



State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF SOLID AND
HAZARDOUS WASTE
Dennis R. Downs
Director

JON M. HITSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

FILE COPY

February 1, 2006

Mr. Kirk Christenson
Plant Operations Manager
Stericycle, Inc.
90 North 100 West
North Salt Lake, Utah 84054

Subject: Approval of Solid Waste Permit #9102R2

Dear Mr. Christenson:

The Division of Solid and Hazardous Waste completed our review of the solid waste permit renewal application for the operation of Stericycle's medical waste incinerator. Once the renewal application was deemed complete, a Draft Permit (#9102R2) was prepared and both documents were made available for public review and comment. Comments received during the public comment period have been reviewed and a response to each of the comments was prepared and the complete document is enclosed with this letter.

Also, please find enclosed the final Permit (#9102R2). As you are aware, the enclosed permit will remain in effect for five years.

If you have any questions regarding this letter or the permit, please contact Ralph Bohn or Roy Van Os at (801) 538-6170. Thank you for your assistance during the permit renewal process.

Sincerely,

Dennis R. Downs, Executive Secretary
Utah Solid and Hazardous Waste Control Board

Enclosures: Stericycle Response to Comments
Final Permit #9102R2

c: Delane McGarvey, M.ED, EHS, Environmental Health Director, Davis Co. Health Dept.

UTAH SOLID AND HAZARDOUS WASTE CONTROL BOARD

SOLID WASTE PERMIT RENEWAL

#9102R2

CLASS V INCINERATOR
(INCINERATOR)

Pursuant to the provisions of the *Utah Solid and Hazardous Waste Act*, Title 19, Chapter 6, Utah Code Annotated (UCA) 1953, as amended (the Act) and the *Utah Solid Waste Permitting and Management Rules*, Utah Administrative Code (UAC) R315-301 through 320 (the Solid Waste Rules) adopted thereunder,

Stericycle, Inc.

is hereby authorized to operate the **Medical Waste Incinerator** at the site described under the "Location" section of this permit.

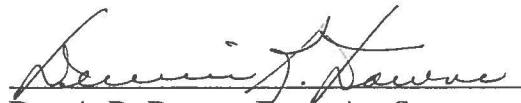
The operation of the incinerator is subject to the condition that Stericycle, Inc. (**Permittee**) meet the requirements set forth herein.

All references to UAC R315-301 through 320 are to regulations that are in effect on the date that this permit becomes effective.

This permit shall become effective February 15, 2006.

This permit shall expire at midnight February 14, 2011.

Signed this 7 day of February, 2006.



Dennis R. Downs, Executive Secretary
Utah Solid and Hazardous Waste Control Board

NAME Stericycle, Inc.

ADDRESS Stericycle, Inc.
90 North 1100 West
North Salt Lake, Utah 84054

TYPE Commercial Medical Waste Incinerator

BASE CAPACITY: The base capacity, for the purpose of compliance with UAC 19-6-108(1)(6), of this incinerator is 1350 pounds per hour (which is approximately 16 tons per day). The permitted capacity of this incinerator was increased to 1850 pounds per hour in 1993. The capacity with this permit renewal will remain at 1850 pounds per hour (which is 24.3 tons per day). The capacity of 1850 pounds per hour shall be based on the annual amount of waste incinerated divided by 8760 (the total number of hours per year). The hourly incineration rate for this incinerator shall not be greater than the three-hour capacity allowed under the existing Air Quality Permit.

PERMIT NUMBER: #9102R2

LOCATION: **Commercial Medical Waste Incinerator** encompassing all of Lot 3, WASATCH FRONT INDUSTRIAL PARK, PLAT A, according to the official plat thereof, on file and of record in the Davis County Recorder's Office. Recorded July 6, 1977, as Entry No. 466509, in Book 657, at Page 475, Davis County Recorder's Office. The incinerator is located in the SE 1/4 of the NE 1/4 of the SW 1/4 of Section 3, T1N, R1W SLBM. The street address is 90 North 1100 West, City of North Salt Lake. The coordinates of the front gate of this facility are:

Longitude: 40° 50' 56" North
Latitude: 111° 56' 31" West

Permit as used in this document is defined in Utah Administrative Code (UAC) R315-301-2(55). Stericycle submitted an application for permit renewal on December 26, 2002. An updated permit application was submitted May 14, 2004. The revised application is incorporated into this permit. All representations made in the revised permit application are part of this permit and will also become part of the *Operating Record* of the Permittee. Where differences in wording exist between this permit and the revised application, the wording of the permit supersedes that of the revised application.

The facility as described in this permit consists of the medical waste incinerator, incoming waste handling facilities and ash collection areas hosted at the address shown above.

By this permit to operate, the Permittee is subject to the following conditions:

I. GENERAL COMPLIANCE RESPONSIBILITIES

A. General Operation

The Permittee shall operate the medical waste incinerator in accordance with all requirements of UAC R315-306 unless otherwise noted in this permit. Any permit noncompliance or noncompliance with any applicable rules in UAC R315-301 through 320 constitutes a violation of the permit or applicable rule and is grounds for appropriate enforcement action, permit revocation, modification, or denial of a permit renewal application.

B. Acceptable Waste

This permit allows for incineration of medical wastes primarily and other wastes as outlined in the revised permit application (Document #2004.01935, May 14, 2004) in Section III: Waste Acceptance Protocol. Incineration of other solid wastes will be considered a violation of this permit and grounds for appropriate enforcement action. The wastes that are incorporated in the Permit Application dated May 14, 2004 include:

1. Infectious Wastes, Pathological Wastes and Laboratory Wastes that include:
 - a. Laboratory Wastes includes:
 - i. Cultures – medical/pathological
 - ii. Cultures/stocks of infectious agents – research and industrial
 - iii. Vaccines and related waste generated in the production thereof
 - iv. Microbiologic specimens and related waste
 - b. Surgical specimens/tissues, contaminated animal parts, tissues, carcasses or body fluids (pathological waste exclusive of preservative agents)
 - c. Fluid blood/blood products, containers/equipment and exudates, secretions, body fluids including, but not related to, isolation waste.
2. Sharps Waste Including, But Not Limited To:
 - a. Needles, syringes, blades, needles with attached tubing, disposable surgical instruments
 - b. Medical/laboratory glassware including slides, pipettes, blood tubes, blood vials, contaminated broken glass
3. Other medical waste as required by the infection control staff, physician, veterinarian, or local health officer to be isolated and handled as regulated medical waste.

4. Trace-Contaminated Chemotherapy (Antineoplastic/Cytotoxic Drugs) Waste:
 - a. Gowns, gloves, masks, barriers, IV tubing, empty bags/bottles, needles and syringes, empty drug vials, spill kits, and other items generated in the preparation and administration of antineoplastic drugs
5. Other Wastes:
 - a. Expired and unused pharmaceuticals:
 - i. Where prior authorization or certification has been received from STERICYCLE, INC., pharmaceutical waste may be accepted for destruction. Pharmaceuticals that may be considered hazardous waste according to Federal or State regulations cannot be accepted for treatment.
 - ii. Confidential records/proprietary packaging and products
 - iii. Contraband (e.g. police evidence, excluding weapons or munitions)
 - iv. Agriculture (APHIS) waste
 - v. Outdated, off-specification or unused consumer commodities
 - vi. Recalled or outdated disposable medical equipment or supplies
 - vii. "Municipal solid waste" as defined by UAC R315-301-2(46) contaminated with infectious materials
 - b. Other non-hazardous waste as approved by the Executive Secretary when such wastes are appropriate for a medical waste incinerator.
6. Stericycle shall obtain approval from the Executive Secretary prior to the acceptance and disposal of animals contaminated with "Mad Cow" disease (Bovine Spongiform Encephalopathy, BSE), chronic wasting disease, or bird flu (Avian Influenza). The facility must demonstrate to the satisfaction of the Executive Secretary and the Utah Department of Agriculture that the incinerator can be operated such that the time/temperature profiles of the incinerator can effectively destroy the animals and the disease that infects that animal.

C. Prohibited Waste

1. No hazardous waste as defined by UAC R315-1 and R315-2 or PCB's as defined by UAC R315-301-2;
2. Household waste; municipal waste; special waste, construction/demolition waste as defined by UAC R315-301-2(16) except as allowed in Section IB above,
3. Yard waste,

4. Industrial waste,
5. Asbestos,
6. Asphalt.
7. Waste paints, solvents, sealers, adhesives or other similar hazardous or potentially hazardous materials

D. Inspections and Inspection Access

The Permittee shall allow the Executive Secretary of the Utah Solid and Hazardous Waste Control Board or an authorized representative, including representatives from the Davis County Health Department, to enter and inspect, at reasonable times, this incinerator facility and any practice or operation regulated or required under this permit. A record of any inspection may be made by photographic, videotape, electronic, or other reasonable means.

E. Self Inspections

The Permittee shall inspect the incinerator site, including the fencing, gate, or other access controls and the storm water run-on/run-off controls. These inspections shall be performed at a frequency no less than quarterly. A record of these inspections shall be maintained in the *Operating Record*.

F. Noncompliance

1. If monitoring, inspection, or testing indicates that any permit condition or any applicable rule under UAC R315-301 through 320 may be or is being violated, the Permittee shall promptly make corrections to the operation or other activities to bring the facility into compliance with all permit conditions or rules.
2. In the event of any noncompliance with any permit condition or violation of an applicable rule, the Permittee shall promptly take any feasible action reasonably necessary to correct the noncompliance or violation and mitigate any risk to the human health or the environment. Actions may include eliminating the activity causing the noncompliance or violation and containment of any waste or contamination using barriers or access restrictions, placing of warning signs, or permanently closing areas of the facility.
3. The Permittee shall: document the noncompliance or violation in the operating record, on the day the event occurred or the day it was discovered; notify the Executive Secretary of the Solid and Hazardous Waste Control Board by phone within 24 hours, or the next business day following documentation of the event; and give written notice of the noncompliance or violation and measures taken to protect public health

and the environment within seven days of Executive Secretary notification.

4. Within thirty days of the documentation of the event, the Permittee shall submit, to the Executive Secretary, a written report describing the nature and extent of the noncompliance or violation and the remedial measures taken or to be taken to protect human health and the environment and to eliminate the noncompliance or violation.
5. Upon receipt and review of the assessment report, the Executive Secretary may order the Permittee to perform appropriate remedial measures including development of a site remediation plan for approval by the Executive Secretary. In an enforcement action, the Permittee may not claim as a defense that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with UAC R315-301 through 320 and this permit.
6. Compliance with the terms of this permit does not constitute a defense to actions brought under any other local, State, or Federal laws. This permit does not exempt the Permittee from obtaining any other local, State or Federal permits or approvals required for the facility operation.
7. The issuance of this permit does not convey any property rights, other than the rights inherent in this permit, in either real or personal property, or any exclusive privileges nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations including zoning ordinances.
8. The provisions of this Permit are severable. If any provision of this permit shall be held invalid for any reason, the remaining provisions shall remain in full force and effect. If the application of any provision of this permit to any circumstance is held invalid, its application to other circumstances shall not be affected.

G. Air Quality Permits

The Permittee shall maintain all authorizations required from the Utah Division of Air Quality for the operation of the incinerator and associated pollution control devices.

H. Ash Analysis

1. The Permittee shall sample the bottom ash resulting from the incineration of medical and other permitted waste at a frequency of once every six months in accordance with Rules R315-316-5: Infectious Waste Treatment and Disposal Requirements.
2. Herbicides, pesticides, volatiles, and semi volatiles parameters have been eliminated based upon one year of monthly sampling with no statistically significant levels of organic constituents. The petition for eliminating these

parameters was submitted to the Division of Solid and Hazardous Waste as a Permit Modification of the previous permit and this Permit Modification was granted December 14, 1993. At this time, ash shall be sampled for metal constituents only.

3. Once every five years, the Permittee shall perform the full TCLP analysis to ascertain that the incinerator continues to remove all organic TCLP constituents.
4. Results of ash analysis shall be submitted to the Division of Solid and Hazardous Waste within one week of receipt of results or no later than sixty days from the sampling date.
5. Results of all testing shall be kept on file at the facility and available for inspection for a minimum of three years.
6. If test results are positive for hazardous characteristics or constituents, the facility shall notify the Executive Secretary of the Solid and Hazardous Waste Control Board within two business days of the receipt of results.
7. Written notification shall be provided to the Executive Secretary within ten business days.
8. Resampling must occur within one week of positive results. If re-sampling shows that the ash is hazardous, then the ash must be disposed at an approved hazardous waste disposal facility.
9. Furthermore, each subsequent bin of ash must be sampled for TCLP metals until two consecutive bins indicate that the ash is not a characteristic hazardous waste and documentation supporting the analysis submitted to the Executive Secretary.

I. Revocation

1. This permit is subject to revocation if any condition of this permit is not being met. The Permittee will be notified in writing prior to any proposed revocation action and such action will be subject to all applicable hearing procedures established under UAC R315-12 and the *Utah Administrative Procedures Act*.
2. Revocation of this permit does not revoke the financial assurance established for closure and post-closure care of the facility, nor remove any responsibility on the part of the permittee for completion of closure and post-closure care for the facility required in UAC R315-302-3.

J. Attachment Incorporation

Attachments to the permit application are incorporated by reference into this permit and are enforceable conditions of this permit, as are documents incorporated by reference into the attachments. Language in this permit

supercedes any conflicting language in the attachments or documents incorporated into the attachments.

II. INCINERATOR OPERATION

A. Access Controls

At least one person, employed by the Permittee, shall be at the facility site during all hours that it is open and operating. The incinerator facility site shall be fenced and the entry gate shall be locked during the time the facility is not open.

B. Burning of Waste

Intentional burning of solid wastes outside the incinerator unit is prohibited. All accidental fires shall be extinguished immediately.

C. Recordkeeping

The Permittee shall maintain and keep an *Operating Record* at the incinerator facility site or at another location determined acceptable by the Executive Secretary. This *Operating Record* for the facility shall be made available for inspection during normal operating hours. The *Operating Record* shall include:

- a. Copy of this permit including the permit application;
- b. Number of vehicles entering the site each day of operation;
- c. Record of the weights of waste received each day of operation;
- d. Record of the weights of waste incinerated each day
- e. Records of any inspections;
- f. Records of any noncompliance.

Weights of medical waste incinerated daily shall be recorded in the *Operating Record*. Weights of medical waste incinerated shall be noted in pounds per hour based on an average hourly rate.

D. Reporting

An *Annual Report* shall be prepared and submitted to the Executive Secretary by March 1 of each year for the preceding calendar (or fiscal) year of facility operation. This *Annual Report* shall include:

- a. The name and address of the facility;
- b. the calendar (or fiscal) year covered by the report;

- c. the annual quantity of waste disposed (in tons);
- d. the annual update of the closure costs and financial assurance requirement;
- e. any training program completed;
- f. and any other information required by the Executive Secretary.

E. Operations Plan

- 1. The Operations Plan included in the permit application and the solid waste permit issued by the Executive Secretary shall be kept onsite at the incinerator.
- 2. The incinerator shall be operated in accordance with the operations plan as included in the permit application. If necessary, the facility owner may modify the Operations Plan, provided that the modification meets all of the requirements of UAC R315-301 through 320, is as protective of human health and the environment as that approved in the permit application, and is approved by the Executive Secretary as a minor modification under UAC R315-311-2(1)(a)(xiii).
- 3. Any modification to the Operations Plan shall be noted in the operating record.
- 4. Ash bins shall be covered with a wind-proof tarp that has been tied down to prevent air disbursement of ash from the bins.

III. CLOSURE REQUIREMENTS

A. Financial Assurance for Closure

- 1. The established financial assurance shall be updated each year of operation and adjusted for any inflation or facility modification that may have affected the closure costs.
- 2. Any changes in the closure cost must be reflected in the estimated closure costs based on the most recent annual update of the closure costs.
- 3. The Permittee has established a Certificate of Insurance for the cost of the closure estimate. In accordance with the Rules R315-309-3, the insurance policy must be maintained for a face amount equal to or in excess of the closure, post-closure, or corrective action cost estimates.
- 4. The Permittee must notify the Executive Secretary of the Utah Solid and Hazardous Waste Control Board 120 days in advance of cancellation of this Certificate of Insurance.

B. Closure

- 1. The final closure of the incinerator facility shall consist of removing any waste remaining at this facility to an approved solid waste disposal facility and

decontaminating and decommissioning all the facility equipment to the extent practicable.

2. All electrical equipment shall be de-energized and all hazardous materials shall be removed from this site.
3. All ash shall be removed and disposed at an approved disposal facility.
4. All other utilities, including water and compressed air, shall be disconnected.

IV. ADMINISTRATIVE REQUIREMENTS

A. Permit Modification

Modifications to this permit may be made by the Executive Secretary when necessary as a result of new information or statutory or regulatory changes, or upon approval by the Executive Secretary of the Permittee's request for modification. The Permittee will be given written notice of any permit modification initiated by the Executive Secretary.

B. Permit Transfer

This permit may be transferred to a new Permittee by meeting the requirements of the permit transfer provisions of UAC R315-310-10.

C. Expiration

An application for a permit renewal shall be made at least six months prior to the expiration date, as shown on the signature (cover) page, of this permit. If a timely renewal application is made but the permit renewal is not complete by the expiration date, this permit shall continue in force until renewal is completed or denied.

D. Revocation

This permit is subject to revocation if any condition of the permit is not being met. The Permittee will be notified in writing prior to any proposed revocation action and such action will be subject to all applicable hearing procedures established under the Solid Waste Rules and the *Utah Administrative Procedures Act*.

UTAH DIVISION OF SOLID AND HAZARDOUS WASTE
Stericycle Medical Waste Incinerator
RESPONSE TO COMMENTS

The solid waste permit for the Stericycle infectious waste incinerator is issued under the solid waste rules, Utah Administrative Code (UAC) R315-301 through 320. These rules address the solid waste treatment, storage, and disposal of non-hazardous solid waste. These rules do not address the emissions from the incineration of the solid waste. Emissions from solid waste incinerators are addressed under rules administered by the Division of Air Quality (DAQ). DAQ currently has issued an approval order (permit) for the Stericycle infectious waste incinerator. Issues relating to the emissions from the Stericycle facility should be addressed to DAQ.

Written and oral comments submitted to Executive Secretary of the Utah Solid and Hazardous Waste Control Board are numbered below. Some comments have been summarized and comments have been grouped to aid in preparing this response. A response follows each comment or group and is in italics.

1. Several comments were received regarding the black smoke emitted by the incinerator. The commenters felt that the smoke indicated that there were toxic constituents from the medical waste being released into the atmosphere.

Stericycle submits an annual emissions inventory that includes the emissions released during times when the air pollution control system is bypassed. This emissions inventory is required by the Division of Air Quality and is compared to the permissible limits established by the Division of Air Quality in Stericycle's DAQ Permit. A review of the most recent annual emissions inventory indicates that the total emissions, including bypass events, are below the allowable limits set by the Division of Air Quality. Any further questions regarding the emissions should be directed to the Division of Air Quality.

2. One commenter complained about the noise during the night and that the noise was disruptive.

The noise during the night is not an aspect of the solid waste operating permit that is subject to solid waste regulations and therefore considered during a permit renewal. However, Stericycle is aware of the proximity to neighbors and will be investigating engineering controls to reduce the noise levels at the facility.

3. Residents expressed concern that there was no emergency evacuation plan as part of the Plan of Operations.

An emergency evacuation plan for the incineration facility is under review by Stericycle. The final emergency plan, when completed, will be included in the

Plan of Operation and will include the conditions under which an emergency evacuation of the incinerator site is required. Any emergency evacuation plan will need to be developed under the authority of the local emergency responders that include the appropriate local fire department and/or police department.

Stericycle does not have either the authority to conduct nor establish the conditions when emergency evacuations of residents near the facility could be conducted. Any such evacuations would be done under the authority of local emergency responders. The emergency response required by the "Solid Waste Permitting and Management Rules" is specific to the facility. If an incident should occur the facility operator will notify local police or fire department agencies. Any decisions to evacuate nearby residents would be made by the emergency responders as part of their authority to protect the public.

4. Several commenters indicated that they wanted an extension to the public comment period and a public hearing to be held in North Salt Lake to discuss the effects of the Stericycle incinerator on the adjacent Foxboro community and the new development that is planned on the other side of Stericycle.

The public comment period was extended to allow for additional public participation. In addition, a second public hearing was held during the public comment period extension. A total of sixty-four days were allowed for public comments.

Two public hearings were held to receive oral comments on the draft permit renewal. Both hearings were held in the Cannon Health Building, which is located less than six miles from the Stericycle facility. All suggested locations for public hearings given by commenters required transportation outside the neighborhood adjacent to the facility. As transportation would be required to attend any public hearing on the facility, six miles is not an unreasonable distance to travel and the Cannon Health Building conference rooms were adequate for conducting public hearings.

5. One comment was received regarding the lack of dialogue between the State and North Salt Lake Planning Commission and City Council and stating that the State changed original agreements without properly notifying the North Salt Lake City Council and cited the increase of 1350 lbs/hour to 1850 lbs/hour in 1993.

The change to increase the waste throughput was made as a modification to the permit issued by the Executive Secretary of the Solid and Hazardous Waste Control Board. The permit modification included a public comment period. The comment period and final action were both noticed in the local and statewide newspapers.

Additionally, as a matter of division policy, all correspondence with Stericycle is copied to the Director of the Davis County Health Department. The Health Department has the authority to perform inspections of the facility at any reasonable time. As a local health department, the Davis County Health Department is overseen by a board that is composed of representatives of the local governments throughout Davis County.

Zoning and conditional use restrictions are administered by the local government authority that set the conditions. The Division of Solid and Hazardous Waste does not have the authority to enforce conditional use restrictions set by local governments.

6. One commenter indicated that the bottom ash container was simply covered by garbage bags and that the bags had blown off during a wind gust and that the ash was blowing around.

The requirement for cover of the ash container will be explicitly included in the operating requirements for this facility. Specifically, the ash storage bin will require covering. This requirement will be included in the Permit.

Permit Section II. E.4 will be modified to read as follows:

“Ash bins shall be covered a wind-proof tarp that has been tied down to prevent air disbursement of ash from the bins.”

7. Comments were received that indicated that residents were concerned about the storage and incineration of animals contaminated with “wasting disease” or Mad Cow disease.

It is the opinion of the Utah Department of Agriculture that incineration is an appropriate disposal option for animals contaminated with chronic wasting disease, Bovine Spongiform encephalopathy (Mad Cow disease), and bird influenza. As such, the option of disposal of these wastes at the Stericycle medical waste incinerator is allowed and available.

As a practical matter, however, the Division believes that the inclusion of a large mass of animal carcasses into this incinerator presents operational problems that will need to be addressed before these wastes can be incinerated. Specifically, Stericycle will need to be able to confirm that the inclusion of large animal carcasses will not degrade the performance of the primary or secondary combustion chambers of this incinerator.

Stericycle will need to inform the Division prior to acceptance of these wastes to determine if incineration can be performed in accordance with the permit. The Permit will be modified in Section I.B.6 to read as follows:

“Stericycle shall obtain approval from the Executive Secretary prior to the acceptance and disposal of animals contaminated with “Mad Cow” disease (Bovine Spongiform Encephalopathy, BSE), chronic wasting disease, or bird flu (Avian Influenza). The facility must demonstrate to the satisfaction of the Executive Secretary and the Utah Department of Agriculture that the incinerator can be operated such that the time/temperature profiles of the incinerator can effectively destroy the animals and the disease that infects that animal.”

8. Comments were received indicating that the public was unable to enter the building during the public information meeting held at 6:00 p.m. and the public hearing scheduled at 6:30 p.m. Furthermore, some people indicated that the doors to the building were not placarded and that they had to wait for someone to exit the building before they could enter. The commenter further indicated that since anyone could make a statement during the public hearing, the doors must be opened for the duration of the public hearing.

The doors at all entrances to the building were placarded to direct the public to an open door. Division personnel were monitoring the open door to direct people to the public hearing as well as the information meeting held just prior to the public hearing. The open door was monitored during the entirety of the public hearing. At the end of the public hearing, the placards were rechecked and confirmed to have been placed on all the doors during the entire time of the public hearing.

9. One commenter stated that since the DSHW indicated that the permit application would be amended to include such changes as language (definitions for medical waste, Biohazardous waste, etc.) and an emergency evacuation plan, the comment period should be extended to allow the public an opportunity to review the revised permit application.

The following changes were made to the permit renewal application:

- a) Section 6, General Facility Information: The capacity will remain at 1850 lbs/hour, and not be increased to 2,025 lbs/hr.
- b) Section 3, General Facility Information: The onsite representative for the facility is Kirk Christenson
- c) Section 7: Land use will be updated to include existing housing and a new map will be inserted to update the existing zoning surrounding the Stericycle facility.
- d) Section 1.5.7 of the Plan of Operations will be changed to R315-301-2(47) to reflect the correct citation.
- e) Section 11.1.1 of the Plan of Operations will be changed to R315-301 Through 320, Utah Code Annotated.
- f) Section 8, Plan of Operations: The current Emergency Response

Coordinator will replace the name in this section

g) Tab 8: Section 5 will be updated to include current personnel and the wording "Biohazardous" will be changed to "Infectious" waste. Attachments 1 & 2 will be replaced with updated information.

h) Tab 9: Attachment I will be replaced with an updated Emergency Call List

i) Tab X: Section 2 (Facility Operations) will be updated to accurately reflect the current zoning surrounding the facility and to note that there are residential dwellings adjacent to the facility property.

j) Tab XVI: Sections 8.0 through 10.0 will be adjusted to reflect the current closure cost estimate and insurance policy numbers

k) Tab 12 will be updated to reflect the current Policy Number and associated certificates.

These changes to the permit application reflect current information. The Executive Secretary does not consider these changes to significantly change the permit application and would not constitute a need for another public hearing

10. Comments were received that indicated that the permit application did not address the proximity of nearby homes and residents.

Section 7(Land Use Compatibility) of the permit application as submitted, indicates that a community is planned adjacent to the facility. Section X (Fugitive Dust Control Plan) of the permit application states that the nearest resident is greater than 1 mile. Both of these sections of the permit application will be modified to include the proximity to residential neighborhoods. See Item 9 for a complete list of changes to the permit application.

11. One comment was received regarding the responsibility of DSHW to monitor for infectious, pathological, or other medical waste material as defined by DSHW statutes.

The requirement to test the effectiveness of the treatment of infectious waste is a requirement when the treatment is not steam sterilization or incineration (see R315-316-1(1)(a)). Monitoring the effectiveness of a proposed treatment using specific methods is discussed in R315-316-1(3)(a) of the Solid Waste Permitting and Management Rules, UAC.

12. One commenter indicated that the DSHW should more clearly define the characterization and/or amounts of waste that would be processed at any one time since the different types of waste would cause fluctuations in temperature and residence time in the incinerator.

The computer control system of the incinerator adjusts the cycle times and/or adjusts the flow of natural gas into the primary combustion chamber to

maintain a relatively constant temperature inside the combustion chamber. There are interlocks in the control system of the incinerator that prevent doors from opening and adding more waste until the temperature within the incinerator reaches the proper processing temperature. As different types of waste are introduced into the primary combustion chamber, the automatic control adjusts the flow of air and gas to reduce temperature fluctuations. The control system of the secondary combustion chamber insures that a relatively constant temperature is maintained.

13. One commenter indicated that the issue of “prions” which could be part of an animal carcass has not been directly addressed by the permit application, the DSHW, or by Stericycle. Any methodology of how to treat this waste has not been presented to the public for comment.

The “prions” that could be part of animal carcasses have been shown to be destroyed effectively at 1,000° C (1800 °F) during incineration¹. Questions about incineration being an effective disposal option are directed at ‘small’ incinerators where effective secondary combustion is not available. The Stericycle incinerator has a controlled secondary combustion chamber that operates between 1800 °F and 2200 °F. The Division concurs with current research that this temperature is effective. Also see response (7) for further discussion.

14. There needs to be clarification of what type of production and testing Stericycle is planning to do with “biological material”, what is meant by “biological material” referenced in Section 1.0 (Description of Waste) in the Plan of Operations.

The term “biological materials” refers to wastes already included in the categories of waste from health care facilities, health-care related facilities, animal care facilities, wastes from research facilities, pharmaceutical manufacturing and unused pharmaceuticals. The term “biological” wastes will be removed from the waste description as this is a redundant term.

15. One commenter wanted clarification of Section 2.0 “Waste Identification Procedures” of the Plan of Operation to specifically identify whether prionic waste was included in this classification.

“Prionic” wastes would be classified as an agricultural waste. At this time, Stericycle is not required to create a special sub-category of “prionic” waste. A permit condition will be added to Section B (6) of the Permit to address the concern that agricultural waste that contains “prions” be completely

¹ “Strategic R&D Priorities: TSE Inactivation and Management of Bovine Specified Risk Material (Draft Report)”, Alberta Agricultural Research Institute. February 2005.
http://www.aari.ab.ca/sec/new_res/docs/Specified_Risk_Materials_Feb15.pdf#search='Strategic%20R%26D%20priorities%20TSE%20inactivation'

incinerated during operation. Please see Comment #7 for the citation of this Permit condition. Also see comment #13 for the citation of current research for this waste.

16. One commenter indicated that the waste minimization requirements of Section 2.0 "Waste Identification Procedures" of the Plan of Operations needs to be in a place such that the public could review various protocols and be able to determine that actual minimization occurs. Merely being able to recite the requirements does not meet this requirement. Clarification is needed on what protocols are being implemented.

As a disposal facility, Stericycle is constrained to dispose of all waste that arrives at the facility. There are no regulations in the Administrative Rules, R315-301 Through 320, of the Utah Annotated Code that require a solid waste disposal facility to include "minimization" requirements for the generators of waste arriving at their facility. Stericycle may have voluntary "waste minimization" goals with their customers, but these goals are not included in the solid waste permit and is not enforceable by the Division of Solid and Hazardous Waste.

17. One commenter indicated that the ash analysis of Section 5.0 "Ash Analysis" needs to be modified to specifically define the methodology regarding the characterization of pathological waste, such that the methods are clearly defined to assure that pathological waste is destroyed in the various processes used at Stericycle.

Currently, the solid waste rules only require that ash be characterized for metals and organics to insure that the ash would not be characterized as "hazardous waste" before disposal in a regulated landfill. Also, see comment #11.

18. One commenter stated that the term "Biohazardous" was used in Subsection 5.0 "Ash Analysis" and that this language was not defined by the State statute or Solid Waste Rules.

The term "Biohazardous" is a term used by the Department of Transportation to identify a category of wastes. Historically, the Division of Solid and Hazardous Waste has used the terms "medical waste", "infectious waste" and "Biohazardous waste" interchangeably. The State of Utah has specifically identified "infectious waste" in statute as follows:

19-6-102(12) UCA "Infectious waste" means a solid waste that contains or may reasonably be expected to contain pathogens of sufficient virulence and quantity that exposure to the waste by a susceptible host could result in an infectious disease.

Also, State statute defines a health facility as:

19-6-102(10) UCA "Health facility" means hospitals, psychiatric hospitals, home health agencies, hospices, skilled nursing facilities, intermediate care facilities, intermediate facilities for the mentally retarded, residential health care facilities, maternity homes or birthing centers, free standing ambulatory surgical centers, facilities owned or operated by health maintenance organizations, and state renal disease treatment centers including free standing hemodialysis units, the offices of private physicians and dentists whether for individual or private practice, veterinary clinics, and mortuaries.

The proper reference to the types of waste would be "infectious waste and wastes received from health care facilities." The permit application and permit will be modified to properly identify these wastes to be in congruence with State statute.

Section I.B.1. of the Permit will be modified to read as follows:

"Infectious Wastes, Pathological Wastes and Laboratory Wastes that include:"

19. One commenter indicated that "police evidence and/or contraband" could include various weapons and munitions and that there needed to be a statement how weapons and munitions would be processed. Also, there was a comment regarding the disposal of contraband from "meth" labs as they could contain dangerous organic sulfur and organic chloride compounds.

The types of wastes included in "police evidence and/or contraband" was not intended to include weapons or munitions. Section I.B.5.a.iii of the Permit will specifically exclude weapons and munitions and read as follows:
"Contraband (e.g. police evidence) excluding weapons or munitions."

Section I.E.3 of the Permit Application (Waste Management Procedures) will be modified to read: "Contraband (e.g. police evidence) excluding weapons or munitions."

Hazardous organic wastes such as dangerous organic sulfur and organic chloride compounds found in "meth labs" would not be accepted for disposal at Stericycle. These compounds are noted in Section 2.0 of the Permit Application (Waste Management Procedures) as non-conforming wastes if they are regulated as a hazardous wastes by the State of Utah.

20. One commenter indicated that since the Division of Air Quality regulated the emission parameters, the combustion parameters would need to be regulated under DSHW, and requested that the parameters regulated under DSHW be

specified and furthermore, which specific parameters would be continuously monitored.

The solid waste permit includes the operation of the incinerator and the management of waste going into the incinerator and the management of ash produced by the incinerator. The permit includes the operation of the primary combustion chamber, but not the operation of the secondary combustion chamber. The secondary combustion chamber and all air pollution control equipment is regulated by the Division of Air Quality.

It is important to recognize that the solid waste permit includes the permit application by reference and is enforceable by the Executive Secretary of the Solid and Hazardous Waste Control Board.

21. One commenter indicated that there was no discussion requiring either a 20-hour OSHA training or a 40-hour OSHA training, yet Section V "Personnel Training" indicated refresher courses for this OSHA training.

OSHA (Occupational Safety and Health Administration) has promulgated its own regulations which can be found in section 29 CFR 1910.46 of the Code of Federal Regulations. These regulations require that the employer train its employees how to protect themselves from hazards in their specific workplace environments. Hazardous waste exposure protection is only one of the topics in which the employees need to be trained. Other subjects include confined space entry, electrical hazards, physical hazards, fire prevention, etc.

While the solid waste permit regulates the management of the waste, personnel safety is a requirement of OSHA. Training required under the Solid Waste Rules relates to waste handling, waste inspection, and identification and management of hazardous waste. Personnel safety training is regulated by OSHA.

22. One commenter indicated that the financial assurance cost estimate (1999 dollars) was not adjusted for inflation and the current closure cost needs to be corrected.

The financial assurance cost estimate was amended on September 16, 2004 and the estimated closure cost was increased to \$316,928.00. Stericycle maintains a bond for this amount and meets the financial assurance requirements of the solid waste rules.

Tab XVI of the Permit Application (Closure/Financial Assurance Plan) will be updated to reflect the current closure costs and update the Certificates of Insurance included in this section.

23. Several commenters stated that black smoke and debris was observed coming from the stack at Stericycle.

The Division is very concerned that there is the perception that this facility emits black smoke and/or debris during its operation. The Division is working with Stericycle to determine the conditions and circumstances where these conditions have been observed. To date, one instance of debris has been ascertained that has occurred when the installation of equipment caused building insulation (shredded and treated newsprint) to be blown to neighboring homes.

The facility is investigating various conditions, such as boiler cleanout, primary combustion startup, packed tower operation, or any other operating conditions that could possibly cause black smoke.

The Division will be working with the facility and the Division of Air Quality to understand and prevent these events. Even during bypass events, all gas is still being heated in the secondary combustion chamber and all controls on the primary and secondary combustion chambers are in operation. These controls prevent non-combusted material from exiting the incinerator.

24. Several commenters criticized North Salt Lake city officials and the builder for allowing residential housing adjacent to the incinerator and, while acknowledging that the incinerator was located earlier than the housing, insisted that the incinerator be shut down.

Zoning changes that allowed residential housing adjacent to this incinerator are strictly under local jurisdiction and are outside the legal authority of the solid waste statute and rules and therefore are not addressed by this permit. Siting criteria are applicable only to new facilities seeking a permit from the State. Facilities that have already received a permit and are seeking a renewal permit are not subject to the siting criteria.

25. Several commenters indicated that they were concerned about the bypass events that took place and that toxic pollution would impact their health.

Bypass events are monitored by the Division of Air Quality and are regulated by the Air Quality Approval Order and Operating Permit for Stericycle. Bypass events occur when the gas from the secondary combustion chamber is prevented from being treated in the subsequent air pollution control equipment. These events may be caused by loss of electrical power or equipment malfunction. During all bypass events, the gas is discharged from the secondary combustion chamber directly to the atmosphere. Gas from the secondary combustion chamber is at approximately 2200°F and all organic

compounds have already been completely destroyed.

26. One commenter questioned the use of water at Stericycle and wanted to know if the wastewater was sent to the sewer system or disposed into the groundwater.

All wastewater produced by the Stericycle facility is discharged, under the appropriate local approval, into the sewer system where it is subsequently treated at the sewage plant. The wastewater is periodically monitored by the sewage treatment plant and is subject to the pre-treatment standards established by the sewage treatment plant.

27. One commenter indicated that the original permit of the facility owned by BFI was sited within 1 mile of residential homes and apartments and questioned the original permitting process that allowed this.

The original permitting of this facility was performed in accordance with the Solid Waste Permitting and Management Rules, R315-301 Through 320 at the time of the original permit date in 1992. The existing criteria for siting the facility at that time were adopted by the Utah Solid and Hazardous Waste Control Board following required rulemaking procedures, including the opportunity for public participation. Solid waste facility siting criteria have never required a facility be subject to a one-mile setback from residential homes or apartments.

28. Several commenters indicated that the permit should be revoked unless Stericycle converts their technologies to non-incineration methods.

Both the Solid and Hazardous Waste Act and the Solid Waste Permitting and Management Rules allow for incineration of medical waste as an appropriate disposal option. The Solid and Hazardous Waste Act does not grant the Executive Secretary of the Solid and Hazardous Waste Control Board the authority to dictate any specific technologies a facility may chose to use in its waste management process.