOMMISSIONING OF CORRECTIVE MEASURE

If after two years, there was no exceedance of an off-site SSTL in any one of the wells presented above, when it can be demonstrated that reducing contaminant mass is no longer feasible or ODEQ issues a "no further action" letter, then the Corrective Measure system would be decommissioned permanently, and closed in accordance with the Closure Plan in Tab XI.

13.5.4. SUMMARY

In summary, the Corrective Measure approach presented above is consistent with EPA guidance and is protective of public health and the environment. It does not pose any unacceptable potential health risks to future potential irrigation water well receptors in the area. The approach provides a level of protection of human health and the environment that is consistent with anticipated future land use and does not inappropriately exceed the level of protection required. It incorporates a monitoring system that can provide

early warning if levels potentially exceed those that could be expected downgradient of the Facility. This will provide sufficient time to design contingent response action, should such action be necessary.

TULSA DISPOSAL, LLC TULSA, OKLAHOMA

TAB XIV

REFERENCES

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