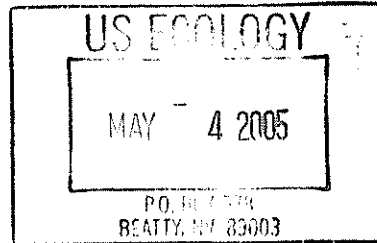


LEO M DROZDOFF *Administrator*

STATE OF NEVADA
KENNY C GUINN
Governor



ALLEN BIAGGI *Director*

(775) 687-4670

Administration
Facsimile 687-5856

Water Quality Planning
Water Pollution Control
Facsimile 687-4684

Mining Regulation and
Reclamation
Facsimile 684-5259

Air Pollution Control
Air Quality Planning
Facsimile 687-6396

Waste Management
Federal Facilities

Corrective Actions
Facsimile 687-8335

NDEP.nv.gov

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION

333 W. Nye Lane, Room 138
Carson City, Nevada 89706

May 2, 2005

Mr. Bob Marchand
General Manager
US Ecology Nevada, Inc. (USEN)
PO Box 578
Beatty NV 89003

RE: ISSUANCE OF US ECOLOGY NEVADA INC (EPA ID #NVT330010000) HAZARDOUS
WASTE TREATMENT, STORAGE AND DISPOSAL PERMIT (PERMIT NO: NEVHW0019)

Dear Mr. Marchand:

As stated in the Notice of Decision dated March 30, 2005, NDEP is hereby renewing the USEN TSD permit effective April 29, 2005, for a period of five (5) years.

No appeal requests were received and there are no major changes from the January 2005 draft permit.

If you have any questions, please contact Sree Kailash at (775) 687-9471.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jeffrey C. Denison".

Jeffrey C. Denison, P.E.
Supervisor, RCRA Facilities Branch
Bureau of Waste Management

DZ:JD:SK:db

Enc: USEN Permit (NEVHW0019), w/o permit attachments

cc: Mitch Kaplan (WST-5), US EPA Region IX, 75 Hawthorne St, San Francisco CA 94105 (e-mail copy of permit as read-only zip files)
Mark John, USEN (e-mail copy of permit as read-only zip files)
Mike Elges, BAPC, NDEP
ec: Sree

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NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
RCRA PERMIT
FOR A HAZARDOUS WASTE MANAGEMENT FACILITY

Permittee: **US Ecology Nevada Inc.**
Beatty, Nevada 89003

Facility Identification Number: **NVT330010000**

Permit Number: **NEV HW0019**

This Permit is issued by the Nevada Division of Environmental Protection (NDEP) under the authority of Section 3006 of Resource Conservation and Recovery Act (RCRA) (40 CFR regulations codified in part 271), Nevada Revised Statutes (NRS) 459.520 and Nevada Administrative Code (NAC) 444.842 through 444.8746 and 444.960. The State of Nevada has adopted 40 CFR Subpart A of Part 2, Subparts A and B of Part §§124, Parts 260 through 270 inclusive, by reference in the NAC at 444.8632 with exceptions listed at 444.86325 and as revised at 444.8633. This Permit is issued to US Ecology Nevada, Inc. (hereafter called the Permittee), to operate a commercial hazardous waste treatment, storage, and disposal facility located near Beatty, Nevada at latitude 36° 46' 9" N and longitude 116° 41' 23" W, summarily described as follows:

The facility is located on an 80-acre site, which is owned by the state of Nevada. In addition, the state of Nevada leases a 400-acre buffer zone surrounding the 80-acre site from the U.S. Bureau of Land Management. The facility consists of:

- ~~Four~~ ^{Six} (6) Container Storage Units;
- Five (5) PCB Storage Tanks;
- One (1) Leachate Storage Tank;
- One (1) Evaporation Tank;
- Three (3) Batch Stabilization Tanks;
- One (1) Subpart - X "Low Temperature Thermal Desorption Unit (LTTD);
- Three (3) Condensate Storage Tanks – LTTD Operations
- Three (3) Subtitle C landfills consisting of Trench 10 (closed), Trench 11 (existing operating trench), and Trench 12 (proposed) with a combined design capacity of 2,630 acre-feet.

The facility is required to perform groundwater monitoring, perform post-closure care, and is in various stages of investigation concerning corrective action activities which are described in detail in the corrective action Parts of this Permit (Sections 11 & 12). A compliance schedule is included in this Permit Section 12B. The Permittee must comply with all terms and conditions of this Permit. This Permit consists of the conditions contained herein, the Permit Application, and the applicable regulations contained in 40 CFR Parts §§260 through 266, 270, and 124, and of Sections 206, 212, and 224 of HSWA, which require corrective action for all releases of hazardous wastes or constituents from any solid waste management unit (SWMU) at a treatment, storage, or disposal unit seeking a Permit, regardless of the time at which waste was placed in such unit, as specified in the Permit. If there are conflicts between this Permit and the Permit Application, the Permit shall prevail. Applicable regulations are those that are in effect on the date of issuance of the Permit, in accordance with 40 CFR §270.32(c) and NAC 444.8632.

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
RCRA PERMIT
FOR A HAZARDOUS WASTE MANAGEMENT FACILITY

This Permit is based on the Part B Permit Renewal Application, as modified by subsequent amendments (hereafter referred to as the Permit Application) is accurate and that the facility will be operated as specified in the Permit Application and this Permit.

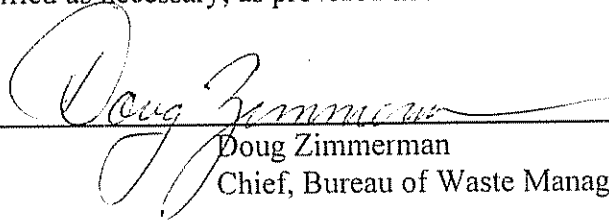
Any inaccuracies found in the submitted information may be grounds for the termination, revocation and reissuance, or modification of this Permit in accordance with 40 CFR §§270.41, 270.42, 270.43, and NAC 444.8632 and for enforcement action. The Permittee must inform NDEP of any deviation from or changes in the information in the application, which would affect the Permittee's ability to comply with the applicable regulations or Permit conditions. Failure to comply with any term or condition set forth in this Permit in the time or manner specified herein will subject the Permittee to possible enforcement action and penalties pursuant to NRS 459.565, 459.570, 459.585, and 459.595.

This Permit is effective as of **April 29, 2005** and shall remain in effect until **April 29, 2010** unless revoked and reissued under 40 CFR §270.41 and NAC 444.8632, terminated under 40 CFR §270.43 and NAC 444.8632, or continued in accordance with 270.51(a) and NAC 444.8632.

This Permit shall be reviewed by the Administrator five years after the date of Permit issuance or reissuance and shall be modified as necessary, as provided in NRS 459.520 (4) and 40 CFR §270.50 (d).

Date

4/29/05



Doug Zimmerman
Chief, Bureau of Waste Management

1. SUMMARY

US Ecology is a commercial hazardous waste facility. The facility may store, treat and dispose all waste identified in the Part A application and managed as identified in the Part B application which are adopted by reference and are attachments to this Permit. Storage of waste is identified in Sections 3 and 4 (Container and Tank storage), treatment is identified in Sections 5 and 6 (Tank and Subpart X Treatment-Thermal Desorption) and disposal is identified in Section 7 (Landfill). The facility also accepts waste subject to Subpart AA, BB and CC with requirements identified in Section 9. All regulations cited in this Permit refer to regulations in effect on the date of issuance of this Permit. US Ecology is to maintain compliance with the conditions contained in this Permit and any self implementing regulations promulgated after issuance.

1.1. EFFECT OF PERMIT

US Ecology is allowed to treat, store, and dispose on-site hazardous waste in accordance with the conditions of this Permit and its attachments. Any treatment, storage, or disposal of hazardous waste not authorized in this Permit is prohibited. Subject to 40 CFR §270.4, compliance with this Permit generally constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA, NRS 459.400 through 459.600, NAC 444.842 through 444.8746, NAC 444.960, and with HSWA. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 106(a), 104, 107 or 301(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 *et seq.*, commonly known as CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986, NRS 459.400 through NRS 459.600, or any other law providing for protection of public health or the environment. [40 CFR §270.4, §270.30(g)].

The State of Nevada has adopted 40 CFR Subpart A of Part 2, Subparts A and B of Part 124, Parts §260 through §270 inclusive, by reference in the NAC at 444.8632 with exceptions listed at 444.86325 and as revised at 444.8633. Therefore, all references to 40 CFR in this Permit shall be interpreted to include reference to NAC 444.8632.

1.2. PERMIT ACTIONS

1.2.1. Permit Modification, Revocation and Reissuance, and Termination

This Permit may be modified, revoked and reissued, or terminated for cause, as specified in 40 CFR §270.41, §270.42, and §270.43. The filing of a request for a Permit modification, revocation and Reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of US Ecology, does not stay the applicability or enforceability of any Permit condition. [40 CFR §270.4(a) and §270.30(f)]

This Permit may be modified for both routine and significant changes subject to the requirements identified in the following Permit Conditions:

1.2.1.1. Routine Changes

A routine change or modification to the Permit is any change that qualifies as a class 1 or class 1* permit modification under 40 CFR §270.42, Appendix I.

If US Ecology intends to make a routine change that qualifies as a class 1 modification not subject to prior approval by the Director, US Ecology shall:

1. Notify the Director concerning the modification by certified mail or other means that establish proof of delivery within seven (7) calendar days after the change is put into effect. This notice must specify the changes being made to the permit or the permit application conditions or supporting documents referenced by the permit and must explain why they are necessary. Along with the notice, US Ecology must provide the applicable information required by §§ 270.13 through §270.21, §270.62, and §270.63.
2. US Ecology must send a notice of the modification to all persons on the facility mailing list, maintained by the Director in accordance with 40 CFR 124.10(c)(ix), and the appropriate units of State and local government, as specified in 40 CFR 124.10(c)(ix). This notification must be made within 90 calendar days after the change is put into effect. For the Class I modifications that require prior Director approval, the notification must be made within 90 calendar days after the Director approves the request.

If US Ecology intends to make a routine change that qualifies as a class 1*, subject to prior approval by the Director, US Ecology shall:

1. Submit a modification request to the Division that specifies the changes to the permit or the permit application, or supporting documents referenced by the permit or application and must explain why the change is necessary. Along with the notice, US Ecology must provide the applicable information required by §§ 270.13 through §270.21, §270.62, and §270.63.
2. US Ecology must send a notice of the modification to all persons on the facility mailing list, maintained by the Director in accordance with 40 CFR §124.10(c), and the appropriate units of State and local government, as specified in 40 CFR §124.10(c)(ix). This notification must be made within 90 calendar days after the Director approves the request.

1.2.1.2. Significant Changes

A significant change or modification of the Permit is any change that qualifies as a class 2 or class 3 permit modification under 40 CFR §270.42, Appendix I; or is not explicitly identified in 40 CFR §270.42, Appendix I; If US Ecology intends to make a significant change to this Permit, US Ecology shall:

1. Provide notice and conduct a public meeting. US Ecology shall provide public notice at least 30 days

prior to the public meeting, in accordance with the requirements in 40 CFR §124.31(d);

2. Conduct a public meeting, where US Ecology shall solicit questions from the community and inform the community of the proposed modifications. US Ecology shall maintain a sign-in sheet or provide a method for attendees to provide their names and addresses; and
3. Submit to the Administrator, after the public meeting, all the applicable information specified in 40 CFR §270.42(b). US Ecology shall also submit a summary of the public meeting, the list of attendees and their addresses, and copies of any written comments or materials submitted by the attendees.
4. Also comply the applicable conditions specified in the respective modification requirements of 40 CFR §270.42

1.3. PERMIT RENEWAL

This Permit may be renewed as specified in 40 CFR §270.30(b) and Permit Condition 1.6. Review of any application for a Permit renewal shall consider improvements in the state of control and measurement technology, as well as changes in applicable regulations. [40 CFR §270.30(b), HSWA Sec. 212]

1.4. SEVERABILITY

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby. [40 CFR 124.16(a)] [NAC 444.8632]

1.5. DEFINITIONS

For purposes of this Permit, terms used herein shall have the same meaning as those in 40 CFR Parts 124, §260, §264, §266, §268, and §270. Unless this Permit specifically provides otherwise; where terms are not defined in the regulations or the Permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. "Administrator" means the Administrator of the Nevada Division of Environmental Protection, or his designee or authorized representative. "Director" means the Director of the Nevada Department of Conservation and Natural Resources, or his designee or authorized representative.

1.5.1. Area of Concern (AOC)

For purposes of this Permit includes any area having a probable release of a hazardous waste or hazardous constituent which is not from a solid waste management unit and is determined by the Division to pose a current or potential threat to human health or the environment

1.5.2. Certified Laboratory

For the purposes of this Permit means a laboratory that has been approved by the Division to perform specific analyses referenced in NRS 459.500

1.5.3. Compliance Period

For the purposes of the groundwater requirements of this Permit is the number of years equal to the active life of the unit prior to the Department's approval of certification of closure. The compliance period includes any period of waste management activity that may have occurred prior to permitting and begins when the owner/operator initiates a compliance-monitoring program for groundwater pursuant to Permit Section 10.

1.5.4. Contamination

For purposes of this Permit refers to the presence of any hazardous constituent in a concentration which exceeds the naturally occurring concentration of that constituent in areas that should not be affected by the operations of the facility.

1.5.5. Corrective Action

For purposes of this Permit, may include all corrective actions necessary to protect human health and the environment for all releases of hazardous waste or hazardous constituents at the facility, regardless of the time at which waste was placed in the unit, as required under 40 CFR §264.101. Corrective action may address releases to air, soils, surface water sediment, groundwater, or subsurface gas.

1.5.6. Division

For purposes of this permit means the Nevada Division of Environmental Protection, including personnel thereof authorized by the Administrator to act on behalf of the Division.

1.5.7. Extent of Contamination

For the purposes of this Permit is defined as the horizontal and vertical area in which the concentrations of hazardous constituents in the environmental media being investigated are above the naturally occurring concentration of that constituent in areas not affected by the facility.

1.5.8. Facility

For purposes of this Permit includes all contiguous property and structures, other appurtenances, and improvements on the property, used for treating or storing hazardous waste. For the purpose of implementing corrective action under §§264.100 and §§264.101, the facility includes all contiguous property under the control of the operator seeking a permit under Subtitle C of RCRA.

1.5.9. Hazardous Constituent

For purposes of this Permit are those substances listed in Appendix VIII 40 CFR 261 and/or Appendix IX of 40 CFR §264.

1.5.10. Hazardous Waste Management Unit

For purposes of this Permit is a contiguous area of land on or in which hazardous waste is managed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area.

Examples of hazardous waste management units include surface impoundments, waste piles, land treatment areas, landfill cells, incinerators, tanks and their associated piping and underlying containment system, and container storage areas. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are managed.

1.5.11. Interim Measures

For purposes of this Permit are actions necessary to minimize or prevent the further migration of contaminants and limit actual or potential human and environmental exposure to contaminants while long-term corrective action remedies are evaluated and, if necessary, implemented.

1.5.12. Land Disposal

For purposes of this Permit and 40 CFR §268 means placement in or on the land except for a Corrective Action Management Unit (CAMU) and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, underground mine or cave, or concrete vault or bunker intended for disposal purposes.

1.5.13. Landfill

For the purposes of this Permit includes any disposal or unmitigated release at the facility or part of the facility where hazardous waste is or was placed in or on the land and is to be left in place.

1.5.14. Post Closure Care Period

For the purpose of this Permit is a thirty year period beginning when a hazardous waste management unit is certified as closed and during which time US Ecology shall be required to maintain, monitor, and report in accordance with the appropriate requirements of 40 CFR §264 Subparts F, K, L, M, N, and X. The post closure care period is unit specific and may be more or less than thirty years. The Division may modify the post closure care period applicable to a unit if it finds that an extended or reduced period is sufficient to protect human health and the environment.

1.5.15. Release

For purposes of this Permit includes any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any hazardous waste or hazardous constituents.

1.5.16. Remediation Waste

For the purposes of this Permit includes all solid and hazardous wastes, and all media (including groundwater, surface water, soils and sediments) and debris, which contain listed hazardous wastes or which themselves exhibit a hazardous waste characteristic, that are managed for the purpose of implementing corrective action requirements under 40 CFR §264.100, §264.101 and RCRA Section 3008(h). For a given facility, remediation wastes may originate only from within the facility boundary, but may include waste managed in implementing RCRA Sections 3004(v) or 3008(h) for releases beyond the facility boundary.

1.5.17. Schedule of Compliance

For the purposes of this Permit refers to a schedule of remedial measures included in this Permit, including an enforceable sequence of interim requirements (for example, actions, operations, or milestone events) leading to compliance with the Resource Conservation and Recovery Act and/or the State of Nevada Hazardous Waste Management Regulations.

1.5.18. Solid Waste

Means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).

1.5.19. Solid Waste Management Unit (SWMU)

For the purposes of this Permit includes any unit which has been used for the treatment, storage, or disposal of solid waste at any time, irrespective of whether the unit is or ever was intended for the management of solid waste. RCRA hazardous waste management units are also solid waste management units. SWMUs include areas that have been contaminated by routine and systematic releases of hazardous waste or hazardous constituents, excluding one-time accidental spills that are immediately remediated and cannot be linked to solid waste management activities (e.g. product or process spills).

1.5.20. Temporary Unit (TU)

For the purposes of this Permit include any temporary tanks and/or container storage areas used solely for treatment or storage of hazardous remediation wastes during remedial activities required under 40 CFR §264.101 or RCRA Section 3008(h). Designated by the Department, such units must conform to specific standards as specified in 40 CFR §264.553.

1.5.21. Unit

For purposes of this Permit includes, but is not limited to, any landfill, surface impoundment, waste pile, land treatment unit, incinerator, injection well, tank, container storage area, wastewater treatment unit, elementary neutralization unit, or recycling unit.

1.6. DUTIES AND REQUIREMENTS

1.6.1. Duty to Comply

US Ecology shall comply with all conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency Permit. Any Permit noncompliance, other than

noncompliance authorized by an emergency Permit, constitutes a violation of RCRA and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application. [40 CFR §270.30(a)] [NAC 444.8632]

1.6.2. Compliance Schedules

Any schedule of compliance established subsequent to the issuance of this Permit shall be adopted by reference as a condition of Permit compliance as if fully set forth herein.

1.6.3. Duty to Reapply

If US Ecology wishes to continue an activity allowed by this Permit after the expiration date of this Permit, US Ecology shall submit a complete application for a new Permit at least 180 days prior to Permit expiration. [40 CFR §270.10(h), §270.30(b)] [NAC 444.8632]

1.6.4. Permit Expiration

Pursuant to NRS 459.520 (4), this Permit shall be effective for a fixed term not to exceed five (5) years. As long as the NDEP is the Permit-issuing authority, this Permit and all conditions herein will remain in effect beyond the Permit's expiration date. If US Ecology has submitted a timely, complete application (see 40 CFR §270.10, §270.13 through §270.29) and, through no fault of US Ecology, the Director has not issued a new Permit, as set forth in 40 CFR §270.51 and NAC 444.8632.

1.6.5. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for US Ecology, in an enforcement action that it would have been necessary, to halt or reduce the Permitted activity in order to maintain compliance with the conditions of this Permit. [40 CFR §270.30(c)] [NAC 444.8632]

1.6.6. Duty to Mitigate

In the event of noncompliance with this Permit, US Ecology shall take all reasonable steps to minimize releases to the environment and shall carry out such measures, as are reasonable, to prevent significant adverse impacts on human health or the environment. [40 CFR §270.30(d)] [NAC 444.8632]

1.6.7. Proper Operation and Maintenance

US Ecology shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by US Ecology to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit. [40 CFR §270.30(e)] [NAC 444.8632]

1.6.8. Permit Actions

This Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by US Ecology for a Permit modification, revocation and Reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any Permit condition. [40 CFR §270.30(f)]

1.6.9. Property Rights

This Permit does not convey any property rights of any sort, nor any exclusive privilege. [40 CFR §270.30(g)]

1.6.10. Duty to Provide Information

US Ecology shall furnish to the Director, within a reasonable time, any relevant information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. US Ecology shall also furnish to the Director, upon request, copies of records required to be kept by this Permit. [40 CFR §264.74(a), §270.30(h)] [NAC 444.8632]

1.6.11. Inspection and Entry

Pursuant to NAC 444.8632 and 40 CFR §270.30(I), US Ecology shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents, as may be required by law, to:

1.6.11.1. Enter at reasonable times upon US Ecology's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

1.6.11.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

1.6.11.3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

1.6.11.4. Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

1.6.12. Monitoring and Records

1.6.12.1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261 or an equivalent method approved by the Director. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, Standard Methods of Wastewater Analysis, or an equivalent

method, as specified in the Waste Analysis Plan, Section 8 of the Permit Application). [40 CFR §270.30(j)(1)] [NAC 444.8632]

1.6.12.2. US Ecology shall retain records of all monitoring information, including all calibration and maintenance records (for analyses conducted in the on-site laboratory), copies of all reports and records required by this Permit, the certification required by 40 CFR §264.73(b)(9), and records of all data used to complete the application for this Permit for a period of at least 3 years from the date of the sample, measurement, report, record, certification, or application. In addition, US Ecology shall maintain records from all ground-water monitoring wells and associated ground-water surface elevations for the active life of the facility and throughout post-closure. These periods may be extended by request of the Director at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility. [40 CFR §264.74(b) and §270.30(j)(2)] [NAC 444.8632]

1.6.12.3. Records of monitoring information shall specify [40 CFR §270.30(j)(3) and NAC 444.8632]:

1. The dates, exact place, and times of sampling or measurements;
2. The individuals who performed the sampling or measurements;
3. The dates analyses were performed;
4. The individuals who performed the analyses;
5. The analytical techniques or methods used; and
6. The results of such analyses.

1.6.13. Signatory Requirement

All applications, reports, or information submitted to or requested by the Director, his designee, or authorized representative, shall be signed and certified in accordance with 40 CFR §270.11 and §270.30(k).

1.6.14. Reporting Planned Changes

US Ecology shall give notice to the Director, as soon as possible, of any planned physical alterations or additions to the Permitted facility. [40 CFR §270.30(l)(1)] [NAC 444.8632]

1.6.15. Reporting Anticipated Noncompliance

US Ecology shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements. [40 CFR §270.30(l)(2)] [NAC 444.8632]

1.6.16. Certification of Construction or Modification

US Ecology may not commence treatment, storage, or disposal of hazardous waste in the modified or newly constructed portion(s) of the facility until US Ecology has submitted to the Director, by certified mail or hand delivery, a letter signed by US Ecology and a Nevada registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and

1.6.16.1. The Director has inspected the modified or newly constructed facility and finds it is in compliance with the permit; or

1.6.16.2. The Director has either waived the inspection or has not within 15 days notified US Ecology of his intent to inspect. [40 CFR §270.30 (1)(2)] [NAC 444.8632]

1.6.17. Transfer of Permits

This Permit is not transferable to any person, except after notice to the Director. The Director may require modification or revocation and reissuance of the Permit pursuant to NAC 444.8632 or 40 CFR §270.40. Before transferring ownership or operation of the facility during its operating life, US Ecology shall notify the new owner or operator in writing of the requirements of 40 CFR Parts §264 and §270, NAC 444.842 through 444.8746, NAC 444.960, and this Permit. [40 CFR §270.30(1)(3), §264.12(c)] [NAC 444.8632]

1.6.18. Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this Permit or as required by a compliance schedule issued pursuant to Permit Condition 1.6.2. [40 CFR §270.30(1)(4)]

1.6.19. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit or issued as an enforcement action, shall be submitted no later than 14 calendar days following each schedule date. [40 CFR §270.30(1)(5)]

1.6.20. Twenty-Four Hour Reporting

1.6.20.1. US Ecology shall report to the Director any noncompliance which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time US Ecology becomes aware of the circumstances. The report shall include the following:

- i. Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies.
- ii. Any information of a release or discharge of hazardous waste, or of a fire or explosion from the hazardous waste management facility which could threaten the environment or human health.

1.6.20.2. The description of the occurrence and its cause shall include:

- i. Name, address, and telephone number of the owner or operator;
- ii. Name, address, and telephone number of the facility;
- iii. Date, time, and type of incident;

- iv. Name and quantity of materials involved;
- v. The extent of injuries, if any;
- vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
- vii. Estimated quantity and disposition of recovered material that resulted from the incident.

1.6.20.3. A written submission shall also be provided within five days of the time US Ecology becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and, if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Director may waive the five-day written notice requirement in favor of a written report within 15 days. [40 CFR §270.30(i)(6)] [NAC 444.8632]

1.6.21. Other Noncompliance

US Ecology shall report all other instances of noncompliance not otherwise required to be reported above, Permit Conditions 1.6.10-15, at the time monitoring reports are submitted. The reports shall contain the information listed in Permit Condition 1.6.20.2. [40 CFR §270.30(i)(10)] [NAC 444.8632]

1.6.22. Other Information

Whenever US Ecology becomes aware that it failed to submit any relevant facts in the Permit application, or submitted incorrect information in a Permit application or in any report to the Director, US Ecology shall promptly submit such facts or information. [40 CFR §270.30(i)(11)] [NAC 444.8632]

1.6.23. Information Repository

US Ecology shall maintain the information repository created in support of all Permit applications and renewals at the facility [40 CFR §§124.33(c) through (f)]. It shall contain all the information used in support of any Permit renewal and/or modifications for the life of the facility and/or the life of the Permit whichever is longer. [40 CFR §270.30(m)]

1.7. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE DIRECTOR

All reports, notifications, or other submissions which are required by this Permit to be sent or given to the Director should be mailed (postmarked) by the specified due date or given to:

RCRA Permitting Branch Supervisor
Bureau of Waste Management
Nevada Division of Environmental Protection
333 W. Nye Lane
Carson City, NV 89706-0851
Phone:(775) 687-9465

Submittals which are not received within 10 days after the specified due date may be considered delinquent in accordance with applicable conditions of this permit, unless US Ecology can demonstrate (e.g., certified mail receipt, etc.) that the submittal was sent in a timely manner and that failure of deliverables to arrive on schedule was outside the control of US Ecology.

1.8. CONFIDENTIAL INFORMATION

In accordance with NAC 444.8632 and 40 CFR §270.12, US Ecology may claim confidential any information required to be submitted by this Permit.

1.9. DOCUMENTS TO BE SUBMITTED PRIOR TO OPERATION/COMPLIANCE SCHEDULE

1.9.1. US Ecology shall comply with the compliance schedule listed below by submitting the following documents to the Director by the prescribed due dates given.

Table 1

Document		Date of Submittal
1	Reserved	
2	Reserved	
3	Reserved	
4	Reserved	

1.10. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

US Ecology shall maintain at the facility, until closure is completed, the following documents and all amendments, revisions and modifications to these documents:

1. Waste Analysis Plan, as required by 40 CFR §264.13 and this Permit
2. Inspection schedules, as required by 40 CFR §264.15(b)(2) and this Permit
3. Personnel training documents and records, as required by 40 CFR §264.16(d) and this Permit
4. Contingency Plan, as required by 40 CFR §264.53(a) and this Permit
5. Operating Record, as required by 40 CFR §264.73 and this Permit
6. Closure Plan, as required by 40 CFR §264.112(a) and this Permit
7. Annually-adjusted cost estimate for facility closure, as required by 40 CFR §264.142(d) and this

Permit

8. Information Repository as required by 40 CFR §270.30(m) and this Permit
9. All Groundwater Monitoring Records inclusive of installation details for all wells installed as required by this Permit or otherwise
10. Corrective Action Plans and Reports
11. All instances of implementation of the Contingency Plan
12. Cost Estimates for closure of the Facility
13. All correspondence related to changes or modifications to this Permit
14. Unusual Occurrence Reports documenting (examples only): all manifest discrepancies, deficiencies found as a result of an inspection, all releases whether contained by secondary containment or not, all injuries to personnel, all activations of the alarm system, any non-compliance with this Permit, etc.

1.11. COMPLIANCE SCHEDULES

Refer to specific sections of this Permit for any compliance schedules established by the Division.

2. SUMMARY

US Ecology is required to operate the facility consistent with the accepted practices detailed in this and other sections of the Permit and Permit Application in order to minimize the possibility of releases to the environment or harm to either employees or the public at large.

2.1. DESIGN AND OPERATION OF FACILITY

US Ecology shall construct, maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned, sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment, as required by 40 CFR §264.31 and NAC 444.8632. US Ecology shall operate the facility as specified in all sections of the Permit Application. This Permit adopts specific sections of the application referencing specific management practices etc. However, US Ecology shall also comply with any section of the application not specifically referenced in this Permit.

2.2. REQUIRED NOTICES

2.2.1. Waste Imports

US Ecology shall notify the Director in writing at least four weeks in advance of the date US Ecology expects to receive waste from a foreign source, as required by 40 CFR §264.12 (a) and NAC 444.8632. Notice of subsequent shipments of the same waste from the same foreign source in the same calendar year is not required.

2.2.2. Hazardous Waste from Off-Site Sources

When US Ecology is to receive hazardous waste from an off-site source (except where US Ecology is also the generator), US Ecology must inform the generator in writing that they have the appropriate Permits, and will accept the waste the generator is shipping. US Ecology must keep a copy of this written notice as part of the operating record. [40 CFR §264.12(b)] [NAC 444.8632]

2.2.3. General Waste Analysis

US Ecology shall comply with the waste analysis requirements of 40 CFR §264.13 and NAC 444.8632 by following the Waste Analysis Plan procedures of Permit Application Section 8 and the conditions listed below:

US Ecology shall verify the analysis of each waste stream annually as part of its quality assurance program, in accordance with Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA Publication SW-846 or an equivalent method as specified in the Waste Analysis Plan, as approved by the Director. At a minimum, US Ecology shall maintain proper functional instruments, use approved sampling and analytical methods, verify the validity of sampling and analytical procedures, and perform correct calculations. If US Ecology uses a contract laboratory to perform analyses, then US Ecology shall inform the laboratory in writing that it must use analytical methods as approved in this Permit.

2.2.4. Waste Stream Approval

US Ecology shall submit to the Division for approval, all new waste streams, including solid wastes, submitted to US Ecology for land disposal. The submitted information shall contain the following documents:

- i. A completely filled out Waste Disposal Information (WDI) form, signed by the generator or authorized agent.
- ii. Technical Review Sheet (TRS)
- iii. Other as requested by the Division

2.3. **SECURITY**

US Ecology shall comply with the security provisions of 40 CFR §264.14 (b)(2) and (c) and NAC 444.8632 by complying with the Security Plan in Permit Application Section 4.

2.4. **GENERAL INSPECTION REQUIREMENTS**

US Ecology shall comply with the inspection plan requirements of 40 CFR §264.15 and NAC 444.8632 by following the Inspection Plan procedures in the Permit Application Section 5. US Ecology shall remedy any deterioration or malfunction discovered by an inspection, as required by 40 CFR §264.15(c) and NAC 444.8632. Records of all inspection shall be kept, as required by 40 CFR §264.15(d) and NAC 444.8632.

2.5. **PERSONNEL TRAINING**

US Ecology shall follow the Personnel Training Program procedures in the Permit Application Section 6 and maintain training documents and records, as required by 40 CFR §264.16(d) and (e) and NAC 444.8632. US Ecology shall maintain onsite, the following;

1. An outline of both the introductory and continuing training program used to prepare personnel to operate or maintain the HWM facility in a safe manner as required to demonstrate compliance with §264.16.
2. A brief description of how training is designed to meet actual job tasks in accordance with requirements in §264.16(a)(3).

2.5.1. Instructor Qualifications and Training Content

Health, Safety and Emergency Response

US Ecology shall ensure that a person trained (as described in 29 CFR §1910.120(p)(7)(iii)) in hazardous waste management procedures of 29 CFR §1910.120(p) shall direct the training program, and shall teach facility personnel hazardous waste management procedures (including contingency plan implementation, waste analysis requirements etc.) relevant to their employment positions. At a minimum, the training program shall be designed to ensure that facility personnel are able to respond effectively to emergencies by

including instruction on emergency procedures, emergency equipment, and emergency systems. Including, where applicable: procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment; key parameters for automatic waste feed cut-off systems; communications or alarm systems; response to fires or explosions; response to ground water contamination incidents; and shutdown of operations.

Compliance with Environmental Regulations

US Ecology shall ensure that a person trained in compliance with the regulations of 40 CFR §§260 through §270 *et al* and this Permit shall direct the training program, and shall teach facility personnel hazardous waste management procedures relevant to their employment positions. At a minimum, the training program shall be designed to ensure that facility personnel are able to maintain compliance with the applicable regulation as specified in this Permit or elsewhere, so as to maintain facility adherence with either this Permit or the regulations.

2.5.2. Schedule

Facility personnel shall successfully complete the above outlined training program within six months after the date of their employment or assignment to the facility, or to a new position at the facility, whichever is later. Employees shall not work in unsupervised positions until the employees have completed all the training requirements.

2.5.3. Annual Review

Facility personnel shall take part in an annual review of the required initial training in Permit Condition 2.5.

2.5.4. Documentation

US Ecology shall maintain the following documents and records at the facility:

- 2.5.4.1. The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;
- 2.5.4.2. A written job description for each position listed under Permit Condition 2.5.4.1. This description must include the requisite skill, education, or other qualifications, and duties of employees assigned to each position;
- 2.5.4.3. A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position;
- 2.5.4.4. Records that document that facility personnel have received and completed the training or job experience required under Permit Condition 2.5; and

2.5.4.5. US Ecology shall keep training records on current personnel until the facility closes. US Ecology shall keep training records on former employees for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the company.

2.6. SPECIAL PROVISIONS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

US Ecology shall comply with the requirements of 40 CFR §264.17(a) and NAC 444.8632 by following the procedures for handling ignitable, reactive, and incompatible wastes in Sections 9.2.5, and 9.2.6 of the Container Management Plan and 10.9.0 of the Tank Systems Report.

2.7. RESTRICTED WASTES

US Ecology is not authorized to receive, treat, store, dispose of, or otherwise manage the following:

1. Any Radioactive material that is not exempt from regulation and licensing or is not expressly authorized for disposal under this Permit or Radioactive or nuclear waste material, which requires specific licensing or permitting under any other rules of state or federal authorities for disposal or transshipment;
2. Compressed gases (not to include aerosol containers) or pressurized gases, including those contained in compressed gas cylinders unless closure devices have been removed prior to disposal;
3. Class 1, Division 1.1 or 1.2, or forbidden explosives (Code of Federal Regulations, title 49, subchapter C, part 173, section 50), explosive material, as defined by the Department of Transportation under 49 Code of Federal Regulations (CFR) Part 173;
4. Biological agents, Etiologic Agents or infectious wastes;
5. Bulk liquids for direct disposal, or containerized liquids (except lab packs) for direct disposal; or bulk hazardous liquids to which absorbents have been added (Use of liquids as dust suppression in accordance with Permit Application Section 11.3.9 is not considered disposal under this section);;
6. Reactive material as defined in 40 CFR Part §261.23, that is not treated to meet the requirements of 40 CFR Part §268 prior to disposal;
7. Liquid organic peroxides;
8. Containerized liquids to which biodegradable absorbents have been added;
9. Non-containerized waste containing a volatile organic concentration (VOC) of twenty (20) percent by weight or greater.

2.8. PREPAREDNESS AND PREVENTION

2.8.1. Required Equipment

At a minimum, US Ecology shall maintain at the facility the equipment set forth in the Contingency Plan in the Permit Application Section 7, as required by 40 CFR §264.32 and NAC 444.8632.

2.8.2. Testing and Maintenance of Equipment

US Ecology shall test and maintain the equipment specified in Permit Application Section 7.0 of the Contingency Plan, as required by 40 CFR §264.33 and NAC 444.8632.

2.8.3. Access to Communications or Alarm System

US Ecology shall maintain access to the communications or alarm system, as required by 40 CFR §264.34 and NAC 444.8632.

2.8.4. Required Aisle Space

At a minimum, and as required by 40 CFR §264.35 and NAC 444.8632, US Ecology shall maintain a minimum of two (2) feet of aisle space between container rows to facilitate inspections and the movement of emergency equipment and personnel.

2.8.5. Arrangements with Local Authorities

US Ecology shall maintain arrangements with state and local authorities as specified in Permit Application Section 7, as required by 40 CFR §264.37 and NAC 444.8632. If state or local officials refuse to enter into preparedness and prevention arrangements with US Ecology, US Ecology must document this refusal in the operating record.

2.9. CONTINGENCY PLAN

2.9.1. Implementation of Plan

US Ecology shall immediately carry out the provisions of the RCRA Contingency Plan of the Permit Application Section 7, whenever there is a fire, explosion, or release of hazardous waste or constituents, which could threaten human health or the environment.

2.9.2. Copies of Plan

US Ecology shall comply with the requirements of 40 CFR §264.53 and NAC 444.8632.

2.9.3. Amendments to Plan

US Ecology shall review and immediately amend, if necessary, the Contingency Plan, as required by 40 CFR §264.54 and NAC 444.8632.

2.9.4. Emergency Coordinator

A qualified emergency coordinator shall be available at all times in case of an emergency, as required by 40 CFR §264.55 and NAC 444.8632.

2.10. MANIFEST SYSTEM

US Ecology shall comply with the manifest requirements of 40 CFR §264.71, and §264.76 and NAC 444.8666 by following the procedures in Permit Application Section 8.2.4.10 consistent with:

1. Signing and dating each copy of the manifest to certify that the hazardous waste covered by the manifest was received¹;
2. Noting any significant discrepancies in the manifest as defined by a and b below, on each copy of the manifest;
 - a) Waste Types - Manifest discrepancies between the type of hazardous waste designated on the manifest or shipping paper, and the type of hazardous waste the facility actually receives, or obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper or:
 - b) Waste Quantities - For bulk waste, variations greater than 10 percent in weight, for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload.
3. Immediately give the transporter at least one copy of the signed manifest;
4. Within 30 days after the delivery, send a copy of the manifest to the generator; and
5. Retain at the facility a copy of each manifest for at least three years from the date of delivery.
6. US Ecology shall comply with the Manifest discrepancies requirements of 40 CFR §264.72 by:

Reconciling the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, US Ecology must immediately submit to the Division a letter describing the discrepancy and attempts to reconcile it,

¹ [Comment: The Division does not intend that US Ecology (who performs procedures under § 264.13(c)) to perform that analysis before signing the manifest and returning it to the transporter. §264.72(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.]

and a copy of the manifest or shipping paper.

2.11. RECORDKEEPING AND REPORTING

In addition to the recordkeeping, reporting and fee requirements specified elsewhere in this Permit, US Ecology shall do the following:

2.11.1. Operating Record

US Ecology shall maintain a written operating record at the facility, in accordance with 40 CFR §264.73 and NAC 444.8632.

2.11.2. Quarterly Reports

US Ecology shall submit to the Director a detailed volume fee breakdown report along with the quarterly fees due and the wire transfer information report within 30 days after the end of each calendar quarter (NAC 444.8452).

2.11.3. Biennial Reports

US Ecology shall comply with the biennial reporting requirements of 40 CFR 264.75 by complying with Permit Section 2.11.4.

2.11.4. Annual Report

US Ecology shall prepare and submit an annual report by March 1 of each year. The report shall contain the following information:

- a. The EPA identification number, name, and address of the facility;
- b. The calendar year covered by the report;
- c. The EPA identification number of each generator from which US Ecology received a waste stream during the year. In addition, the name and address of foreign generators shall be provided for all imported shipments.
- d. A description and quantity of each waste stream in tons and cubic feet received at the facility. This information must be listed by EPA identification number for each generator.
- e. The method of treatment, storage, and/or disposal for each waste stream.
- f. The most recent closure and post-closure cost estimates (including complete cost itemization).
- g. A description of the waste minimization efforts undertaken during the year to reduce the volume and toxicity of wastes generated by US Ecology.
- h. A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years.
- i. Unusual occurrence reports covering all rejected shipments during the year and copies of the quarterly reviews of these reports which is required by the WAP. Any letters sent to a generator/broker during the year as required by the WAP must also be included.
- j. The certification signed by the operator of the facility or his authorized representative.
- k. The annual report shall contain all information required by 40 CFR §264.73.

1. The results of tank integrity assessments.

2.12. GENERAL CLOSURE REQUIREMENTS

2.12.1. Performance Standard

US Ecology shall close the facility, as required by 40 CFR §264.111 and in accordance with the Permit Application Section 15 or 16 of the Closure Plan.

2.12.2. Amendment to Closure Plan

US Ecology shall amend the Closure Plan, in accordance with 40 CFR §264.112(c), whenever necessary and under the following circumstances:

1. When closure of one or more of the regulated units identified in the application or the Permit is notified in accord with Permit Condition 2.12.3 has changed to the extent the Division determines a modification to the Closure Plan is necessary.
2. When closure of one or more of the regulated units is proposed in order to modify it to the extent Permit Condition 1.2 applies.

2.12.3. Notification of Closure

US Ecology shall notify the Director in writing at least 45 days prior to the date on which he expects to begin partial or final closure of the facility, as required by 40 CFR §264.112(d).

2.12.4. Time Allowed for Closure

After receiving the final volume of hazardous waste in any or all of the regulated units, US Ecology shall treat, remove from the unit and/or facility, and shall complete closure activities, in accordance with 40 CFR §264.113 and the schedules specified in Permit Application Section 15 of the Closure Plan or a Closure Schedule as determined by the Division.

2.12.5. Disposal or Decontamination of Equipment, Structures, and Soils

US Ecology shall decontaminate or ship off site all contaminated equipment, structures, and soils, as required by 40 CFR §264.114 and the Closure Plan. In the event not all structures, soils or equipment can be shipped offsite, US Ecology shall close the facility in accord with 40 CFR §264 subpart N.

2.12.6. Certification of Closure

US Ecology shall certify that the facility has been closed in accordance with the specifications in the Permit Application Section 15, Closure Plan, as required by 40 CFR §264.115.

2.13. GENERAL POST-CLOSURE REQUIREMENTS

2.13.1. Post-Closure Care Period

US Ecology shall begin post-closure care for each landfill after completion of closure of the unit and continue for at least 30 years after that date. Post-closure care shall be in accordance with Permit Application Section 17 and 40 CFR §264.117, NAC 444.8632, and the Post-Closure Plan in the Permit Application.

2.13.2. Amendment to Post-Closure Plan

US Ecology shall amend the Closure Plan, in accordance with 40 CFR §264.112(c), whenever necessary and under the following circumstances:

1. When closure of one or more of the regulated units identified in the application or the Permit is notified in accord with Permit Condition 2.12.3 has changed to the extent that the Division determines a modification to the Closure Plan is necessary.
2. When closure of one or more of the regulated units is proposed in order to modify it to the extent Permit Condition 1.2 applies.

2.13.3. Post-Closure Notices

2.13.3.1. No later than 60 days after certification of closure of each hazardous waste disposal unit, US Ecology shall submit records of the type, location, and quantity of hazardous waste disposed within each cell or disposal unit, in accordance with 40 CFR §264.119(a) and NAC 444.8632.

- i. Within 60 days of certification of closure of each hazardous waste disposal unit, US Ecology shall submit a request to NDEP and the Nevada Division of State Lands to record a notation on the deed (or other instrument normally examined during title search regarding the facility property), in accordance with 40 CFR §264.119(b)(1) and NAC 444.8632.

2.13.3.2. US Ecology shall request and obtain a permit modification prior to post-closure removal of hazardous wastes, hazardous waste residues, liners, or contaminated soils, in accordance with 40 CFR §264.119(c) and NAC 444.8632.

2.13.4. Certification of Completion of Post-Closure Care

US Ecology shall certify that the post-closure care period was performed in accordance with the specifications in the Post-Closure Plan, as required by 40 CFR §264.120 and NAC 444.8632.

2.14. FINANCIAL REQUIREMENTS FOR CLOSURE AND POST CLOSURE

Refer to Section 14 Financial Assurance requirements and cost estimates

2.15. OPERATING RECORD

- 2.15.1. US Ecology shall maintain a written record at the facility, in accordance with 40 CFR §264.73 and NAC 444.8632.
- 2.15.2. US Ecology shall maintain at the facility copies of waste minimization documents required in Section 15 and shall make them available to any authorized representative of NDEP or USEPA conducting an inspection pursuant to 40 CFR §270.32 (b) and NAC 444.8632.

2.16. DOCUMENTS

The Documents that comprise the Application and all Attachments are adopted herein as if fully set forth in this permit;

1. US Ecology Beatty Nevada Binders 1, 2 and 3 -April 2004
2. RCRA Permit Interim Status Report for the Low Temperature Thermal Desorption Unit -January 2003
3. Cell 12 Design Report Volumes 1 and 2 March 1996
4. Response to Notice of Deficiency for the Cell 12 Design Report -December 1996
5. Corrective Measures Study Report for US Ecology Inc HWMF -April 1997

2.17. COMPLIANCE SCHEDULE

Reserved

3. SUMMARY

US Ecology is permitted to store waste in containers subject to the terms and conditions of this Permit as described in this Section. Containers are managed in the areas noted in the Container Management Plan (Section 9 of the Part B application). Both liquids and solids managed in containers are accepted and stored while awaiting treatment, disposal, or off-site shipment. No treatment in containers is permitted. The specific management requirements of each area are specified below.

3.1. CONTAINER STORAGE

The container storage areas are identified in the Container Management Plan (Section 9 of the Part B application). The actual locations of these container storage areas can be seen on the map in Appendix A of the Permit Application. The maximum amount and type of wastes that may be handled are discussed below in 3.2.3.

3.2. CONTAINER-SPECIFIC INFORMATION TO BE MAINTAINED AT THE FACILITY

3.2.1. US Ecology shall maintain at the facility, until closure is completed for all container storage areas and certified by an independent, registered professional engineer, the following container-specific documents and information and all amendments, revisions and modifications to these documents and information:

3.2.2. A description of the containment systems including:

3.2.2.1. Basic design parameters, dimensions, and materials of construction;

3.2.2.2. How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system;

3.2.2.3. Capacity of the containment system relative to the number and volume of containers to be stored;

3.2.2.4. Provisions for preventing or managing run-on; and

3.2.2.5. How accumulated liquids can be analyzed and removed to prevent overflow.

3.2.3. For container storage areas holding wastes that do not contain free liquids US Ecology shall maintain documentation onsite the following:

3.2.3.1. Test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and

- 3.2.3.2. A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids.
- 3.2.3.3. Sketches, drawings, or data demonstrating compliance with 40 CFR §264.174 (location of buffer zone (15m or 50ft)) and containers holding ignitable or reactive wastes) and 40 CFR §264.175(c) (location of incompatible wastes in relation to each other), where applicable.
- 3.2.3.4. Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with 40 CFR §264.175 (a) and (b), and §264.17 (b) and (c).

3.3. AIR EMISSION CONTROL INFORMATION TO BE MAINTAINED AT THE FACILITY

- 3.3.1. US Ecology shall maintain at the facility until closure of the facility is completed and certified by an independent, registered professional engineer, the following air emission control documents and information and all amendments, revisions and modifications to these documents and information:
- 3.3.1.1. Identification of each area that manages waste subject to 40 CFR §264 Subpart AA, BB or CC controls and US Ecology's certification that the requirements of this Subpart are met. The facility must document if the containers are subject to Level 1, Level 2 or Level 3 requirements;
1. An emission monitoring plan for Method 21 in 40 CFR Part 60, Appendix A. This plan shall include monitoring point(s), monitoring methods for control devices, monitoring frequency, procedures for documenting any exceedence, and procedures for mitigating noncompliance.
- 3.3.1.2. US Ecology shall maintain compliance with Permit Application Section 9.2.8

3.4. PERMITTED AND PROHIBITED WASTE IDENTIFICATION

- 3.4.1. US Ecology may store hazardous wastes as identified in the Part A application, and other hazardous wastes as identified in NAC 444.843, including wastes containing polychlorinated biphenyls, subject to the terms and limitations of this Permit.
- 3.4.2. US Ecology is prohibited from storing hazardous waste that is not included in Permit Condition 3.4.1.
- 3.4.3. US Ecology may store hazardous waste in any of the following container storage areas up to the maximum volume specified:
- 3.4.3.1. US Ecology is prohibited from treating waste in containers. Treatment is defined as "...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 waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume” [40 CFR §260.10]. Treatment does not include the addition of absorbent for incidental liquids.

Table 3.4

Unit Number	Container Storage Areas	Maximum Volume
1	CMU 1 - PCB/RCRA Storage	100,485 gallons (1872 55gal drums, 498 yd ³)
2	CMU 3 - Waste Consolidation and Storage Area #1 (WCSA #1)	34,329 gallons (624 55gal drums, 170 yd ³)
3	CMU 4 - Waste Consolidation and Storage Area #2 (WCSA #2)	48,470 gallons (881 55gal drums, 240 yd ³)
4	CMU 5 - Dry Hazardous Waste Storage Area #1 (DHWSA #1)	694,516 gallons (12627 55gal drums, 3438 yd ³)
5	CMU 6 - Dry Hazardous Waste Storage Area #2 (DHWSA #2)	197,646 gallons (3593 55gal drums, 840 yd ³)
6	CMU 7 - Bin Storage Area (Secondarily Contained)	80,778 gallons (1469 55gal drums, 400 yd ³)
7	Reserved	--
8	Reserved	--
Total Storage Capacity		1,156,224 gallons

3.4.4. US Ecology may store hazardous waste for up to one (1) year in container storage areas 1 through 6, as listed in Table 3.4. However, the following wastes are prohibited from being stored or managed in WCSA1 & 2 and DHWSA1 & 2.

- ? Liquids
- ? PCBs
- ? Waste identified/labeled with the following EPA waste codes: F020, F021, F022 & F026

3.4.5. Aisle space shall be maintained as noted in Container Management Section 9.2.3.2 and shall be separated by a minimum aisle space of two (2) feet and containers shall be stored no more than two high.

3.4.6. US Ecology shall perform a Paint Filter Test (EPA method 9095 in SW 846) on all hazardous waste to be placed in the WCSA1 & 2 and DHWSA1 & 2 for which the absence of free liquids cannot be determined by visual inspection.

3.4.7. US Ecology shall not store any hazardous waste (whether accepted from off site or generated onsite), which

contains free liquids, as determined by the Paint Filter Test (EPA method 9095 in SW 846), in an area that does not have secondary containment.

3.5. CONDITION OF CONTAINERS

If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, US Ecology shall manage as required by Permit Application Section 9.2.1 and transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of the Container Management Plan and this Permit. [40 CFR §264.171] [NAC 444.8632]

3.6. COMPATIBILITY OF WASTE WITH CONTAINERS

US Ecology shall assure that the ability of the container to contain the waste is unimpaired, as detailed in Permit Application Section 9.2.6 of the Container Management Plan [40 CFR §264.172].

3.7. MANAGEMENT OF CONTAINERS

- 3.7.1. US Ecology shall keep all containers closed during storage or staging, except when it is necessary to visually inspect, add or remove waste, and shall not open, handle, or store containers in a manner, which may rupture the container or cause it to leak. [40 CFR §264.173] [NAC 444.8632]
- 3.7.2. US Ecology shall follow the container management practices in the Container Management Plan of the Permit Application.
- 3.7.3. Aisle space shall be maintained and shall be separated by a minimum aisle space of two (2) feet and containers shall be stored no more than two high.
- 3.7.4. US Ecology shall not store any hazardous waste (whether accepted from off site or generated onsite), which contains free liquids, as determined by the Paint Filter Test (EPA method 9095 in SW 846), in an area that does not have secondary containment.

3.8. CONTAINMENT SYSTEMS

US Ecology shall construct and maintain the secondary containment systems in accordance with Section 9.2.4 of the Permit Application and the requirements of 40 CFR §264.175 and NAC 444.8632.

3.9. INSPECTION SCHEDULES AND PROCEDURES

US Ecology shall inspect all container areas in accordance with the Inspection Schedule Permit Application Section 5.2.0, to detect leaking containers, improperly labeled containers, deterioration of containers and/or the containment system caused by corrosion and other factors

3.10. RECORDKEEPING

3.1.1. US Ecology shall place the results of all waste analyses and inspections in the operating record.

3.10.1. US Ecology must document compliance with 40 CFR §264.17(a) and (b) and §264.177 in the facility operating record, Permit condition 2.11.1. [40 CFR §264.73] [NAC 444.8632]

3.11. SPECIAL CONTAINER PROVISIONS FOR IGNITABLE OR REACTIVE WASTE

3.11.1. US Ecology shall not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the facility's property line as required by 40 CFR §264.176 and NAC 444.8632.

3.11.2. US Ecology shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste in accordance with 40 CFR §264.17(a), §264.176, and NAC 444.8632, and follow the procedures specified in Permit Application section 9.2.5

3.12. SPECIAL CONTAINER PROVISIONS FOR INCOMPATIBLE WASTE

3.12.1. US Ecology shall not place incompatible wastes, or incompatible wastes and materials, in the same container as required by 40 CFR §264.177(a) and NAC 444.8632, unless US Ecology complies with 40 CFR §264.17 (b).

3.12.2. US Ecology shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material as required by 40 CFR §264.177(b) and NAC 444.8632.

3.12.3. US Ecology shall separate containers of incompatible wastes as required by 40 CFR §264.177(c) and NAC 444.8632 by following the procedures specified in Permit Application Section 9.2.6.

3.13. CLOSURE

Upon closure of any of the container storage areas, US Ecology shall remove all hazardous waste and hazardous waste residues from the containment system or area, in accordance with the closure procedures in the Closure Plan, Permit Application Section 9.2.7. [40 CFR §264.178] [NAC 444.8632]

3.14. COMPLIANCE SCHEDULE

Reserved

SECTION 4
TANK STORAGE CONDITIONS

4. SUMMARY

The tank storage portion of the facility includes five (5) Polychlorinated Biphenyls (PCB's) storage tanks, three (3) condensate storage tanks associated with the LTTD Units, and one (1) Leachate Storage tank. The maximum amount and type of wastes that may be handled are discussed below in Permit condition 4.1. [NOTE: Three (3) stabilization tanks and one (1) evaporation tank (truck wash pad) designated as "treatment" tanks are discussed in Permit Section 5.]

4.1. PERMITTED AND PROHIBITED WASTE IDENTIFICATION

4.1.1. US Ecology may store any waste identified on the part A application of the Permit Application, including PCB's, subject to the terms of this Permit. Requirements related to the PCB Building and Tanks storage are also contained in the TSCA Permit issued by the US EPA 12/20/2000. US Ecology must also comply with those requirements.

4.1.2. US Ecology is prohibited from storing hazardous waste that is not identified in Permit Condition 4.1.1.

4.1.3. US Ecology may store a total volume of 46,100 gallons of hazardous waste in the tanks listed below, subject to the terms of this Permit and as follows:

Table 4.1

Tank #	Secondary Containment Required	Description	Capacity Gallons
#4	Yes-In Place	PCB Storage	7,500
#5	Yes-In Place	PCB Storage	7,500
#6	Yes-In Place	PCB Storage	5,000
#7	Yes-In Place	PCB Storage	5,000
#8	Yes-In Place	PCB Storage	3,000
#9	--	Reserved	--
#10	--	Reserved	--
#12	Yes-In Place	LTTD Tank (Condensate Management)	6,500
#13	Yes-In Place	LTTD Tank (Condensate Management)	4,300
#14	Yes-In Place	LTTD Tank (Condensate Management)	3,000
#15	Yes-In Place	Leachate Storage Tank	10,000
#16	--	Reserved	--
Total =			51,800 gallons

US Ecology may store hazardous waste for up to one (1) year in any of the storage tanks listed in Table 4.1.

4.2. SECONDARY CONTAINMENT AND INTEGRITY ASSESSMENTS

4.2.1. US Ecology shall design, construct, and operate the secondary containment system(s), in accordance with the detailed design plans and descriptions contained in Permit Application Section 10. [40 CFR 264.193(b)-(f)] [NAC 444.8632]

4.2.2. US Ecology shall submit the integrity assessments required under 40 CFR 264.192 (d) and NAC 444.8632 to the Director prior to operation of any new tank system.

4.3. OPERATING REQUIREMENTS

4.3.1. US Ecology shall not place hazardous wastes in the tank system if they could cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode, or otherwise fail. [40 CFR 264.194(a)] [NAC 444.8632]

4.3.2. US Ecology shall prevent spills and overflows from the tank or containment systems using the methods described in Permit Application Section 10.9.1. [40 CFR 264.194(b)] [NAC 444.8632]

4.4. RESPONSE TO LEAKS OR SPILLS

In the event of a leak or a spill from the tank system, from a secondary containment system, or if a system becomes unfit for continued use, US Ecology shall comply with Permit Application Section 10.9.1 and remove the system from service immediately and complete the following actions: [40 CFR 264.196(a)-(f)] [NAC 444.8632]

4.4.1. Stop the flow of hazardous waste into the system and inspect the system to determine the cause of the release.

4.4.2. Remove waste and accumulated precipitation from the system within 24 hours of the detection of the leak to prevent further release and to allow inspection and repair of the system. If US Ecology finds that it will not be possible to meet this time period, US Ecology shall notify the Director and demonstrate that the longer time period is required.

If the collected material is a RCRA hazardous waste, it must be managed in accordance with all applicable requirements of 40 CFR Parts 262-264. US Ecology shall note that if the collected material is discharged through a point source to U.S. waters or to a Publicly Owned Treatment Works, it is subject to requirements of the Clean Water Act. If the collected material is released to the environment, it may be subject to reporting under 40 CFR Part 302.

4.4.3. Contain visible releases to the environment. US Ecology shall immediately conduct a visual inspection of all releases to the environment and based on that inspection: (1) prevent further migration of the leak or spill to soils or surface water and (2) remove and properly dispose of any visible contamination of the soil or surface water.

4.4.4. Close the system in accordance with the Closure Plan, Permit Application Section 10.12.0, unless the following actions are taken:

4.4.4.1. For a release caused by a spill that has not damaged the integrity of the system, US Ecology shall remove the released waste and make any necessary repairs to fully restore the integrity of the system before returning the tank system to service.

4.4.4.2. For a release caused by a leak from the primary tank system to the secondary containment system, US Ecology shall repair the primary system prior to returning it to service.

4.4.4.3. If US Ecology replaces a component of the tank system to eliminate the leak, that component must satisfy the requirements for new tank systems or components in 40 CFR 264.192 and 40 CFR 264.193 and NAC 444.8632.

4.4.5. For all major repairs to eliminate leaks or restore the integrity of the tank system, US Ecology must obtain a certification by an independent, qualified, registered professional engineer that the repaired system is capable of handling hazardous wastes without release for the intended life of the system before returning the system to service. Examples of major repairs are: installation of an internal liner, repair of a ruptured tank, or repair or replacement of a secondary containment vault.

4.5. INSPECTION SCHEDULES AND PROCEDURES

4.5.1. US Ecology shall inspect the tank systems, in accordance with the Inspection Plan in Permit Application Section 10.11.0, and complete the items in Permit Conditions 4.5.2 & 4.5.3 as part of those inspections.

4.5.2. US Ecology shall inspect the overfill controls. [40 CFR 264.195(a)] [NAC 444.8632]

4.5.3. US Ecology shall inspect the following components of the tank system once each operating day: [40 CFR 264.195(b)] [NAC 444.8632]

- a) Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;
- b) Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design;

- c) Construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system, to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).

4.5.4. US Ecology shall inspect cathodic protection systems, in accordance with the following schedule: [40 CFR 264.195(c)]

- a) The proper operation of the cathodic protection system must be confirmed within six months from initial installation and annually thereafter and;
- b) All sources of impressed current must be inspected and tested every other month.

4.5.5. US Ecology shall document compliance with Permit Conditions 4.5 and place this documentation in the operating record for the facility. [40 CFR 264.195(d)] [NAC 444.8632]

4.6. RECORDKEEPING AND REPORTING

4.6.1. US Ecology shall report to the Director, within 24 hours of detection, when a leak or spill occurs from the tank system or secondary containment system to the environment. [40 CFR 264.196(d)(1)] (A leak or spill of one pound or less of hazardous waste, that is immediately contained and cleaned-up, need not be reported.) [40 CFR 264.196(d)(2)] (Releases that are contained within a secondary containment system need not be reported). If US Ecology has reported the release pursuant to 40 CFR Part 302, this report satisfies the requirements of this Permit Condition. [40 CFR 264.196(d)(1)] [NAC 444.8632]

4.6.2. Within 30 days of detecting a release to the environment from the tank system or secondary containment system, US Ecology shall report the following information to the Director: [40 CFR 264.196(d)(3)]

- a) Likely route of migration of the release;
- b) Characteristics of the surrounding soil (including soil composition, geology, hydrogeology, and climate);
- c) Results of any monitoring or sampling conducted in connection with the release. If US Ecology finds it will be impossible to meet this time period, US Ecology should provide the Director with a schedule of when the results will be available. This schedule must be provided before the required 30-day submittal period expires;
- d) Proximity of down-gradient drinking water, surface water, and populated areas; and
- e) Description of response actions taken or planned.

4.6.3. US Ecology shall submit to the Director all certifications of major repairs to correct leaks within seven days from returning the tank system to use. [40 CFR 264.196(f)] [NAC 444.8632]

4.6.4. US Ecology shall obtain, and keep on file at the facility, the written statements by those persons required to certify the design and installation of the tank system. [40 CFR 264.192(g)] [NAC 444.8632]

4.6.5. US Ecology shall maintain at the facility a record of the results of leak tests and integrity tests conducted, in accordance with 40 CFR 264.192 (d).

4.7. SPECIAL TANK PROVISIONS FOR IGNITABLE OR REACTIVE WASTES

4.7.1. US Ecology shall not place ignitable or reactive waste in the tank system or in the secondary containment system, unless the procedures specified in Permit Application Section 10.9.2 are followed. [40 CFR 264.198(a)] [NAC 444.8632]

4.7.2. US Ecology shall comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon, as required in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code" (1977 or 1981). [40 CFR 264.198(b)] [NAC 444.8632]

4.8. SPECIAL TANK PROVISIONS FOR INCOMPATIBLE WASTES

4.8.1. US Ecology shall not place incompatible wastes, or incompatible wastes and materials, in the same tank system or the same secondary containment system, unless the procedures specified in Permit Application Section 10.9.1 are followed. [40 CFR 264.199(a)] [NAC 444.8632]

4.8.2. US Ecology shall not place hazardous waste in a tank system that has not been decontaminated and that previously held an incompatible waste or material. [40 CFR 264.199(b)] [NAC 444.8632]

4.9. CLOSURE AND POST-CLOSURE CARE

4.9.1. At closure of the tank system(s), US Ecology shall follow the procedures in the Closure Plan, Permit Application Section 10.12.0. [40 CFR 264.197(a)] [NAC 444.8632]

4.9.2. If US Ecology demonstrates that not all contaminated soils can be practically removed or decontaminated, in accordance with the Closure Plan, then US Ecology shall close the tank system(s) and perform post-closure care in accordance with 40 CFR 264.197(b) and NAC 444.8632.

4.10. COMPLIANCE SCHEDULE

Reserved

5. SUMMARY

The amount and type of wastes that may be treated in tanks are discussed in this Section. The containment systems employed for these tanks are discussed in detail in the Part B application Section 10. There are three (3) Stabilization tanks for the treatment of liquid and metal bearing wastes (See Table 1). A fourth tank is used for decontaminating equipment (trucks, etc) and allowing the wash-water to evaporate.

5.1. PERMITTED AND PROHIBITED WASTE IDENTIFICATION

5.1.1. US Ecology may treat in tanks any waste identified in Part A of the Permit Application in the tanks listed in Table 5.1 within the parameters outlined in Section 10 of the Permit Application.

5.1.2. US Ecology is prohibited from treating hazardous waste that is not identified in Permit Condition 5.1.1.

5.1.3. US Ecology may treat a total volume of 45,000 gallons/day of hazardous waste in treatment tank 1 and 252,000 gallons/day each of hazardous waste in treatment tanks 2 and 3, subject to the terms of this Permit.

Table 5.1

Tank	Secondary Containment	Description	Capacity (gallons)
#1	Yes- In Place	Stabilization Tank (Pan 1)	6,400
#2	Yes- In Place	Stabilization Tank (Pan 2)	35,500
#3	Yes- In Place	Stabilization Tank (Pan 3)	35,500
#11	Yes-In Place	Evaporation Tank (Truck Wash Pad)	10,000
#	--	Reserved	--
Total =			87,400.00 gallons

5.2. CONSTRUCTION, SECONDARY CONTAINMENT AND INTEGRITY ASSESSMENT

5.2.1. US Ecology shall ensure that the batch stabilization tanks are provided with a backfill material that is noncorrosive, porous, homogeneous substance (e.g. sand) and that is installed so that the backfill is completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported. [40 CFR §264.192 (c)] [NAC 444.8632]

5.2.2. US Ecology shall ensure that all ancillary equipment is supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction. [40 CFR §264.192 (e)] [NAC 444.8632]

5.2.3. US Ecology shall design, construct, and operate the secondary containment system(s), in accordance with the detailed design plans and descriptions contained in the Permit Application Section 10. [40 CFR §264.193(b)-(f)] [NAC 444.8632]

5.2.4. US Ecology shall submit the integrity assessments required under 40 CFR §264.192 (d) and NAC 444.8632 to the Director prior to operation of any new tank system.

5.3. OPERATING REQUIREMENTS

5.3.1. US Ecology shall not place hazardous wastes or treatment reagents in the tank system if they could cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode, or otherwise fail. [40 CFR §264.194(a)] [NAC 444.8632]

5.3.2. US Ecology shall prevent spills and overflows from the tank or containment systems using the methods described in Permit Application Section 10. [40 CFR §264.194(b)] [NAC 444.8632]

5.4. RESPONSE TO LEAKS OR SPILLS

In the event of a leak or a spill from the tank system, from a secondary containment system, or if a system becomes unfit for continued use, US Ecology shall comply with Permit Application Section 10.10.0 and remove the system from service immediately and complete the following actions: [40 CFR §264.196(a)-(f)] [NAC 444.8632]

5.4.1. Stop the flow of hazardous waste into the system and inspect the system to determine the cause of the release.

5.4.2. Remove waste and accumulated precipitation from the system within 24 hours of the detection of the leak to prevent further release and to allow inspection and repair of the system. If US Ecology finds that it will not be possible to meet this time period, US Ecology shall notify the Director and demonstrate that the longer time period is required. As the collected material is a RCRA hazardous waste, it must be managed in accordance with all applicable requirements of 40 CFR Parts §262-§264. US Ecology shall note that if the collected material is discharged through a point source to U.S. waters or to a POTW, it is subject to requirements of the Clean Water Act. If the collected material is released to the environment, it may be subject to reporting under 40 CFR Part 302.

5.4.3. Contain visible releases to the environment. US Ecology shall immediately conduct a visual inspection of all releases to the environment and based on that inspection: (1) prevent further migration of the leak or spill to soils or surface water and (2) remove and properly dispose of any visible contamination of the soil or surface water.

- 5.4.4. Close the system in accordance with the Closure Plan, Permit Application Section 10.12.0, unless the following actions are taken:
- 5.4.4.1. For a release caused by a spill that has not damaged the integrity of the system, US Ecology shall remove the released waste and make any necessary repairs to fully restore the integrity of the system before returning the tank system to service.
- 5.4.4.2. For a release caused by a leak from the primary tank system to the secondary containment system, US Ecology shall repair the primary system prior to returning it to service.
- 5.4.4.3. For a release to the environment caused by a leak from the portion of the tank system component that is not readily available for visual inspection, US Ecology shall provide secondary containment that meets the requirements of 40 CFR §264.193 before the component can be returned to service.
- 5.4.4.4. If US Ecology replaces a component of the tank system to eliminate the leak, that component must satisfy the requirements for new tank systems or components in 40 CFR §264.192 and CFR 40 §264.193 and NAC 444.8632.
- 5.4.5. For all major repairs to eliminate leaks or restore the integrity of the tank system, US Ecology must obtain a certification by an independent, qualified, registered professional engineer that the repaired system is capable of handling hazardous wastes without release for the intended life of the system before returning the system to service. Examples of major repairs are: installation of an internal liner, repair of a ruptured tank, or repair or replacement of a secondary containment vault.

5.5. INSPECTION SCHEDULES AND PROCEDURES

- 5.5.1. US Ecology shall inspect the tank systems, in accordance with the Inspection Plan in Permit Application Section 10.11.0, and complete the items in Permit Conditions 5.5.2 & 5.5.3 as part of those inspections.
- 5.5.2. US Ecology shall inspect the overfill controls. [40 CFR §264.195(a)] [NAC 444.8632]
- 5.5.3. US Ecology shall inspect the following components of the tank system once each operating day: [40 CFR §264.195(b)] [NAC 444.8632]
- a) Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;
- b) Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design;
- c) Construction materials and the area immediately surrounding the externally accessible portion of the

tank system, including the secondary containment system, to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).

5.5.4. US Ecology shall inspect cathodic protection systems, in accordance with the following schedule: [40 CFR §264.195(c)] [NAC 444.8632]

- a) The proper operation of the cathodic protection system must be confirmed within six months from initial installation and annually thereafter and;
- b) All sources of impressed current must be inspected and tested every other month.

5.5.5. US Ecology shall document compliance with Permit Conditions 5.5 and place this documentation in the operating record for the facility. [40 CFR §264.195(d)] [NAC 444.8632]

5.6. RECORDKEEPING AND REPORTING

5.6.1. US Ecology shall report to the Director, within 24 hours of detection, when a leak or spill occurs from the tank system or secondary containment system to the environment. [40 CFR §264.196(d)(1)] (A leak or spill of one pound or less of hazardous waste, that is immediately contained and cleaned-up, need not be reported.) [40 CFR §264.196(d)(2)] (Releases that are contained within a secondary containment system need not be reported). If US Ecology has reported the release pursuant to 40 CFR Part 302, this report satisfies the requirements of this Permit Condition. [40 CFR §264.196(d)(1)] [NAC 444.8632]

5.6.2. Within 30 days of detecting a release to the environment from the tank system or secondary containment system, US Ecology shall report the following information to the Director: [40 CFR §264.196(d)(3)]

- a) Likely route of migration of the release;
- b) Characteristics of the surrounding soil (including soil composition, geology, hydrogeology, and climate);
- c) Results of any monitoring or sampling conducted in connection with the release. If US Ecology finds it will be impossible to meet this time period, US Ecology should provide the Director with a schedule of when the results will be available. This schedule must be provided before the required 30-day submittal period expires;
- d) Proximity of down-gradient drinking water, surface water, and populated areas; and
- e) Description of response actions taken or planned.

- 5.6.3. US Ecology shall submit to the Director all certifications of major repairs to correct leaks within seven days from returning the tank system to use. [40 CFR §264.196(f)] [NAC 444.8632]
- 5.6.4. US Ecology shall obtain, and keep on file at the facility, the written statements by those persons required to certify the design and installation of any new tank system. [40 CFR §264.192(g)] [NAC 444.8632]
- 5.6.5. US Ecology shall maintain at the facility a record of the results of leak tests and integrity tests conducted, in accordance with 40 CFR §264.192 (d) and NAC 444.8632.
- 5.6.6. US Ecology shall, on an annual basis, sample the evaporation pad liquid and solid phases in the tank and test for Total Organic Carbon (TOC), RCRA TC metals, total cyanide, and conductivity. The test results shall be submitted to the Director by February 1 of each calendar year.

5.7. SPECIAL TANK PROVISIONS FOR INCOMPATIBLE WASTES

- 5.7.1. US Ecology shall not place incompatible wastes, or incompatible wastes and materials, in the same tank system or the same secondary containment system, unless the procedures specified in Permit Application Section 10.9.0 are followed. [40 CFR §264.199(a)] [NAC 444.8632]
- 5.7.2. US Ecology shall not place hazardous waste in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless the requirements of Permit Condition 5.7.1 are met. [40 CFR §264.199(b)] [NAC 444.8632]

5.8. CLOSURE AND POST-CLOSURE CARE

- 5.8.1. At closure of the tank system(s), US Ecology shall follow the procedures in Permit Application 10.12.0 for closure of the Tank identified above. [40 CFR §264.197(a)] [NAC 444.8632]
- 5.8.2. If US Ecology demonstrates that not all contaminated soils can be practically removed or decontaminated, in accordance with the Closure Plan, then US Ecology shall close the tank system(s) and perform post-closure care in accordance with the 40 CFR §264.197 (b) and NAC 444.8632.

5.9. COMPLIANCE SCHEDULE

Reserved

6. SUMMARY

The Low Temperature Thermal Desorption Units, are used to treat waste containing petroleum products, Volatile Organic and Semi-Volatile Organic compounds and pesticides (both RCRA-regulated and non-regulated). The Thermal Units operate both in atmospheric and negative (high-vacuum) environments, under temperature conditions reducing the likelihood of changing the chemical make-up of the waste being treated. These units are described in Section 12 of the Part B application.

6.1. LTTD DESCRIPTION

The Low Temperature Thermal Desorption Units (LTTD) are used to treat the following RCRA and Non-RCRA Wastes;

1. Organic Compounds, (VOCs and SVOCs); and/or
2. Pesticides; and/or
3. Petroleum Hydrocarbons

The authorities for specific requirements of this section of the Permit are pursuant to 40 CFR §264.601 as adopted by reference in NAC 444.8632. Unless there is a specific regulation adopted by reference and enumerated as required by 40 CFR §270.32, all permit conditions have been established pursuant to 40 CFR §264.601. The LTTD units are permitted under the Subpart X requirements of 40 CFR §264.600 as adopted by NAC 444.8632 and include additional requirements pursuant to 40 CFR §270.32(b)(2) as determined by the Division for further protective measures for both human health and the environment.

6.1.1. Modification, Revocation and Termination

This section of the Permit may be modified, revoked or terminated for cause as specified in Permit Condition 1.2

6.1.2. Planned/Unplanned changes to the Low Temperature Thermal Desorption Unit(s)

US Ecology shall not modify any plan, procedure, and process or alter any portion of the LTTD Units. Examples of changes include alterations or changes in treatment technology, the LTTD Unit(s) and its appurtenances, use of a different pollution control device, changes in waste storage or handling or operating procedures including pretreatment of waste prior to treatment in the LTTD units as currently approved by the Division without adhering to Permit condition 1.2

6.1.2.1. Other Permit Conditions

US Ecology shall continue to comply with all other conditions of this Permit and the applicable section(s) of 40 CFR §264. No relief from operating under the applicable Subparts of 40 CFR §264 is included in this section of the Permit, unless specifically identified. In the event of a conflict between the other sections of this Permit and this section, the NDEP shall determine which provision governs [40 CFR §270.32.]

6.2. PERMITTED UNITS

6.2.1. Low Temperature Thermal Desorption (LTTD) System: Consists of two (2) Matrix Constituent Separator (MCS) Units, each with closeable hood and two removable trays.

6.2.2. High Vacuum 200 System (IRHV-200 System): Consists of two (2) IRHV Units, each with two removable trays.

6.2.3. Thermal Desorption Unit Air Treatment System: An air treatment train consisting of:

- ✍ Electrostatic Precipitator
- ✍ Granular Activated Carbon Units and filters
- ✍ Two Coalescing Filters
- ✍ HEPA Filter
- ✍ Piping and ducting connecting the Units

6.2.4. Condensate/Vapor Management System

Located within the Secondary Containment area (consisting of a series of tank-like and container-like miscellaneous units) identified in Section 12 of the Part B application. The Condensate Management System containers are to be used for the management of condensate or supernatant from the LTTD and/or IRHV Units only.

6.2.5. The following components (miscellaneous units) are determined to closely resemble or function as “containers” and are subject to the conditions of Section 6.2.5.1:

1. Carbon Filter/Treatment Vessel(s)
2. Particulate Filter(s) & HEPA Filters
3. The “Trays” used in the IRHV-200 and MCS Units

6.2.5.1. Container-like Standards:

The provisions of this section are intended to control emissions from miscellaneous units identified in Section 6.2.5. US Ecology shall control emissions from each miscellaneous unit subject to this section in accordance with the Container Level 1 standards specified below:

1. Units shall be equipped with a cover and/or closure devices that form a continuous barrier over openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the unit. The cover may be a separate cover installed on the unit (e.g., a lid on a drum or a suitably secured tarp on a roll-off box) or may be an integral part of the structural design (e.g., a “portable tank” or bulk cargo container equipped with a screw-type cap).

2. Units shall be equipped with covers and closure devices that are composed of suitable materials to minimize exposure of the hazardous waste to the atmosphere and to maintain the integrity of the equipment for as long as the container is in service. Factors to be considered in selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of contact with the hazardous waste or its vapor; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the unit is intended to be used.

6.2.5.2. Whenever a hazardous waste is managed or “contained” in a unit identified in Section 6.2.5, US Ecology shall install, secure and maintain each closure device in the closed position except as follows:

6.2.5.2.1. The opening of a cover is allowed for the purpose of adding hazardous waste or other material to the unit as follows:

1. In the case when discrete quantities or batches of material intermittently are added to the unit over a period of time, US Ecology shall promptly secure the closure devices in the closed position and install covers, as applicable, upon either the unit being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the unit within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the unit; or the shutdown of the process generating the material being added, whichever condition occurs first.

6.2.5.2.2. Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the unit as follows:

1. For the purpose of meeting the requirements of this section, an empty unit as defined in 40 CFR §261.7(b) may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container).
2. In the case when discrete quantities or batches of material are removed from the unit, but the unit does not meet the conditions as “empty”, as defined in 40 CFR 261.7(b), US Ecology shall promptly secure the closure devices in the closed position and install covers, as applicable to the unit, upon the completion of a batch removal after which no additional material will be removed from the unit within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the unit, whichever condition occurs first.

6.2.5.3. Opening of a safety device, as defined in 40 CFR §265.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

6.2.5.4. US Ecology shall inspect the units and their covers and closure devices as follows:

1. US Ecology shall visually inspect each unit and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the unit when the cover and closure devices are secured in the closed position. If a defect is detected, US Ecology shall repair the defect.
2. When a defect is detected for the unit, cover, or closure device, US Ecology shall make first efforts at repair of the defect no later than 24 hours after detection and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the unit and the unit shall not be used to manage hazardous waste until the defect is repaired.

6.2.6. The following units are determined to closely resemble or function as “tanks” and are subject to the conditions of Section 6.2.6. Even though these units are part of a Subpart X (miscellaneous) process, they are descriptively referred to as “tanks” in this Section. For the purposes of determining compliance with this Permit, the condensate tanks and oil/water separator (Items 3, 4, 5, and 6) are also subject to the requirements of Sections 5 and 9 of this Permit.

1. MCS Units 1 & 2
2. IRHV Units 3 & 4
3. Condensate Oil Tank
4. Condensate Tank
5. Condensate Water Tank
6. Oil/Water Separator

6.2.6.1. Tank-like Standards

For units identified in 6.2.6, US Ecology shall control air pollutant emissions from the tank in accordance with the Tank Level 1 controls specified in 6.2.6.2 of this section.

6.2.6.2. The Tank(s) shall be equipped with a roof or cover designed to meet the following specifications:

6.2.6.2.1. The roof or cover and its closure devices shall be designed to form a continuous barrier over the entire surface area of the hazardous waste in the tank. The fixed roof may be a separate cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).

6.2.6.2.2. The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.

6.2.6.2.3. Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:

1. Equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or
2. Connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and shall be operating whenever hazardous waste is managed in the tank, except as provided for in A, B, and C below.
 - A. During periods when it is necessary to provide access to the tank for performing the activities of paragraph B a), of this section, venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device.
 - B. During periods of routine inspection, maintenance, or other activities needed for normal operations, and for removal of accumulated sludge or other residues from the bottom of the tank.
 - a) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: Organic vapor permeability, the effects of any contact with the hazardous waste or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.
 - C. Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows:
 - a) Opening of closure devices or removal of the fixed roof is allowed at the following times:
 - b) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

c) To remove accumulated sludge or other residues from the bottom of tank.

6.2.6.2.4. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the owner or operator based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the tank internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.

6.2.6.2.5. Opening of a safety device is allowed at any time conditions require doing so to avoid an unsafe condition.

6.2.6.3. US Ecology shall inspect the air emission control equipment in accordance with the following requirements.

1. The fixed roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
2. The owner or operator shall perform an initial inspection of the fixed roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except under the special conditions provided for in 40 CFR §264.1084 paragraph (l).
3. In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of 40 CFR §264.1084 paragraph (k).
4. The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §264.1089(b).

6.2.7. Compliance with state issued Permits [40 CFR §270.32(b)(2)]

6.2.7.1. US Ecology shall comply with the conditions of Air Quality Operating Permit #AP4953-0184.01

1. In the event of non-compliance with Air Quality Operating Permit #AP4953-0184.01, the Division reserves the authority to review compliance with the terms and conditions of this section of the Permit.

6.3. PROHIBITED WASTE IDENTIFICATION

- 6.3.1. US Ecology shall not treat or manage in the LTTD units any waste not *identified in the Part A application* or restricted in Table 6.1:

Table 6.1

Restricted Waste/Treatment Categories	
1	Liquids or waste containing liquids: As determined by Method 9095 of SW-846 (Paint Filter Test)
2	Material containing PCBs at ?2ppm
3	Material containing Mercury at ? 0.025 mg/L
4	Dioxins/Furans or wastes codes containing any of the components identified in EPA waste codes F020, F021, F023 and/or F027
5	Ignitable as defined by: 40 CFR §261.21(a) and/or §261.31 when listed for Ignitability
6	Reactive as defined by: 40 CFR §261.23(a) and/or §261.32 when listed for Reactivity

6.4. MONITORING REQUIREMENTS

- 6.4.1. Stack Emission Limits – Point Monitoring (Subpart AA Process Vent)

US Ecology shall comply with the following emission limits at the exit point of the stack:

1. Dioxins and Furans
?0.20 ? g TEQ/dscm corrected to 7% O₂ using method 0023A, SW-846
2. Mercury
?130 ?g/dscm corrected to 7% O₂ using method 29 Appendix A Part 60 of 40 CFR
3. Lead and Cadmium
? 240?g/dscm combined corrected to 7% O₂ using method 29 Appendix A Part 60 of 40 CFR
4. Arsenic, Beryllium and Chromium
?97 ?g/dscm combined corrected to 7% O₂ using method 29 Appendix A Part 60 of 40 CFR

- 6.4.1.1. In no event shall US Ecology cause to emit or emit under standard operating conditions greater than 3 lb/hr or 3.1 tons/yr of total organic emissions as determined by Method 25A from the exit point of the stack on the LTTD and/or IRHV, either collectively or separately.

- 6.4.2. Worker Breathing Zone – Ambient Monitoring

US Ecology shall maintain an ambient monitoring network that enables compliance with the following emission limits in the worker-breathing zone and maintain documentation demonstrating the following limits are met;

1. Carbon Monoxide

- ☞ 35 ppm Time Weighted Average (TWA) - TWA Determination is 8 hours
- ☞ 200 ppm Ceiling (5-min sample) Ceiling determination is five (5) minutes
- ☞ 1,500 ppm Instantaneous
- ☞ US Ecology shall monitor ambient air conditions for Carbon Monoxide that meets the specifications of OSHA method ID-209.

2. Hydrocarbons

- ☞ ? 10 ppmv (as Naphthalene) as a maximum or hourly rolling average at worker level.

6.4.3. Emission Limits Exceedence

An exceedence of any of the above limits constitutes non-compliance with this Permit. US Ecology shall cease operation(s) of the Unit and modify it accordingly to prevent any further non-compliance. In addition, US Ecology shall provide a notification of non-compliance pursuant to Permit condition 1.6.14. Before initiating any such modification(s), US Ecology shall follow the notification procedure in Section 1.2

6.4.3.1. Air Emission Standards for Process Vents ~ Subpart AA

The requirements of this part apply to the “common exhaust stack” as identified on drawing DWG-013 of Appendix B Subpart AA process flow diagram of the Interim Status Report for the LTTD Units. US Ecology shall comply with the following:

1. Monitor the Common Exhaust Stack as identified in Drawing DWG-013 at the monitoring points indicated in accord with the following parameters;
 - 1) A continuous monitoring system meeting the requirements of method 25A of 40 CFR part 60 Appendix A.
 - 2) A continuous monitoring system as specified in method 2 of 40 CFR part 60 Appendix A [type s pitot tube].
 - 3) Comply with the emission limits specified in Permit condition 6.4.1 and 6.4.1.1.

6.4.3.1.1. Recording Keeping

US Ecology shall comply with 40 CFR §264.1035

6.4.3.1.2. Reporting Requirements

US Ecology shall comply with 40 CFR §264.1036

6.4.3.2. US Ecology shall maintain the following records onsite:

1. Information and data identifying all process vents. Daily and cumulative throughput and operating hours of each affected unit, and emission rates to determine compliance with Section 6.3 of this Permit. This shall be maintained for each affected vent and for the overall facility (i.e., the total emissions for all

affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the hazardous waste management units on a facility plot plan).

2. Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. Determinations of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates, or vent stream organic compounds and concentrations) that represent the conditions that result in maximum organic emissions, such as when the waste management unit is operating at the highest load or capacity level reasonably expected to occur. If US Ecology takes any action (e.g., managing a waste of different composition or increasing operating hours of affected waste management units) that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.
3. US Ecology shall replace the existing carbon with fresh carbon at regular, predetermined times that is less than the design carbon replacement interval and document such replacement in the recordkeeping for this unit.
4. US Ecology shall document that all carbon that is a hazardous waste and that is removed from the Granular Activated Carbon Units and filters, regardless of the average volatile organic concentration of the carbon, is regenerated or reactivated in the LTTDs or disposed of in accordance with applicable hazardous waste regulations.
5. A statement signed and dated by US Ecology certifying that the operating parameters used in the design analysis presented in the Application(Part B) to this Permit reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

6.4.3.3. Air Emission Standards for Equipment Leaks ~ Subpart BB

The requirements of this part apply to the equipment (pumps, blowers, compressors, pipelines, flanges, connectors, valves, doors and ports) as identified in Appendix C Subpart BB Process Flow diagram of the Interim Status Report for the LTTD Units. US Ecology shall monitor for Subpart BB compliance by monitoring at the points identified in Table 2 in determining whether a leak exists as required by 6.4.3.4.

Table 6.2

Drawing #		Tag #(s)
1	DWG-001	20, 23
2	DWG-002	214, 238
3	DWG-004	241, 242, 259, 240, 243
4	DWG-005	118, 119, 122, 115, 113, 112, 114, 111
5	DWG-006	132
6	DWG-009	416, 418, 417, 437, 427, 449, 465, 527, 420, 439, 431, 434,

423, 432, 467, 536, 537, 533, 462, 534

6.4.3.4. Leak Detection, Monitoring and Repair

6.4.3.4.1. Leak Detection

1. Monitoring for leak detection shall comply with Reference Method 21 in 40 CFR Part 60.
2. The detection instrument shall meet the performance criteria of Reference Method 21.
3. The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.
4. Calibration gases shall be:
 - a) Zero air (less than 10 ppm of hydrocarbon in air).
 - b) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
5. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

6.4.3.4.2. US Ecology shall monitor all the points in Table 2 monthly or in accord with the following;

1. After two consecutive monthly leak detection periods with the percentage of monitoring points leaking equal to or less than 2%, US Ecology may skip the following monthly leak detection period subject to the requirements of 6.4.3.4 and monitor every third month (quarterly).
2. After five consecutive quarterly leak detection periods with the percentage of monitoring points leaking less than 2%, US Ecology may skip three of the quarterly leak detection periods for the valves subject to the requirements in 6.4.3.4 and monitor once a year.
3. If at any time the percentage of valves leaking is greater than 2 percent, US Ecology shall monitor monthly in compliance with the requirements in 6.4.3.4.2, but may again elect to use this section after meeting the requirements of §264.1057(c)(1).

6.4.3.4.3. Repair of Leaks

US Ecology shall repair any or all leaks as detected in accord with the following:

1. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected.
2. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

3. If the leak cannot be repaired in accord with 1 or 2, US Ecology must repair as soon as is practicable and document the reason for delay.

6.4.3.5. Recordkeeping

US Ecology shall comply with the requirements of this Permit by maintaining the following records:
For each piece of equipment to which this section applies:

1. Equipment identification number and hazardous waste management unit identification. Including whether the equipment is in a state of positive or negative pressure (*i.e.* above or below atmospheric).
2. Approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan).
3. Type of equipment (e.g., a pump or pipeline valve etc).
4. Hazardous waste state at the equipment (e.g., solid gas/vapor or liquid).
5. Method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals" etc.).
6. When each leak is detected as specified in 6.4.3.4.1, the following requirements apply and shall be recorded on the facility operating record:
 - i. As marked with the equipment identification number, the date evidence of a potential leak was found in accordance with 6.4.3.4.1.
 - ii. Repair methods applied in each attempt to repair the leak.
 - iii. Documentation supporting any delay of repair.
 - iv. The signature of the owner or operator (or designate) whose decision it was that repair could not be affected without a hazardous waste management unit shutdown.
 - v. The date of successful repair of the leak.

6.4.3.6. Air Emission Standards for Containers ~ Subpart CC

The requirements of this part apply to the Containers as identified in 6.2.5 and Appendix D Subpart CC Process Flow Diagram of the Interim Status Report for the LTTD Units. US Ecology shall monitor for Subpart CC compliance by monitoring at the points identified in Table 3 in determining whether a leak exists as required by 6.3.3.4.

Table 3

Drawing #	Tag# and/or Location
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1	IRHV & MCS Trays DWG-001, 002, 007	Comply with 6.2.5.1 & 2
2	DWG-009 & 011	Carbon Treatment Vessel(s) ~ 462, 458, 162,163, 164, 165
3	DWG-001, 002, 005	Particulate Filter(s) - HEPA Filters ~ 24, 16, 105, 101, 121, 229, 225
4	Reserved	--
5	Reserved	--

6.4.3.7. Air Emission Standards for Tanks ~ Subpart CC

The requirements of this part apply to the Tanks as identified in 6.2.6 and Appendix D Subpart CC Process Flow Diagram of the Interim Status Report for the LTTD Units. US Ecology shall monitor for Subpart CC compliance by monitoring at the points identified in Table 4 in determining whether a leak exists as required by 6.3.3.4.

Table 4

Drawing #		Tag# and/or Location
1	DWG-007	MCS Units 1 & 2 ~ 307, 328, 387, 395
2	DWG-001 & 002	IRHV Units 3 & 4 ~ 2, 6, 206, 202
3	DWG-009	Condensate Oil Tank ~ 424, 427
4	DWG-009	Condensate Tank ~ 422, 537
5	DWG-009	Condensate Water Tank ~ 444, 420
6	DWG-009	Oil/Water Separator ~ 432, 434,
7	Reserved	

6.4.3.8. Leak Detection, Monitoring and Repair

6.4.3.8.1. Leak Detection

Comply with Section 6.4.3.4.1

6.4.3.8.2. US Ecology shall monitor all the points in Table 3 monthly or in accord with the following:

Comply with 6.4.3.4.2

6.4.3.8.3. Repair of Leaks

Comply with 6.4.3.4.3

6.4.3.9. Recordkeeping

Comply with 6.4.3.5

6.4.3.10. The Division reserves the authority to impose further monitoring requirements for the treatment, containment or management system if, at any time, the Director believes that minor, significant and/or undue releases

have occurred, or have the potential to occur, as a result of operating the LTTD System(s), its components or management system.

6.5. OPERATING REQUIREMENTS

6.5.1. US Ecology shall operate the Low Temperature Thermal System(s) as follows;

6.5.1.1. Employee Training Plan

US Ecology shall comply with the personnel-training requirement of 40 CFR §264.16 and NAC 444.8632 by adhering to the provisions of the “Thermal Specific Training Plan” (Appendix J), of the Permit Application. US Ecology shall maintain training documents and records, as required by 40 CFR §264.16(d) and (e) in the Facilities operating record.

6.5.1.1.1. Amendments to Employee Training Plan

US Ecology shall review the contents of the Plan whenever a change to the operation or configuration of the LTTD and/or IRHV Units occurs. If necessary, US Ecology shall amend the Employee Training Plan to reflect the changes to the LTTD and/or IRHV Units due to the changes in operational or waste management requirements.

6.5.1.2. Health and Safety Plan

US Ecology shall comply with the Site Specific Health and Safety Plan (SSHSP), “Low Temperature Thermal Desorption Unit Specific Health and Safety Plan, (Appendix E) of the Permit Application” for both the Low Temperature Thermal Desorption Unit(s) and the Infra-Red High Vacuum Unit(s) (LTTD and IRHV respectively). US Ecology shall maintain all health and safety records as required by section 2.6 of the SSHSP in the Facilities operating record.

6.5.1.2.1. Amendments to Health and Safety Plan

US Ecology shall review the contents of the Plan whenever a change to the operation or configuration of the LTTD and/or IRHV Units occurs. If necessary, US Ecology shall amend the Health and Safety Plan.

6.5.1.3. Contingency Plan

US Ecology shall comply with the “Supplement to the Facility Contingency Plan for Low Temperature Thermal Desorption {Contingency Plan}” (Appendix K) of the Permit Application for both the LTTD and IRHV Unit(s). US Ecology shall maintain all records, inspections, maintenance records and logs of events at the LTTD or IRHV Unit(s). In addition, US Ecology shall comply with the following;

6.5.1.3.1. Implementation of Contingency Plan

US Ecology shall immediately carry out the provision of the Contingency Plan whenever there is a fire, explosion or release of hazardous waste or constituents, which could or may threaten human health or the environment.

6.5.1.3.2. Copies of Contingency Plan

US Ecology shall make available to Personnel working at the LTTD and IRHV copies of the contingency plan, train them in its use, and document it in the operating record. Additionally, US Ecology shall keep a current copy of the Contingency Plan at the LTTD/IRHV and maintain compliance with 40 CFR §264.53.

6.5.1.3.3. Amendments to Contingency Plan

US Ecology shall review the contents of the Contingency Plan whenever a change to the operation or configuration of the LTTD and/or IRHV Units occurs. If necessary, US Ecology shall amend the Contingency Plan as required by 40 CFR §264.33.

6.5.1.4. Emergency Coordinator

A qualified and trained emergency coordinator with knowledge specific to the operation of the LTTD Unit (as referenced and defined in 40 CFR §1910.120(p)) shall be onsite or immediately available at all times in the event of an emergency, as required by 40 CFR §264.55.

6.5.1.5. Unit Operations Plan

US Ecology shall operate the LTTD Units as specified in Appendix G of the Permit Application.

6.5.1.5.1. Amendments to the Unit Operations Plan

US Ecology shall review the contents of the Plan whenever a change to the operation or configuration of the LTTD and/or IRHV Units occurs. If necessary, US Ecology shall amend the Contingency Plan as required by 40 CFR §264.33.

6.5.1.6. Sampling and Analysis Plan

US Ecology shall follow the procedures in the Sampling and Analysis Plan for the Low Temperature Thermal Desorption Unit in Permit Application Section 12, Appendix F.

6.5.1.7. Operating Record

US Ecology shall maintain a written operating record for the LTTD and IRHV Units. The operating record shall contain all records of inspections, maintenance, repairs, operating forms, field log book, weekly leak monitoring, releases, incidents, training, health and safety records, waste analysis and monitoring records.

6.6. TANK AND CONTAINER SYSTEM

6.6.1. US Ecology shall comply with the Environmental Performance Standard provisions of 40 CFR §264.601 and NAC 444.8632 by following the operating procedures and controls described in this Permit and Section 12 of the Permit Application.

6.6.1.1. US Ecology shall not place wastes or reagents in the treatment system that could cause any component of

the system, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

6.6.1.2. US Ecology shall operate and maintain the concrete containment system, depicted on the as-built drawings in Section 12 of the Permit Application, as follows:

1. Free of cracks or gaps and is impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.
2. Run-on into the containment system must be prevented.
3. Spilled waste and accumulated precipitation must be removed within 24 hours or in as timely a manner as is possible to prevent overflow of the containment system.

6.6.2. Secondary Containment

US Ecology shall comply with the following standards for the Secondary Containment System of the Thermal Treatment Units

6.6.2.1. The system shall comply with the following standards:

1. Able to contain 100 percent of the capacity of the largest tank within its boundary;
2. Able to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event; and
3. Constructed with chemical-resistant water stops in place at all joints; and
4. Provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete; and
5. It shall have a leak-detection system that is designed and operated so that it will detect presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time; and
6. Shall be sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health and the environment.

6.7. INSPECTION SCHEDULE AND PROCEDURES

US Ecology shall inspect the LTTD treatment system in accordance with this Permit and the Inspection Plan in Section 5 and 12 of the Permit Application and as required in other sections of this part, as required by 40 CFR §264.602 and NAC 444.8632.

6.8. RECORDKEEPING AND REPORTING

1. US Ecology shall develop and maintain all records required to comply with 40 CFR §264.602 and NAC 444.8632 and as required by Appendix 12G.10 of Section 12 of the Permit Application.
2. US Ecology shall maintain at the facility in the operating record, all treatment records and results of analyses as described in the Waste Analysis Plan in Section 8 of the Permit Application.
3. US Ecology shall report to the Director, within 24 hours of detection, when a leak or spill occurs from the LTTD Treatment System, Waste Staging area or the containment system to the environment. Releases that are contained within the containment system need not be reported.

6.9. CLOSURE AND POST-CLOSURE CARE

1. At closure of the LTTD unit, US Ecology shall comply with the requirements of 40 CFR §264.111 and NAC 444.8632 by following the Closure Plan procedures in Section 15 of the Permit Application.
2. If US Ecology cannot remove or decontaminate all soils, secondary containment systems, in accordance with the Closure Plan, then US Ecology shall close the LTTD system and perform post-closure care in accordance with 40 CFR §264.603 and NAC 444.8632.

7. SUMMARY

US Ecology has constructed and is currently operating landfill Trench 11 as shown on Drawing No.'s 87050024-0 through 6. Trench 11 was constructed with a double composite liner consisting of a primary liner of HDPE and a secondary liner with a HDPE liner and 6" of soil amended with bentonite. The design was approved as meeting the Minimum Technology Requirements (MTR) in the June 6, 1988 permit. The below grade capacity of Trench 11 is 847 acre-feet (1.36 million cubic yards) and the area of the footprint is 12.3 acres. The proposed above grade capacity of Trench 11 is 1,000,000 cubic yards. US Ecology proposes to construct an additional trench (Trench 12) and has submitted substantial information regarding the design and configuration of this trench. The 8.81 acre base footprint to be occupied by Trench 12 and the landfill capacity of 745 acre-feet (1.2 million cubic yards) of waste and cover material is approved by this Permit. However, final design drawings are still pending for the liner system (See compliance schedule in Section 7.12.)

7.1. PERMITTED AND PROHIBITED WASTE IDENTIFICATION

US Ecology may dispose of the following hazardous wastes in Trench 11, subject to the terms of this Permit:

7.1.1. US Ecology may dispose of hazardous wastes as identified in the Part A application, and other hazardous wastes as identified in NAC 444.843, including wastes containing polychlorinated biphenyls, subject to the terms and limitations of this Permit.

7.1.2. US Ecology is prohibited from disposing any hazardous waste that is not included in Permit Condition 7.1.1.

7.2. DESIGN AND OPERATING REQUIREMENTS

7.2.1. US Ecology shall design, maintain and operate landfill Trench 11 under the following conditions:

7.2.1.1. US Ecology installed and shall maintain two liners and a leachate collection and removal system (one above and one between the liners) in accordance with the design plans and reports contained in the Permit Application Section 11.4.0. [40 CFR §264.301(c)]

7.2.1.2. US Ecology shall submit a final cap design for Trench 11 when the elevation of waste has reached 90% of permitted capacity. The revised cover design shall be designed to resist the maximum horizontal acceleration in lithified earth material for the site. Maximum horizontal acceleration is defined as the maximum expected horizontal acceleration depicted on a seismic hazard map with a 90 percent or greater probability that the acceleration will not be exceeded in 250 years.

7.2.2. Collected leachate must be managed as F039 and in accordance with the procedures for all other waste streams outlined in the Waste Analysis Plan (Section 8 of Part B application).

7.2.3. US Ecology shall locate, construct, operate, and maintain landfill(s) Trench 11 and 12 as specified so as to

prevent the migration of any hazardous constituents into the ground water or surface water, at least as effectively as the liners and leachate collection and removal systems outlined in 40 CFR §264.301(c). [40 CFR §§264.301(d)]

7.2.4. US Ecology shall design, construct, operate, and maintain a run-on and run-off control system in accordance with the design plans, specifications, and operating practices contained in Section 11 of the Part B application. [40 CFR §§264.301(f) and (g)]

7.2.5. US Ecology shall empty or otherwise manage run-on and run-off collection and holding facilities to maintain the design capacity of the system(s) within 72 hours of a 25 year 24 hour storm and in accordance with any other required permits (*i.e.* NPDES). [40 CFR §§264.301(h)]

7.2.6. US Ecology shall cover or otherwise manage the landfill to control wind dispersal of particulate matter, in accordance with the methods specified in Permit Application Section 11.3.9. [40 CFR §264.301(I)]

7.2.7. US Ecology shall sample and analyze leachate from each Leachate Collection Removal System (LCRS) and Leachate Detection and Removal System (LDRS) for the parameters found in Table 7 in Permit Section 10 from at least one sump per quarter. The results of these analyses shall be submitted with the bi-annual report required under Permit condition 10.2.2.

7.3. ACTION LEAKAGE RATE/RESPONSE ACTION PLAN

US Ecology shall operate landfill Trench 11 in accordance with the Response Action Plan (RAP) in Section 11 of the Permit Application.

7.3.1. The Action Leakage Rate for Trench 11 is set at 211 gallons/acre-day for each leak detection sump

7.3.2. US Ecology shall calculate the gallons/acre-day (GPAD) leachate generation rate for each sump and submit the information along with the liquid level monitoring data and any leachate chemical analysis as required by Permit Condition 10.2.2.

7.3.3. US Ecology shall operate the leachate collection and detection systems without the head on any liner exceeding (30 cm) or one (1) foot.

7.3.4. US Ecology shall monitor each sump as required in the RAP.

7.3.5. US Ecology shall pump all pumpable fluids from each sump whenever the pump operating level, as defined in the RAP, is reached.

7.3.6. US Ecology shall notify the NDEP-RCRA Permitting Branch Supervisor within 7 days of either an exceedance of the Action Leakage Rate (ALR) or the fluid head on either liner exceeding one foot. The

notification must be followed up by a preliminary written assessment within (14) days of the exceedence. Within thirty (30) days of the initial notification US Ecology shall submit an analysis of the liquid found in the sump with a summary of the other information required by the RAP.

7.4. INSPECTION SCHEDULES AND PROCEDURES

US Ecology shall inspect the landfill in accordance with the following conditions:

- 7.4.1. US Ecology shall inspect the liners and cover systems during construction and installation for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). [40 CFR §264.303(a)]
- 7.4.2. US Ecology shall inspect the landfill immediately after construction or installation. [40 CFR §264.303(a)]
- 7.4.2.1. Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.
- 7.4.2.2. Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.
- 7.4.3. US Ecology shall inspect the landfill (including the liner and leachate collection system) in accordance with the inspection schedule in Section 5 of the Part B application [40 CFR §264.303(b)]
- 7.4.3.1. The landfill must be inspected weekly and within 24 hours or the next business day (normally Monday through Friday) after a storm event of 0.25" or greater storms (per US Ecology letter of 1/12/96) to detect evidence of any of the following:
1. Deterioration, malfunctions, or improper operation of run-on and run-off systems.
 2. Proper functioning of wind dispersal control systems.
 3. The presence of leachate in, and proper functioning of, leachate collection and removal systems.

7.5. CELL LOCATION SURVEYING

US Ecology shall maintain the following items in the operating record: [40 CFR §264.73 and 40 CFR §264.309]

1. A map with the exact location and dimensions (including depth) of each cell with respect to permanently surveyed benchmarks.

2. The types of waste in each cell and the approximate location of each hazardous waste type within each cell.
3. In accordance with Permit Application Section 11.3.8

7.6. CLOSURE AND POST-CLOSURE CARE

US Ecology shall conduct closure and post-closure activities in accordance with the following conditions:

- 7.6.1. At final closure of the landfill, or upon closure of any cell, US Ecology shall follow the procedures in the approved closure plan contained in Permit Application Section 15 for Scheduled Closure and Permit Application Section 16 for Unscheduled Closure. [40 CFR §264.310(a)]
- 7.6.2. After final closure, US Ecology shall follow the plans and procedures in the approved Post-Closure Care Plan in Permit Application Section 17 and in the Post-Closure Permit Section 12 [40 CFR §264.310(b)]

7.7. SPECIAL LANDFILL PROVISIONS FOR INCOMPATIBLE WASTES

US Ecology shall not place incompatible wastes, or incompatible wastes and materials, in the same landfill cell, unless the procedures specified in Permit Application Section 11.3.5 are followed. [40 CFR §264.217(b)]

7.8. SPECIAL LANDFILL PROVISIONS FOR HAZARDOUS WASTES F020, F021, F022, F023, F026, AND F027 [HSWA]

- 7.8.1.1. US Ecology may place hazardous wastes F020, F021, F022, F023, F026, or F027 in the landfill only if the waste is shown to meet the treatment standard in 40 CFR §268.
- 7.8.1.2. US Ecology shall follow the special requirements for these as specified in Permit Application Section 11.3.7.

7.9. SPECIAL LANDFILL PROVISIONS FOR LIQUID WASTE

- 7.9.1. US Ecology shall not place bulk or non-containerized liquid wastes or waste containing free liquids in a landfill. [40 CFR §264.314(b)]. Use of liquids as dust suppression in accordance with Permit Application Section 11.3.9 is not considered placement under this section.
- 7.9.2. If undetermined by visual inspection, US Ecology shall demonstrate the absence of free liquids in either a containerized or a bulk waste by the following test: "Method 9095 (Paint Filter Liquids Test)" as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication No. SW-846).

7.9.3. US Ecology shall not place containers holding free liquid in the landfill unless: [40 CFR §264.314(d)]

7.9.3.1. All free-standing liquid: (i) has been removed by decanting, or other methods; (ii) has been mixed with absorbent or solidified so that free-standing liquid is no longer observed; or (iii) has been otherwise eliminated; or

7.9.3.2. The container is no larger than an ampule; or

7.9.3.3. The container is designed to hold free liquids for use other than storage (e.g., batteries, capacitors); or

7.9.3.4. The container is a lab pack as defined in 40 CFR §264.316 and is disposed of in accordance with Permit Condition 7.11

7.9.3.5. US Ecology shall follow the procedures in Permit Application Section 11.3.3 to prevent the disposal of liquids in the landfill.

7.10. SPECIAL REDUCTION REQUIREMENTS FOR EMPTY CONTAINERS

US Ecology shall not dispose of any containers in the landfill unless they are at least 90 percent full when placed in the landfill or they are crushed, shredded, or similarly reduced in volume to the maximum practical extent before placement in the landfill, or they are no larger than an ampule. [40 CFR §264.315]

7.11. PROVISIONS FOR THE CONTAINERIZED LANDFILL DISPOSAL OF LAB PACKS

US Ecology shall dispose of any small containers of hazardous waste in overpacked drums (lab packs) in accordance with the detailed plans and procedures contained in Permit Application Section 11.3.4. [40 CFR §264.316]

7.12. COMPLIANCE SCHEDULE

Item & Date	
1	US Ecology shall locate, design, maintain and operate landfill Trench 12 pursuant to Volume III, Appendix S (Geotechnical Investigation for Cell 12, Grant Environmental, 7/94, Cell 12 Design Report, TRC Environmental Solutions, 3/96 and Response to NOD for Cell 12 Design Report, HMA, December 1996, Response to Verbal Comments January 17, 1996, HMA) of the Permit Application upon the Director's approval of the following items:
2	90 days prior to construction of Trench 12, submit results which show that site soils can meet the required hydraulic conductivity (1×10^{-5} cm/sec) prescribed for the soil layer in the Minimum Technology Requirement (MTR)
3	90 days prior to construction of Trench 12, submit results of stress strain tests on the liner materials to be used in Trench 12. The type of tests and the conditions under which the tests shall be conducted must be approved by the Director prior to the tests being conducted

**SECTION 7
LANDFILL DISPOSAL CONDITIONS**

4	120 days prior to the construction of Trench 12, US Ecology shall submit a complete set of design drawings and a revised Section of the permit application for Trench 12
5	120 days prior to construction of Trench 12 US Ecology shall submit a QA/QC Plan for the construction of the landfill as required by §264.303. The plan must contain at a minimum all the applicable elements of and minimum number and types of tests found in "Quality Assurance and Quality Control for Waste Containment Facilities", EPA/600/R-93/182, September 1993
6	60 days prior to accepting waste at Trench 12 US Ecology shall submit and obtain approval for a Response Action Plan
7	120 days prior to accepting waste US Ecology shall demonstrate capacity to store the runoff generated from a 25 year and 24 hour storm event
8	120 days prior to constructing Trench 12 US Ecology shall specify the gravel to be used in the leachate sumps which will obtain the transmissivity of 10 cm/sec
9	Prior to accepting waste US Ecology shall submit as-built drawings and the results of the construction and installation QA/QC Plan required by Item 5 above stamped by an independent Nevada registered professional engineer
10	Prior to accepting waste in Trench 12, US Ecology must receive approval from the Director
11	60 days prior to construction of Trench 12 US Ecology shall submit the results of a magnetic survey covering the Trench 12 footprint and the Area C buffer zone outside of the LLRW restricted area fence
12	60 days prior to construction of Trench 12 US Ecology shall submit a Health and Safety Plan for this activity. The Plan shall include monitoring for radioisotopes and volatile organics
13	Reserved
14	Reserved

8. SUMMARY

US Ecology is required to conduct a Waste Minimization program in accord with this section of the Permit.

8.1. WASTE MINIMIZATION RECORD

US Ecology shall maintain at the facility copies of waste minimization documents required in conditions 8.2 and 8.3 and shall make them available to any authorized representative of NDEP or USEPA conducting an inspection pursuant to 40 CFR §270.32 (b) and NAC 444.8632.

8.2. WASTE MINIMIZATION CERTIFICATION

US Ecology shall annually certify in accordance with 40 CFR §264.73 (b)(14) and NAC 444.8632:

US Ecology has a program in place to reduce the volume and toxicity of all hazardous wastes which are generated by the facility operations to the degree, determined by US Ecology, to be economically practicable; and,

- a. The method of treatment, storage, or disposal is the only practicable method or combination of methods currently available to the facility, which minimizes the present and future threat to human health and the environment.
- b. This certification shall be retained with the facility's operating record and shall comply with the signatory requirements of Permit Condition 1.6.

8.3. SOURCE REDUCTION PLANS AND REPORTS

8.3.1. Source Reduction Evaluation Review and Plan

Within one (1) year of the effective date of this Permit, and at each permit renewal thereafter, US Ecology shall submit a source reduction evaluation review and plan to the Administrator. The review and plan should be conducted and prepared in accordance with the procedures and format provided in the EPA Waste Minimization Opportunity Assessment Manual or other equivalent source reduction guidance. Additional industry specific source reduction guidance is available from both the EPA and the State. The review and plan shall include at a minimum the following: [40 CFR §270.32(b) and NAC 444.8632]

- a. The name and location of the facility.
- b. The NAIC/SIC Code of the facility.
- c. A copy of any written company policy or statement that outlines the general goals, objectives, and methods of source reduction to be implemented within the next five years.

- d. Identification of all routinely generated hazardous waste streams, which result from ongoing processes or operations. For the purposes of this paragraph, a hazardous waste stream is to be included if it meets the following criteria:
- i. It is a hazardous waste stream processed in a wastewater treatment unit which discharges to a publicly owned treatment works or under a national pollutant discharge elimination system (NPDES) permit and its weight before treatment exceeds 5 percent of the weight of the total yearly volume of hazardous waste generated at the site.
 - ii. It is a hazardous waste stream which is not processed in a wastewater treatment unit and its weight exceeds 5 percent of the weight of the total yearly volume of hazardous waste generated at the site, less the weight of any hazardous waste stream identified in condition 8.3.1.d.i.
- e. For each hazardous waste stream identified in condition 8.3.1.d the following information shall be included:
- i. An estimate of the quantity of hazardous waste generated.
 - ii. An evaluation of source reduction approaches available to US Ecology, which are potentially viable. The evaluation shall consider at a minimum the following source reduction approaches:
 - (1) Input change;
 - (2) Operational improvement;
 - (3) Production process change; and,
 - (4) Product reformulation.
- f. Any source reduction and/or recycling measure implemented by US Ecology in the last five years.
- g. A specification of, and a rationale for, the technically feasible and economically practicable source reduction measures, which will be taken by US Ecology with respect to each waste stream identified. The review and plan shall fully document any statement explaining US Ecology's rationale for rejecting any available source reduction approach identified in condition 8.3.1.e.¹
- h. A detailed description of any programs US Ecology may have to assist generators of hazardous waste in reducing the volume or quantity and toxicity of wastes they produce.

a. ¹ Note: NDEP/EPA does not consider a source reduction method to be valid if it merely switches the waste load from one environmental medium (air, water, or land) to another.

- i. An evaluation, and, to the extent practicable, a quantification, of the effects of the chosen source reduction method on emissions and discharges to the air, water, or land environmental mediums.
- j. A description of employee training programs and employee incentive programs for source reduction, which may be in effect at the facility.
- k. A timetable for making reasonable and measurable progress towards implementation of the selected source reduction measures identified in condition 8.3.1.g.
- l. A summary of the source reduction evaluation review and plan.
- m. Certification of the review and plan and the summary by a professional engineer, or by an individual who is responsible for the processes and operation of the facility, or by an environmental assessor, who has demonstrated expertise in hazardous waste management. The engineer, individual, or assessor shall certify the review and plan and the summary only if the review and plan and the summary meet all the requirements of condition 8.3.1.

8.3.2. Certification of Plan Implementation

At the time the review and plan required by condition 8.3.1 is submitted to the Administrator, US Ecology shall also submit a written statement from a responsible official of the facility certifying that US Ecology has implemented, is implementing, or will be implementing, the source reduction measures identified in the plan according to the implementation schedule contained in the plan.

8.3.2.1. US Ecology may determine not to implement a measure selected pursuant to condition 8.3.1.g only if US Ecology determines, upon conducting further analysis or due to unexpected circumstances, that the selected measure is not technically feasible or economically practicable, or if attempts to implement that measure reveal that the measure would result in, or has resulted in, any of the following: [40 CFR §264.73(b)(14) and NAC 444.8632]

- a. An increase in the generation of waste (hazardous and solid).
- b. An increase in the release of hazardous chemicals to other environmental media.
- c. Adverse impacts on product quality.
- d. A significant increase in the risk of an adverse impact to human health or the environment.

8.3.3. Plan and Plan Summary Amendments

If US Ecology elects not to implement the measures selected pursuant to condition 8.3.1.f, US Ecology shall amend its review and plan, and its summary to reflect this rejection and include in the review and plan, and in the summary, proper documentation identifying the rationale for this rejection. Any amendments to the review and plan or the plan summary shall be submitted to the

Administrator no later than 30 days prior to implementation of the changes. [40 CFR §270.32(b) and NAC 444.8632]

8.3.4. Hazardous Waste Management Performance Report

Within one (1) year of the effective date of this permit and every year thereafter, US Ecology shall prepare a hazardous waste management performance report documenting hazardous waste management approaches implemented at the facility. The report shall be prepared in accordance with the EPA Waste Minimization Opportunity Assessment Manual or other equivalent source reduction guidance. The report shall include at a minimum the following: [40 CFR 270.32(b) and NAC 444.8632]

- a. The name and location of the facility.
- b. The SIC Code for the facility.
- c. The following information for each waste stream identified pursuant to condition 8.3.1.d.
 - i. An estimate of the quantity of hazardous waste generated and the quantity of hazardous waste managed by US Ecology during the current reporting year and the baseline year. The current reporting year is the calendar year immediately preceding the year in which the report is to be prepared. For the initial report, the baseline year is any calendar year selected by US Ecology for which substantial data is available on waste generation, or on-site or off-site management. Alternatively, US Ecology may select the current reporting year as the initial baseline year. For all subsequent reports, the baseline year is the current reporting year of the immediately preceding report.
 - ii. An assessment of the effect, during the current year, of each hazardous waste management measure implemented since the baseline year, upon the generation and the on-site and off-site management of hazardous waste. For the initial report, the assessment of the effect required by this condition shall be made for the current year in general terms for any waste management measures implemented in the preceding five years. The report shall consider, but shall not be limited to, measures which use the following approaches:
 - a) Source reduction.
 - b) Recycling.
 - c) Treatment.
 - iii. A description of factors during the current reporting year that have affected hazardous waste generation and on-site and off-site hazardous waste management since the baseline year. For the initial report, the description of factors shall be made in general terms for those factors affecting generation and management in the preceding five years. The description shall include, but is not limited to, any of the following:
 - (1) Changes in business activity.

- (2) Changes in waste classification.
 - (3) Natural phenomena.
 - (4) Other factors that have affected either the quantity of hazardous waste generated or on-site and off-site hazardous waste management requirements.
- iv. A description of any factors, which may have prevented implementation of any aspect of the source reduction plan.
- d. A summary of the hazardous waste management performance report.
- e. Certification of the report and summary by a professional engineer, or by an individual who is responsible for the processes and operations of the facility, or by an environmental assessor, who has demonstrated expertise in hazardous waste management. The engineer, individual, or assessor shall certify the report and summary only if the report and summary meet all the requirements of the condition 8.3.4.

8.4. SPECIFIC WASTE MINIMIZATION CONDITIONS

Reserved

9. SUMMARY

US Ecology is required to manage hazardous waste, as applicable, in accordance with the air emission standards of Subpart AA, BB, and CC of 40 CFR Part 264. Hazardous waste managed in tanks, containers, and applicable miscellaneous units (Subpart X) are subject to these requirements as specified in this Permit.

9.1. ORGANIC AIR EMISSION STANDARDS

9.1.1. Prior to constructing any equipment with process vents subject to the requirements of 40 CFR §264, Subpart AA or installing any additional equipment subject to the requirements of 40 CFR §264, Subpart BB, US Ecology shall supply the specific Part B information required under 40 CFR §270.24 and §270.25 and NAC 444.8632, as applicable.

9.1.2. Prior to installing any tank, surface impoundment or miscellaneous unit subject to 40 CFR Part §264, Subpart CC, US Ecology shall apply for a Permit modification described in Permit Condition 1.2, and provide the specific Part B information required under 40 CFR §270.14-17 and §270.27, as applicable, with the modification request.

9.2. APPLICABILITY

This section applies to all tanks and containers, identified in the Permit Application and all tanks and containers received at the facility with hazardous waste requiring management under this part, except as provided in 40 CFR §264.1, §264.1080, and §264.1082.

9.2.1. The conditions of this part apply to the hazardous waste management units or areas identified below and all containers accepted by the facility which manage waste which would make them subject to this Part:

Table 1

HWMU Designation/Identification Number	HWMU Type	Description Of Air Emission Control System
PCB/RCRA Storage Building (CA1)	Container Storage-drums (Accepts above limits for off-site disposal)	Level 1 Controls
Dry Hazardous Waste Storage Area (DHWSA)	Container Storage ~ Roll offs	Level 1 Controls
Thermal Desorption Units ~ Storage Tanks (Condensate Management Tanks)	Tank	Level 1 Controls
Thermal Desorption Units~ Condensate Management System ~ Oil Water Separator, Carbon Treatment Vessel, Resin Cylinders, Particulate Filters	Container	Level 1 Controls

9.2.2. US Ecology shall use the procedures specified in 40 CFR §264.1082 to determine if a waste stream requires Subpart CC air emission controls or documentation submitted by the Generator of the waste. When using Generator supplied information the determination shall be made in accordance with §265.1084.

9.3. INSPECTION AND REPORTING REQUIREMENTS

9.3.1. US Ecology shall inspect containers using Container Level 1 controls and their covers as follows:

9.3.1.1. Containers accepted at the facility which are not empty per 40 CFR §261.7(b), shall be visually inspected within 24 hours of acceptance. Each container and its cover shall be inspected for visible cracks, holes, gaps or other open spaces when the cover or closure device is secured in the closed position. If a defect is detected, US Ecology shall repair the defect in accordance with 9.3.1.2.

9.3.1.2. When a defect is detected for a container, cover or closure device, US Ecology shall make first efforts at repair of the defect no later than 24 hours after detection and the repair shall be completed as soon as possible but no later than 5 calendar days after the defect is detected. If a repair or defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

9.3.2. US Ecology has submitted revisions to the Inspection Plan, Waste Analysis Plan and the Recordkeeping and Operating Record sections of the Permit Application, which incorporate all the requirements of Subpart CC as they apply to the facility.

- 9.3.3. Visual inspections, monitoring, and all recordkeeping requirements shall be met for each unit to ensure compliance with 40 CFR §264.1088.
- 9.3.4. US Ecology shall report to the Director within 7 days any unit that is not listed above and is managing hazardous waste such that 40 CFR §264 subpart CC should apply to that unit.
- 9.3.5. A monitoring and inspection schedule and procedures shall be submitted to the Director, within thirty (30) calendar days prior to the anticipated start-up of any new Subpart CC unit or emissions control technology on existing units. The inspection schedule and procedures shall be approved by the Director prior to any continuous or intermittent operations.
- 9.3.6. US Ecology shall determine if a Permit modification is required under 40 CFR §270.42 or Permit Conditions 1.2 for any new activity requiring management under this Part and follow the procedures in 40 CFR §270 to obtain a Permit modification if required.

9.4. OPERATING REQUIREMENTS

- 9.4.1. US Ecology shall control air pollutant emissions from each container received at the facility, which is subject to this Part in accordance with the following requirements as applicable to the container.
- 9.4.1.1. For a container having a design capacity greater than 26 gallons and less than 119 gallons, US Ecology shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified below.
- 9.4.1.2. For a container having a design capacity greater than 119 gallons that is not in light material service, US Ecology shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified below;
- 9.4.2. A container using Container Level 1 standards is one of the following:
- 9.4.2.1. A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging, hazardous materials for transportation, As specified in 49 CFR part 178-Specifications for Packaging or 49 CFR part 179 (Specifications for Tank Cars and 40 CFR part 107, subpart B-Exemptions; 49 CFR part 172-Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part 173-Shippers-General Requirements for Shipments and Packages; and 49 CFR part 180-Continuing Qualification and Maintenance of Packaging).
- 9.4.2.1.1. For the purpose of complying with this Part, no exceptions to the 49 CFR part 178 or 179 regulations are allowed except as provided in condition 9.4.2.2.

- 9.4.2.1.2. For a lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with this Part, US Ecology may comply with the exceptions for combination packaging specified in 49 CFR part 173.12(b).
- 9.4.2.1.3. A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (e.g. a lid on a drum or a suitably secured tarp on a roll-off box or may be an integral part of the container structural design such as a “portable tank” or bulk cargo container equipped with a screw type cap).
- 9.4.2.2. An open-top container in which an organic-vapor suppressing barrier (e.g. organic-vapor suppressing foam) is placed on or over the hazardous waste in the container such that no hazardous waste is exposed to the atmosphere.
- 9.4.3. A container using Container Level 1 controls shall have a cover or closure device that is compatible with the waste and the intended management of the container.
- 9.4.4. Whenever storing a container using Container Level 1 controls, US Ecology shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:
- 9.4.4.1. Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:
- 9.4.4.1.1. In the case when the container is filled to the intended final level in one continuous operation, US Ecology shall promptly secure the closure devices in the closed position and install the covers as applicable to the container, upon the conclusion of the filling operation.
- 9.4.4.1.2. In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, US Ecology shall promptly secure the closure devices in the closed position and install covers as applicable to the container;
1. Upon either the container being filled to the intended final level;
 2. The completion of a batch loading after which no additional material will be added to the container within 15 minutes;
 3. The person performing the loading operation leaving the immediate vicinity of the container;
 4. Or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

9.4.5. Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

9.4.5.1. For the purposes of meeting the requirements of this part, an empty container as defined in 40 CFR §261.7(b) may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container).

9.4.5.2. In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined by §261.7(b). US Ecology shall promptly secure the closure devices in the closed position and install covers as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the operation leaves the immediate vicinity of the container, whichever occurs first.

9.4.5.3. Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities (e.g., sampling) other than transfer of hazardous waste. Following completion of the activity, US Ecology shall promptly secure the closure device or reinstall the cover, as applicable to the container.

9.4.5.4. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever internal pressure of the container is within the normal internal operating pressure for that container as defined in 40 CFR §264.1086(c) 3.iv.

9.4.5.5. Opening of a safety device as defined in 40 CFR §264.1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

9.5. RECORDKEEPING REQUIREMENTS

9.5.1. US Ecology shall maintain at the facility in the operating record the following information:

9.5.1.1. A copy of the procedure used to determine that containers with a capacity of 119 gallons or greater which do not meet applicable DOT regulations as specified in §264.1086(f), are not managing hazardous waste in light service.

9.5.1.2. For waste streams that do not require the use of air emission control equipment, documentation shall be recorded and maintained in the operating record that includes the information that was used by US Ecology for each waste determination (e.g. test or certification by the generator). If analysis results for waste

samples are used for the waste determination, then US Ecology shall record the date, time, and location that each waste sample is collected in accordance with applicable requirements in 40 CFR §264.1083.

9.5.1.3. For containers used at the facility to manage hazardous wastes covered by this part, sufficient information shall be provided to describe:

- 1) A facility identification number for the container or group of containers;
- 2) The purpose and placement of this container, or group of containers, in the management train of this hazardous waste;
- 3) The procedures used to ultimately dispose of the hazardous waste handled in the containers.

9.6. COMPLIANCE SCHEDULE

Reserved

10. SUMMARY

US Ecology is required to conduct a Groundwater Detection Monitoring Program in compliance with 40 CFR §264.98. A description of the facility defining onsite and offsite, specifically, the “Point of Compliance” (POC) [40 CFR §264.95] is identified by the legal description of the facility as contained in the Permit Application. The existing up gradient wells are Wells 313, 318 & 319 in the "upper aquifer" and Well 600 in the "lower aquifer." The existing detection monitoring system is designed to monitor the currently operating regulated units, Trench 10 (in post closure) and Trench 11. Additional wells will be installed for the monitoring of Trench 12 as noted below and incorporated in the Detection Monitoring Program.

10.1. POINT OF COMPLIANCE

The Point of Compliance (POC) is established as described in Permit Condition 10. All wells identified herein as POC wells or installed for that purpose subsequent to Permit issuance are considered reflective of the conditions at the Point of Compliance. For the purposes of determining whether the facility complies with the Groundwater Protection standards established herein, any exceedence of the Groundwater Protection Standards identified in Table 4 requires compliance with Permit Condition 10.8.

10.2. RECORDKEEPING AND REPORTING

10.2.1. US Ecology shall enter all field equipment calibration data, monitoring, testing, and analytical data obtained in accordance with Permit Condition 10.4 in the operating record. [40 CFR §264.73(b)(6)] The data must include all computations, calculated means, variances, and tests of distribution results.

10.2.2. US Ecology shall submit to NDEP the analytical and field data results required by Permit Conditions 10.5. and 10.7 and the results of the statistical analyses required by Permit Condition 10.8. in accord with Table 10.1 below. The data shall be reported in graphical, tabular and electronic file format as approved by the Director.

Table 10.1

Bi-Annual Period		Due Date
1	January 1-June 30	September 30
2	July 1 – December 31	March 30

10.2.3. US Ecology shall submit a groundwater gradient map for the “upper” aquifer annually. The map shall indicate the velocity in ft/year, the groundwater elevation for each well used to generate the map and the direction of flow. The map is due with the second biannual report required by Permit Condition 10.2.2. The map shall be submitted in electronic and hard copy format.

10.3. WELL LOCATION, INSTALLATION AND CONSTRUCTION

US Ecology shall install and maintain a ground-water monitoring system as specified in Permit Application Section 13 and as summarized below: [40 CFR §264.97]

10.3.1. US Ecology shall install and maintain ground-water monitoring wells at the locations specified on the map in Permit Application Appendix F (US Ecology Groundwater Monitoring Network) and in conformance with Table 10.2 and 10.3 (when installed):

Table 10.2

MONITORING WELL IDENTIFICATION		DESIGNATION
1	001	POC
2	002	POC
3	308	POC
4	309	POC
5	310	POC
6	311	POC
7	313	Background
8	315A	POC
9	316	POC
10	317	POC
11	318	Background
12	319	Background
13	325	POC
14	326	POC
15	327	POC
16	600	Supplemental ~ Lower Aquifer
17	601	Supplemental ~ Lower Aquifer
18	603	Supplemental ~ Lower Aquifer
19	604	Supplemental ~ Lower Aquifer
20	605	Supplemental ~ Lower Aquifer

10.3.2. Any wells deleted from the monitoring program shall be plugged and abandoned in accordance with NAC 534.420, and shall be decommissioned only upon prior approval of the Director. All well decommissioning methods and certification report shall be submitted to the Director within 90 days from the date any wells are approved to be removed from the monitoring program.

10.3.2.1. The wells in Table 3 shall be installed at locations approved by the Director.

10.3.2.2. All wells listed in Table 3 shall be installed prior to beginning the construction of Trench 12. One Hundred and Eighty (180) days prior to well installation, US Ecology will submit to the Director a Permit Modification in accordance with Permit Condition 1.2 that includes the final design, construction details, and

locations of the wells.

10.3.2.3. Ninety (90) days after well completion, a Well Construction report containing all information collected during installation, shall be submitted to the NDEP. A revised site wide cross section of the stratigraphy encountered during drilling the wells shall also be included.

Table 10.3

WELL IDENTIFICATION	DESIGNATION
320	POC
322	POC
324	POC

10.4. INDICATOR PARAMETERS AND MONITORING CONSTITUENTS

For the purposes of determining whether a Statistically Significant Increase has occurred, the Ground Water Protection Standard (GWPS) in Table 4 will be used. US Ecology shall monitor the wells, as described in Permit Condition 10.3 for the following parameters: [40 CFR §264.98(a)]

Table 10.4

CONSTITUENT	GROUNDWATER QUALITY STANDARD (mg/L)
1 Arsenic	0.01
2 Barium	0.1
3 Cadmium	0.02
4 Chromium	0.06
5 Lead	0.05
6 Mercury	0.002
7 Selenium	0.04
8 Silver	0.04
9 Cyanide	0.02
10 Fluoride	1.4 (Ln of Result)
11 Sodium	175
12 Sulfate	230
13 Chloride	80
14 TOX	0.01
16 TOC	2.1
17 PH	7<pH>8.4
18 Specific Conductance	980<SpCd>1240 umhos
19 Nitrate-Nitrite as N	1.7

Table 10.5

Constituent		Groundwater Protection Standard (mg/l)
1	Endrin (1,2,3,4,10,10- hexachloro-1,7-epoxy-1,4, 4a,5,6,7,8,9a-octahydro-1,4-endo,endo-5,8-dimethano naphthalene)	0.0002
2	Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer)	0.004
3	Methoxychlor (1,1,1- Trichloro-2,2-bis (p-methoxyphenylethane)	0.1
4	Toxaphene (C ₁₀ H ₁₀ Cl ₆ , Technical chlorinated camphene, 67-69 percent chlorine)	0.005
5	2,4-D (2,4-Dichlorophenoxyacetic acid)	0.1
6	2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	0.01

Table 10.6

Radioisotope		Groundwater Quality Standard
1	Gross Alpha	22 pCi/L
2	Gross Beta	25 pCi/L
3	Radium 226/Radium 228	5pCi/L (Combination Of Radium 226 & 228)
4	Tritium	250 pCi/L

Table 10.7

Monitored Leachate Constituent(s)			
1	All constituents listed in Table 10.4	5	Toluene
2	Chloroform	6	Total PCBs
3	Tetrachloroethene	7	Acetone
4	1,1,1-Trichloroethane	8	Reserved

10.5. SAMPLING AND ANALYSIS PROCEDURES

US Ecology shall use the following techniques and procedures when obtaining and analyzing samples from the ground-water monitoring wells described in Permit Condition 10.3: [40 CFR §264.97(d) and (e)]

10.5.1. Samples shall be collected using the techniques described in Permit Application Section E 5.2.

10.5.2. Samples shall be preserved and shipped (when shipped off site for analysis)], in accordance with the procedures specified in the Groundwater Monitoring Plan (Section 13 of Part B applicaion).

10.5.3. Samples shall be analyzed in accordance with the procedures specified in the Groundwater Monitoring Plan.

10.5.4. Samples shall be tracked and controlled using the chain-of-custody procedures specified in the Groundwater Monitoring Plan.

10.5.5. Field sampling equipment shall be calibrated in accordance with the manufacturers guidelines for each piece of equipment. Manufacturers guidelines for each field-sampling device shall be maintained at the facility. The calibration data shall be recorded and maintained as part of the operating record of the facility.

10.6. ELEVATION OF THE GROUND-WATER SURFACE

US Ecology shall determine the elevation of the ground-water surface at each well each time the ground water is sampled, in accordance with Permit Condition 8.4 and the Groundwater Monitoring Plan. [40 CFR §264.97(f)]

10.7. INDICATOR PARAMETERS AND MONITORING CONSTITUENTS

10.7.1. US Ecology shall monitor all wells listed in Table 2, and the wells listed in Table 3 upon installation, for the parameters and constituents listed on Tables 4, 5 &6 according to 10.7.1.1. [40 CFR §264.98(a)]

10.7.1.1.All Point of Compliance or background wells in Table 2, and 3 (upon installation), shall be sampled quarterly, for parameters listed on Table 4; and sampled and analyzed for parameters listed on Tables 5 and 6 biannually. All Supplemental Wells shall be sampled every 5th quarter (calendar year basis) and shall be sampled and analyzed for the parameters in tables 4, 5, and 6.

10.7.1.2.US Ecology shall sample and analyze pumped leachate quarterly for the parameters specified in Table 7.

10.7.2. US Ecology shall take sufficient collective samples from each background well to analyze for each parameter and/or constituent identified in Table 4, 5 and 6 each time the system is sampled. [40 CFR §264.97(g)]

10.7.2.1.POC and background wells shall have four independent field measurements of specific conductance and pH at the time of each quarterly sampling event.[40 CFR §264.98(d)]. Four samples shall also be collected and analyzed for TOX and TOC.

10.7.2.2.Background groundwater quality for monitoring parameters or constituents shall be based on all available data from quarterly sampling of wells 313, 318 and 319. [40 CFR §264.97(g)]

10.7.2.3. US Ecology shall take a minimum of one sample from each well, each time the up-gradient well(s) are sampled to identify changes to background ground-water quality for each parameter or constituent. [40 CFR §264.97(g)(2)]

10.7.2.4. US Ecology shall recalculate the Groundwater Quality and Protection Standards established in tables 4, 5 and 6 and include such calculations when submitting an application for Permit renewal in accord with 40 CFR §270. The recalculation shall include all data obtained from the background wells, which will be used by the Director to assist in establishing a background limit for each parameter or constituent monitored.

10.8. MONITORING PROGRAM AND DATA EVALUATION

10.8.1. US Ecology shall collect, preserve, and analyze samples pursuant to Permit Condition 10.4.

10.8.2. US Ecology shall determine groundwater quality at each monitoring well at the compliance point quarterly during the active, closure and post-closure life of all regulated units. [40 CFR §264.98(d)]

10.8.3. US Ecology shall determine the groundwater flow rate and direction in the uppermost aquifer biannually and submit the results to NDEP per 10.2.3. [40 CFR §264.98(e)]

10.8.4. US Ecology shall determine whether there is a statistically significant increase over the Groundwater Protection Standards for each parameter identified in Table 4 each time groundwater quality is determined at the compliance point. In determining whether such an increase has occurred, US Ecology must compare the Groundwater Protection Standards at each monitoring well specified in Table 2 to the background limits specified in Tables 4. [40 CFR §264.98(f)] and §264.97(h)]

10.8.4.1. A statistically significant increase is determined by comparing each groundwater monitoring result to the corresponding background limit. If the value of the groundwater data is higher than its respective background limit, US Ecology shall:

10.8.4.1.1. Sample the affected well for required parameters at the next scheduled quarterly sampling event.

10.8.4.1.2. Compare the results obtained to the background limit. If the results of the resample are higher than the background limit, US Ecology shall comply with Permit Conditions 10.8.4.2 and/or 10.8.5.

10.8.4.2. If US Ecology determines, pursuant to Permit Condition 10.8.4.1.2, there is a statistically significant increase above the background values for the parameters specified in Tables 4, US Ecology may demonstrate that a source other than a currently operating regulated unit caused the increase or that the increase resulted from error in sampling, analysis, evaluation, or natural variation in the ground water [40 CFR §264.98(g)(6)]. In such cases, US Ecology shall:

10.8.4.2.1. Notify NDEP in writing as part of the next regularly scheduled semi-annual Groundwater Monitoring

Report that US Ecology intends to make a demonstration [40 CFR §264.98(g)(6)(i)], and

10.8.4.2.2. Submit a demonstration in that report that a source other than a currently operating regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, evaluation, or natural variation in the ground water. [40 CFR §264.98(g)(6)(ii)]

10.8.4.2.3. US Ecology shall perform the evaluations described in Permit Condition 10.8.4 through 10.8.4.2 within 90 days after receipt of quarterly groundwater analytical results. [40 CFR §264.98(f)(2)]

10.8.5. If US Ecology determines, pursuant to Permit Condition 10.8.4.1.2, that there is a statistically significant increase above the groundwater protection standards for the parameters specified in Table 4, and US Ecology does not submit the required demonstration under section 10.8.4.2.2, then US Ecology shall:

10.8.5.1. Notify the Agency in writing within seven days of the determination. [40 CFR §264.98(g)(1)]

10.8.5.2. Sample the ground water in all wells required by the Director, and determine the concentration of all constituents identified in Appendix IX (excluding dioxins/furans) of 40 CFR 261. [40 CFR §264.98(g)(2)]

10.8.5.3. For any Appendix IX compounds found in the analysis pursuant to condition 10.8.5.2, US Ecology may sample at the next regularly scheduled quarterly sampling event and repeat the analysis for those compounds detected. If the results of the re-sample confirm the initial results, then the newly identified constituents will form the basis for compliance monitoring. If US Ecology does not re-sample, the compounds found pursuant to 10.8.5.2 will form the basis for compliance monitoring. [40 CFR §264.98(g)(3)]

10.8.5.4. Within 90 days of submitting the Biannual Groundwater Monitoring Report, submit to the Agency an application for a permit modification to establish a compliance-monitoring program for the currently operating regulated units. [40 CFR §264.98(g)(4)] The application must include the following information:

10.8.5.4.1. An identification of the concentration of each Appendix IX constituent found in the ground water at each monitoring well at the compliance point. [40 CFR §264.98(g)(4)(i)]

10.8.5.4.2. Any proposed changes to the ground-water monitoring system at the facility necessary to meet the requirements of compliance monitoring as described in 40 CFR §264.99. [40 CFR §264.98(g)(4)(ii)]

10.8.5.4.3. Any proposed changes to the monitoring frequency, sampling and analysis procedures, or methods or statistical procedures used at the facility necessary to meet the requirements of compliance monitoring as described in 40 CFR §264.99. [40 CFR §264.98(g)(4)(iii)]

10.8.5.4.4. An engineering feasibility study plan for a corrective action program, including the documents listed in

Permit Section 12A.9, necessary to meet §264.100 unless:

- 10.8.5.4.4.1. All hazardous constituents identified under 10.8.5.4.1 are listed in Table 1 of §264.94 and their concentrations do not exceed the respective values given in that Table; or
- 10.8.5.4.4.2. Within 90 days, submit to the Director an application for a permit modification to Section 12A to make any appropriate changes to the monitoring program at the facility. [40 CFR §264.98(g)(6)(iii)]
- 10.8.5.4.4.3. Continue to monitor in accordance with the monitoring program at the facility. [40 CFR §264.98(g)(6)(iv)]

10.9. REQUEST FOR PERMIT MODIFICATION

If US Ecology or the Director determines the Groundwater Monitoring program no longer satisfies the requirements of the regulations, US Ecology must, within 90 days of the determination, submit an application for a permit modification affecting either this section or section 12A in accord with Permit condition 1.2 to make any appropriate changes to the program which will satisfy the regulations. [40 CFR §264.98(h)]

SECTION 11
CORRECTIVE ACTION FOR SOLID WASTE
MANAGEMENT UNITS
GROUND-WATER MONITORING

11. SUMMARY

In accord with 40 CFR §264.101, US Ecology is required to conduct the following groundwater monitoring for all releases of hazardous waste or constituents from all solid waste management unit(s) [SWMUs] at the facility, regardless of the time at which waste was placed in such unit. This section of the Permit specifically identifies disposal Trenches 1 through 9 as identified in the Current Conditions Report and Corrective Measures Study as sources of gaseous emissions contaminating groundwater beneath the site. Corrective action is specified in accordance with this section and other portions of this Permit. This Permit contains schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of this Permit) and assurances of financial responsibility for completing such corrective action. US Ecology must implement corrective actions beyond the facility boundary, as necessary to protect human health and the environment, unless US Ecology demonstrates to the satisfaction of the Director that US Ecology was unable to undertake such actions. US Ecology is not relieved of the responsibility to clean up a release that has migrated beyond the facility boundary where off-site access may be denied. On-site and off-site measures to address such releases will be determined on a case-by-case basis. Assurances of financial responsibility for such corrective action shall be provided in accordance with the terms and conditions of this Permit as approved by the Director.

11.1. GROUNDWATER MONITORING

11.1.1.1. US Ecology shall use the groundwater monitoring network specified in Permit condition 10.3.

11.1.1.2. US Ecology shall monitor the ground water in order to determine the effectiveness of Corrective Action at the facility and to determine the extent of impacts to the Groundwater. The hazardous constituents listed in Table 1 and their concentration limits comprise indicators for making such a determination.

11.1.2. US Ecology shall comply with this section of the Permit (Compliance Period) until the Director relieves US Ecology of Permit Condition 11.5. If US Ecology continues to conduct corrective action at the end of this Permit life, then the compliance period shall be extended until US Ecology demonstrates that the groundwater protection standard has not been exceeded for at least three consecutive years at all the POC wells or until US Ecology is relieved of the requirements of this section.

11.1.3. Groundwater Assessment

11.1.3.1. US Ecology must determine the concentration of hazardous constituents in Table 1 in the ground water at the compliance point quarterly in accord with Permit Condition 10.5 or as otherwise requested by the Division in writing, during the compliance period as specified in Permit Condition 11.1.2.

SECTION 11
CORRECTIVE ACTION FOR SOLID WASTE
MANAGEMENT UNITS
GROUND-WATER MONITORING

11.1.3.2. US Ecology must analyze samples from all Point of Compliance monitoring wells once every 2 years, for the following constituents in Appendix IX, 40 CFR §264, during the compliance period: volatile and semi-volatile compounds, metals and inorganics, pesticides, herbicides and PCBs.

11.2. SAMPLING AND ANALYSIS PROCEDURES

US Ecology shall use the sampling techniques and procedures when obtaining and analyzing samples from the ground-water monitoring wells described in Permit Condition 10.5 as required by Permit condition 10.4.

11.3. REPORTING AND RECORDKEEPING

US Ecology shall enter all monitoring, testing, and analytical data obtained pursuant to Permit Condition 11.2 in the operating record. The data must include all computations, calculated means, variances, and results of statistical tests. US Ecology shall report the results of all sampling conducted pursuant to Permit condition 11.2 in the reports required by Permit Condition 10.2.2.

11.4. WELL LOCATION, INSTALLATION AND CONSTRUCTION

US Ecology shall maintain a ground-water monitoring system, as specified in Section 10.

11.5. GROUND-WATER PROTECTION STANDARD

11.5.1. US Ecology shall monitor the ground water to determine whether the SWMUs are in compliance with the ground-water protection standard established herein and to determine the effectiveness of Corrective Action activities at the facility as required in Section 12. The following hazardous constituents and their concentration limits comprise the indicators in order to make this determination:

Table 1

	Monitored Groundwater Constituents [Indicators of Contamination]	Groundwater Protection Standard (mg/l)
1	Carbon Tetrachloride	0.005
2	Chloroform	0.005
3	Trichlorofluoromethane	0.005
4	Tetrachloroethene	0.005
5	Toluene	0.005
6	Trichloroethene	0.005

11.5.2. US Ecology shall monitor all the wells at the point of compliance, as described in Section 10, for the indicators in Table 1 and as designated in the Permit application.

11.6. MONITORING PROGRAM AND DATA EVALUATION

**SECTION 11
CORRECTIVE ACTION FOR SOLID WASTE
MANAGEMENT UNITS
GROUND-WATER MONITORING**

11.6.1. US Ecology shall determine ground-water quality as follows:

11.6.1.1. US Ecology shall collect, preserve, and analyze ground-water samples pursuant to Section 10.

11.6.2. US Ecology shall analyze samples from all monitoring wells, in accord with Permit Condition 11.2, and their concentrations shall be reported to the Director in accord with Permit condition 11.3.

12A SUMMARY

This section of the Permit applies to Trench 11 and any Regulated Unit after the issuance of this Permit in accordance with 40 CFR §270 as adopted by NAC 444.8632. Trench 11 is a 1.76 million cubic yard disposal trench for RCRA, Non-RCRA, and TSCA waste. All waste must be disposed in accordance with Nevada state law as adopted by reference in NAC 444.8632. The Detection Monitoring Program set forth in Section 10 will be used to determine whether a release from the Regulated Unit(s)¹ has occurred. In the event it is determined that a release has occurred from a regulated unit, US Ecology will be required to prepare and implement a Corrective Action Program that satisfies the requirements of 40 CFR §264.100. Any document submitted in support of a Corrective Action Program required under this part shall be adopted by reference as if fully set forth herein.

12A.1 GROUNDWATER PROTECTION STANDARDS WELL LOCATION, INSTALLATION AND CONSTRUCTION

US Ecology shall maintain the ground-water monitoring system required by Section 10 of this Permit.

12A.1.1 US Ecology shall install additional ground-water monitoring wells at locations as specified by the Division below: [40 CFR §264.100(a)(3) and (d)]

Table 1

Well No.		Location
1	Reserved	
2		
3		
4		

12A.1.2 US Ecology shall (construct and) maintain the monitoring wells identified in Permit Condition 12A.1, in accordance with the plans and specifications meeting the requirements of 40 CFR §264.97(c). They shall consist of design drawings and design criteria applicable to all wells, as well as individual well specifications identifying depth, and location of screened intervals.

12A.1.3 All wells deleted from the monitoring program shall be plugged and abandoned in accordance with Permit Section 10. Well plugging and abandonment methods and certification shall be submitted to the Administrator within 90 days from the date the wells are removed from the monitoring program.

12A.1.4 Groundwater Protection Standard(s)

¹ 40 CFR §264.90(a)(2) All solid waste management units must comply with the requirements in §264.101. A surface impoundment, waste pile, and land treatment unit or landfill that receives hazardous waste after July 26, 1982 is hereinafter referred to as a "Regulated Unit". Accordingly, Trench 10 meets the definition of a Regulated Unit. As this Unit is also a SWMU, the Division has opted to address any releases and associated corrective action(s) for Trench 10 as a SWMU in accordance with Section 12B of this Permit.

US Ecology shall implement a corrective action program to ensure that regulated units comply with the ground-water protection standards. [40 CFR §264.100(d)] The following hazardous constituents and their concentration limits comprise additional ground-water protection standards: [40 CFR §264.93 and §264.94]

Table 2

Constituent		Concentration
1	Reserved	
2		
3		
4		
5		

12A.1.5 US Ecology shall monitor the wells identified in Table 1 and at the point of compliance, and any wells between the point of compliance and the facility boundary. [40 CFR §264.95 and §264.100(d)]

12A.1.6 US Ecology shall monitor for the hazardous constituents identified in Table 2 during the compliance period. [40 CFR §264.93]

12A.2 CORRECTIVE ACTION PROGRAM

12A.2.1 US Ecology shall at a minimum submit the documents in Permit condition 12A.9 within 90 days of a confirmed exceedence of the Groundwater Protection Standards of Permit Section 10. US Ecology shall also submit any other documents as required by the Division in a manner consistent with establishing a timely Corrective Action Program.

12A.2.2 US Ecology shall begin and complete corrective action within a period specified by the Division. [40 CFR §264.100(c)]

12A.2.3 US Ecology shall implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits (as required under Permit Condition 12A.2.4 at the compliance point by removing the hazardous waste constituents or by treating them in place. [40 CFR §264.100(b)]

12A.2.4 US Ecology shall conduct a corrective action program to remove or treat in place any hazardous constituents that exceed concentration limits in ground water between the compliance point and the down gradient facility property boundary, in accordance with the procedures approved by the Division. [40 CFR §264.100(e)]

12A.2.5 If the ground-water protection standard is met during the compliance period, US Ecology shall continue corrective action to the extent necessary to ensure that the ground-water protection standard is not exceeded. If corrective action is required beyond the compliance period, it must continue until the ground-water protection standard has not been exceeded for three consecutive years. [40 CFR §264.100(f)]

12A.3 SAMPLING AND ANALYSIS PROCEDURES

US Ecology shall follow the techniques and procedures of Permit Section 10 when obtaining and analyzing samples from the ground-water monitoring wells described in Permit Condition 12A.1 [40 CFR §264.97(d) and (e)]

12A.3.1 Samples shall be collected using the techniques described in Permit Section 10.

12A.3.2 Samples shall be preserved and shipped (when shipped off site for analysis)], in accordance with the procedures specified in the Groundwater Monitoring Plan.

12A.3.3 Samples shall be analyzed in accordance with the procedures specified in the Groundwater Monitoring Plan.

12A.3.4 Samples shall be tracked and controlled using the chain-of-custody procedures specified in the Groundwater Monitoring Plan.

12A.3.5 Field Sampling equipment shall be calibrated in accordance with the manufacturers guidelines for each piece of equipment. Manufacturers guidelines for each field-sampling device shall be maintained at the facility. The calibration data shall be recorded and maintained as part of the operating record of the facility.

12A.4 ELEVATION OF THE GROUND-WATER SURFACE

US Ecology shall determine the elevation of the ground-water surface as described in Permit Section 10. [40 CFR §264.97(f)]

12A.5 STATISTICAL PROCEDURES

When evaluating the monitoring results to determine the effects of corrective action measures, US Ecology shall:

[reserved]

12A.6 MONITORING PROGRAM AND DATA EVALUATION

US Ecology shall establish and implement a ground-water monitoring program to demonstrate the effectiveness of the corrective action program. Ground-water monitoring shall be conducted and shall be as effective as the program for compliance monitoring under 40 CFR §264.97 and 40 CFR §264.99. US Ecology shall determine ground-water quality as follows:

12A.6.1 US Ecology shall collect, preserve and analyze samples in accordance with Permit Section 10.

12A.6.2 US Ecology shall determine the concentrations of the hazardous constituents in Permit Condition 12A.6.3, throughout the compliance period and any extensions due to corrective action implementation, to demonstrate conformance with the ground-water protection standard. [40 CFR §264.96] US Ecology shall determine the concentration of hazardous constituents in ground water at each monitoring well at the compliance point, at least quarterly. [40 CFR §264.100(d)]

12A.6.3 US Ecology shall analyze samples from all monitoring wells at the compliance point for all constituents contained in 40 CFR 264, Appendix IX (excluding dioxin/furans) at least once every two years to determine if additional hazardous constituents are present in the uppermost aquifer. If US Ecology finds additional hazardous constituents present (*i.e.*, not listed in this section), their concentrations shall be reported to the Division in writing within seven days from completion of the analysis.

12A.6.4 US Ecology shall determine the ground-water flow rate and direction in the uppermost aquifer at least annually. [40 CFR §264.98(e)]

12A.6.5 US Ecology shall statistically compare the measured concentration of each monitored hazardous constituent with the corresponding concentration limit specified in the ground-water protection standard each time ground-water quality is determined in accordance with Permit Condition 12A.5. US Ecology must compare the ground-water quality measured at each point of the compliance monitoring well and any other specified wells in accordance with the procedures specified in Permit Condition 12A.5.

12A.7 RECORDKEEPING AND REPORTING

12A.7.1 US Ecology shall enter all monitoring, testing and analytical data obtained, according to Permit Condition 12A.6., in the operating record. The data must include all computations, calculated means, variances, and results of the statistical test(s) that the Division has specified. [40 CFR §264.73(b)(6)]

12A.7.2 US Ecology shall report, in writing, semi-annually to the Division on the effectiveness of the corrective action program. These reports shall be submitted on the dates in Permit Attachment 1 of each year until the corrective action program has been completed. [40 CFR §264.100(g)]

12A.7.3 US Ecology shall submit the analytical results required by Permit Conditions 12A.4, 5, 6 and 7 in accordance with the following schedule:

Bi-Annual Period		Due Date
1	January 1-June 30	September 30
2	July 1 – December 31	March 30

12A.8 REQUEST FOR PERMIT MODIFICATION

If US Ecology or the Division determines that the corrective action program established by this Permit no longer satisfies regulatory requirements, then US Ecology must submit an application for a permit modification within 90 days to make any appropriate changes to the program. [40 CFR §264.100(h)]

12A.9 PERMIT ATTACHMENTS REFERENCED ABOVE

	Document	Due Date
1	Permit Attachment 1 Corrective Action Program	As required
2	Permit Attachment 2 Sampling and Analysis Plan	As required
3	Permit Attachment 3 Statistical Procedures	As required
4	Reserved	As required

12B SUMMARY AND APPLICABILITY

The objective of the corrective action program at the hazardous waste management facility of US Ecology is to evaluate the nature and extent of releases of hazardous waste and/or constituents, and if necessary, implement corrective measures to protect human health and the environment. US Ecology is required to implement corrective action in accordance with 40 CFR §264.101 and the conditions of this Permit. US Ecology shall follow applicable guidance, including but not limited to the RCRA Corrective Action Plan, EPA 520-R-94-004, dated May 1994 (or most recent version). US Ecology shall conduct the following Corrective Actions for release(s) from formerly used disposal areas (Trenches 1 through 9 and 10) within the facility boundaries as specified below.

12B.1 AUTHORITY

40 CFR §264.101, adopted by the Division in NAC 444.8632, requires that permits issued by the State of Nevada must address corrective action for releases of hazardous waste including hazardous constituents from any Solid Waste Management Unit (SWMU) at the facility, regardless of when the waste was placed in the unit. NAC 445A.121 sets standards applicable to all waters of the state and will be used to evaluate the potential impacts of releases. NRS 445A.575 and 445A.465 are the statutes, which define the authority of the Division to regulate the discharge of hazardous constituents to the waters of the state. NRS 445A.400 defines pollutant and NRS 459.429 defines "hazardous substance." Also, Section 301(c) of the (Federal) Comprehensive Environmental Response, Compensation, and Liability Act of 1980 defines the area under the facility to be "natural resources managed or controlled" by the State of Nevada.

12B.2 CORRECTIVE ACTION SUMMARY AND HISTORY

The Permit issued July 24, 1988 by NDEP, contained requirements for US Ecology to conduct a RCRA Facility Investigation (RFI) based on the findings of the RCRA Facility Assessment (RFA) conducted by Jacobs Engineering Group Inc., April 1987, under contract to EPA Region IX. The RFA identified six (6) Solid Waste Management Units (SWMUs) listed herein. The Permit combined site characterization and groundwater monitoring well installation in the RFI process and the early work centered on site characterization. On August 20, 1990, US Ecology submitted a RFI Workplan designed to investigate the potential for a release from the SWMUs, to meet the requirements of the Permit and comments by EPA and NDEP. The RFI Workplan was approved by EPA on September 20, 1990. The RFI report, submitted by US Ecology April 13, 1992, details the results of the approved RFI Workplan, NDEP found that portions of the RFI report were deficient. The corrective action objectives were:

Units identified as SWMUs are in the April 1987 RFA. The April 1987, Jacobs Engineering Group, RFA contains additional information on each SWMU listed. The August 20, 1990 RFI Workplan was designed to determine the source and the lateral and vertical extent of any release from each of these SWMUs. The RFI report and subsequent sampling events in the vadose zone monitoring points clearly show there has been a release of gaseous contaminants to the subsurface. The Interim Measures Plan contained in this Permit confirmed the transferal of gaseous contaminants release to groundwater. US Ecology has implemented the CMS Implementation plan dated March 24 1994 that was submitted for the PCB Draining and Flushing Area.

US Ecology has submitted documentation in support of Corrective Action activities at the facility and these are listed below. Refer to Section 12B.3 of this Permit for required corrective action. The Division has approved the Corrective Measures Study Report and all prior documents.

12.B.2.1 Documents submitted in support of the Corrective Action activities at the facility are:

1. RFI Workplan Nov 1998
2. RFI Report Dec 1998
3. Current Conditions Report (CCR) Sept 1998
4. CMS Workplan Feb 1999
5. Well Abandonment and Installation Report Aug 2003
6. Evaluation of Groundwater and Vadose zone Monitoring Network Nov 2000
7. Recommendations for SVE Well Placement as a part of Corrective Measures Study Report Dec 2002
8. Corrective Measures Study Report of April 2003

12B.3 REQUIRED CORRECTIVE ACTION ACTIVITIES

12.B.3.1 Corrective Measures Implementation

The Permittee shall submit Corrective Measures Implementation (CMI) Plan in accordance with the schedule provided in Section 12B.6. This Plan shall address the implementation of remedial alternatives as described in the Corrective Measures Study Report of April 2003. The selected remedial alternatives include natural attenuation and/or soil vapor extraction.

12.B.3.2 Corrective Measures Implementation Schedule

In conjunction with the CMI Plan required in Section 12.B.3.1, the Permittee shall include a proposed schedule for implementation of corrective measures. The Division shall approve or modify the proposed schedule. The approved or modified schedule will be incorporated into Section 12B.6.

12B.4 CORRECTIVE ACTION FOR SWMU AND AOC

Corrective action for solid waste management units (SWMUs). US Ecology must institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in such unit.

Corrective action shall be specified in this permit in accordance with this section. This section will contain schedules of compliance for such corrective action and assurances of financial responsibility for completing such corrective action. US Ecology shall implement corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the satisfaction of the NDEP that, despite US Ecology's best efforts, the operator was unable to obtain the necessary permission to undertake such actions. US Ecology is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access may be or is denied. On-site measures to address such releases will be determined on a case-by-case basis. Assurances of financial responsibility for such corrective action must be provided

12.B.4.1 SWMUs and AOCs Identified by the RFA:

The solid waste management units (SWMUs) and areas of concern (AOCs) identified by the initial RCRA Facility Assessment, any subsequent investigations, or other means, as listed in Solid Waste Management Unit and Area of Concern Summary.

12.B.4.2 Additional SWMUs or AOCs

Any additional SWMUs or AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits, releases or other means. As used in this part of the Permit, the terms "discover", "discovery", or "discovered" refer to the date on which US Ecology or a Division representative either, (1) visually observe evidence of a new SWMU or AOC, (2) visually observe evidence of a previously unidentified release of hazardous constituents to the environment, or (3) receive information which suggests the presence of a new release of hazardous waste or hazardous constituents to the environment.

12.B.4.3 Contamination Beyond Facility Boundary

US Ecology shall implement corrective actions beyond the facility boundary where necessary to protect human health and the environment, unless US Ecology demonstrates to the satisfaction of the Division that, despite US Ecology's best efforts, as determined by the Division, US Ecology was unable to obtain the necessary permission to undertake such actions. US Ecology is not relieved of responsibility to clean up a release that has migrated beyond the facility boundary where off site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. Assurances of financial responsibility for completion of such off-site corrective action will be required.

**12B.5 NOTIFICATION AND ASSESSMENT REQUIREMENTS FOR NEWLY IDENTIFIED
SWMUS AND AOCS**

12.B.5.1 Notification

US Ecology shall notify the Division in writing, within fifteen (15) calendar days of discovery, of any additional AOCs and/or SWMUs discovered under Permit Condition 12.B.4.2. The notification shall include, at a minimum, a unique sequential identification number for the SWMU or AOC, the location of the SWMU or AOC, and all available information pertaining to the nature of the release (e.g., media affected, hazardous constituents released, magnitude of release, etc.).

12.B.5.2 Assessment Report

US Ecology shall prepare and submit to the Division, within ninety (90) calendar days of notification, an Assessment Report (AR) for each SWMU or AOC identified under Permit Condition 12.B.4.2. At a minimum, the AR shall provide the following information:

- 1) The unique sequential identification for the SWMU or AOC.
- 2) Location of unit(s) on a topographic map of appropriate scale such as required under §270.14(b)(19).
- 3) Designation of type and function of unit(s).
- 4) General dimensions, capacities and structural description of unit(s) (supply any available plans/drawings).
- 5) Dates the unit(s) operated.
- 6) Specification of all wastes that have been managed at/in the unit(s) to the extent available. Include any available data on 40 CFR §261, Appendix VIII or 40 CFR 264 Appendix IX constituents contained in the wastes.
- 7) All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (including groundwater, soil, air, surface water, and/or sediment data).

12.B.5.3 Division Determination

The Division shall determine the need for further investigations at the SWMUs or AOCs covered in the AR. If the Division determines that such investigations are needed, US Ecology shall be required to prepare a plan for such investigations as required by the Division. If the Division determines further investigation of a SWMU or SWMUs or AOC is required, US Ecology will submit a modification to the Permit in accordance with 40 CFR §270 Subpart D.

12B.6 COMPLIANCE SCHEDULE

Item		Date
1	Submittal of a Corrective Measures Implementation Plan	Within 180 days of issuance of this Permit
2	Reserved	
3	Reserved	
4	Reserved	

**12B.7 SOLID WASTE MANAGEMENT UNIT(S) AND AREA(S) OF CONCERN SUMMARY
TABLE**

List of All Solid Waste Management Units (SWMUs), Areas of Concern (AOCs)	
SWMU/A OC No/Letter	SWMU/AOC Name
1	Trench 1
2	Trench 2
3	Trench 3
4	Trench 4
5	Trench 5
6	Trench 6
7	Trench 7
8	Trench 8
9	Trench 9
10	Low Temperature Thermal Desorption (LTTD) System and associated Tank Storage
11	Dry Hazardous Waste Storage Areas (DHWSA) 1 & 2
12	Waste Consolidation and Storage Areas (WCSA) 1 & 2
13	PCB Building and associated Tank Storage
14	Treatment Tanks 1, 2 & 3
15	Truck Pad Storage Area
16	Truck Wash Pad
17	Reserved
18	Reserved
19	Reserved
20	Reserved
21	Reserved
Units Regulated Under 40 CFR 264 (RCRA-regulated units)	
SWMU/A OC No/Letter	SWMU/AOC Name
RCRA 1	Trench 10
RCRA 2	Trench 11
RCRA 3	Trench 12 (If Constructed)
RCRA 4	Reserved
SWMUs and AOCs Requiring No Further Action at this Time	

**SECTION 12(B) CORRECTIVE ACTION FOR SOLID
WASTE MANAGEMENT UNITS & AREAS OF
CONCERN**

SWMU/A OC No/Letter	SWMU/AOC Name
NFA 1	The "Terminator"
SWMUs and AOCs Requiring a RCRA Facility Investigation (RFI)	
SWMU/A OC No/Letter	SWMU/AOC Name
RFI 1	Reserved
SWMUs and AOCs Requiring a Corrective Measures Study	
SWMU/A OC No/Letter	SWMU/AOC Name
CMS 1	Reserved
SWMUs and AOCs Requiring a Corrective Measures Implementation Plan	
RCRA 1-9	Trenches 1 through 9
RCRA 10	Trench 10
RCRA #	Reserved
SWMUs and AOCs in Corrective Action	
SWMU/A OC No/Letter	SWMU/AOC Name
1	Trench 1
2	Trench 2
3	Trench 3
4	Trench 4
5	Trench 5
6	Trench 6
7	Trench 7
8	Trench 8
9	Trench 9
RCRA 1	Trench 10
SWMUs and AOCs Requiring Land Use Controls	
SWMU/A OC No/Letter	SWMU/AOC Name
1	Trench 1
2	Trench 2

**SECTION 12(B) CORRECTIVE ACTION FOR SOLID
WASTE MANAGEMENT UNITS & AREAS OF
CONCERN**

3	Trench 3
4	Trench 4
5	Trench 5
6	Trench 6
7	Trench 7
8	Trench 8
9	Trench 9
RCRA 1	Trench 10
SWMUs and AOCs Transferred to Another Environmental Program	
SWMU/AO C No/Letter	SWMU/AOC Name
TRANS 1	Reserved

**SECTION 13
POST CLOSURE REQUIREMENTS**

13. SUMMARY

This Section applies to Trenches 1 through 9 currently undergoing corrective action, the currently closed Trench 10, and will apply to currently operating Trench 11 at closure, and Trench 12 when closed if it is constructed.

13.1. UNIT IDENTIFICATION

US Ecology shall provide post-closure care for the following hazardous waste management units, subject to the terms and conditions of this Permit, and as described as follows:

Table 1

Type of Waste Unit	Unit Description	Max Waste Inventory	Waste Descriptions	Date of Certification of Closure
1 Landfill	Trench 10	~ 824,638 yd ³	Various	8/8/97
2 Landfill	Trench 11	~2.36(10 ⁶) yd ³	RCRA and TSCA	N/A
3 Landfill	Trench 12	~1.20(10 ⁶) yd ³	RCRA and TSCA	N/A
4 Reserved	--	--	--	--
5 Reserved	--	--	--	--
6 Reserved	--	--	--	--

13.2. POST-CLOSURE PROCEDURES AND USE OF PROPERTY

13.2.1. US Ecology shall conduct post-closure care for each hazardous waste management unit listed in Permit Condition 13.1 above, to begin after completion of closure of the unit and continue for 30 years after the date of closure of the last unit listed above, except that the 30-year post-closure care period may be shortened upon application and demonstration approved by the Director that the facility is secure, or may be extended by the Director if he finds this is necessary to protect human health and the environment. [40 CFR §264.117(a)]

13.2.2. US Ecology shall maintain and monitor the ground-water as required by either Section 10 or 11 and comply with all other applicable requirements of 40 CFR Part §264 Subpart F as defined by Permit Section 10 during the post-closure period. [40 CFR §264.117(a)(1)]

13.2.2.1. US Ecology shall comply with the requirements for landfills, as follows: [40 CFR §264.310(b)]

13.2.2.2. US Ecology shall comply with the Post Closure requirements of Permit Application Section 17 Post Closure Plan.

13.2.2.3. Maintain the integrity and effectiveness of the final cover, including making repairs to the cap, as necessary, to correct the effects of settling, subsidence, erosion, or other events;

13.2.2.4. Maintain and monitor the ground-water monitoring system and comply with all other applicable requirements of 40 CFR Subpart F;

13.2.2.5. Prevent run-on and run-off from eroding or otherwise damaging the final cover; and

13.2.2.6. Protect and maintain surveyed benchmarks used in complying with the surveying and recordkeeping requirements of 40 CFR §264.309.

13.2.2.7. US Ecology shall annually survey the elevation of the closure caps to verify the cap is not eroding or otherwise compromised and submit the results to NDEP.

13.2.3. US Ecology shall comply with all security requirements, as specified in Permit Application, Section II.A. [40 CFR §264.117(b)]

13.2.4. US Ecology shall not allow any use of the units designated in Permit Condition 13.1 which will disturb the integrity of the final cover, liners, any components of the containment system, or the function of the facility's monitoring systems during the post-closure care period. [40 CFR §264.117(c)]

13.2.5. US Ecology shall implement the Post-Closure Plan, Permit Application Section 17. All post-closure care activities must be conducted in accordance with the provisions of the Post-Closure Plan. [40 CFR §264.117(d) and §264.118(b)]

13.2.6. Inspections

US Ecology shall inspect the components, structures, and equipment at the site in accordance with the Inspection Schedule, Permit Application Section 17. [40 CFR §264.117(a)(1)(ii)]

13.3. NOTICES AND CERTIFICATION

13.3.1. The state of Nevada has been transferred by patent in fee simple terms the parcel of land described as MDM T13S R47E, Sec. 35 NW ¼ NE ¼, NE ¼ NW ¼. At final closure of the facility inclusive of all hazardous waste disposal landfills the NDEP will provide note as required 40 CFR §264.117.

13.3.2. No later than 60 days after certification of closure of each Permitted hazardous waste disposal unit, US Ecology shall submit to the Director a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, US Ecology shall identify the type, location, and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records that have been kept. [40 CFR §264.119(a)]

13.3.3. Within 90 days of certification of closure of each hazardous waste disposal unit, the Division shall:

13.3.3.1. Record, in accordance with Nevada law, a notation on the deed to the facility property -- or on some other instrument that is normally examined during the title search -- that will in perpetuity notify any potential purchaser of the property that:

- i. The land has been used to manage hazardous wastes;
- ii. Its use is restricted under 40 CFR Part §264 Subpart G regulations; and
- iii. The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility have been filed with the Director and the local zoning authority with jurisdiction over local land use.

13.3.4. If US Ecology or any subsequent owner or operator of the land upon which the hazardous waste disposal unit is located, wishes to remove hazardous wastes and hazardous waste residues, the liner, if any; or contaminated soils, then he shall request a modification to this post closure Permit in accordance with the applicable requirements in 40 CFR Parts §§124 and 270. US Ecology or any subsequent operator of the land shall demonstrate that the removal of hazardous wastes will satisfy the criteria of 40 CFR §264.117(c). [40 CFR §264.119(c)]

13.3.5. No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, US Ecology shall submit to the Director, by registered mail, a certification that the post-closure care for the hazardous waste disposal unit was performed in accordance with the specifications in the approved Post-Closure Plan. US Ecology and an independent Nevada registered professional engineer must sign the certification. Documentation supporting the independent, registered professional engineer's certification must be furnished to the Director upon request until the Director releases US Ecology from the financial assurance requirements for post-closure care under 40 CFR §264.145(1). [40 CFR §264.120]

13.4. FINANCIAL ASSURANCE

13.4.1. US Ecology shall maintain financial assurance during the post-closure period and comply with Permit Application Section 18. [40 CFR §264.145]

13.4.2. US Ecology shall demonstrate to the Director that the value of the financial assurance mechanism exceeds the remaining cost of post-closure care, in order for the Director to approve a release of funds. [40 CFR §264.145(a)(10)]

13.4.3. US Ecology or any other person authorized to conduct post-closure care shall submit itemized bills to the Director when requesting reimbursement for post-closure care. [40 CFR §264.145(a)(11)]

13.4.4. US Ecology shall re-calculate the post-closure cost estimate based on the conditions in this Permit and

submit to the NDEP 60 days after the effective date of the Permit renewal. In the event of a change in the facility design or operation, US Ecology shall re-calculate the post-closure cost estimate and submit it to NDEP within 60 days after the effective date of the change. Any required adjustments to the amount of financial assurance required shall be made after the post-closure cost estimate is revised.

13.5. POST-CLOSURE PERMIT MODIFICATIONS

US Ecology must request a Permit modification to authorize a change in the approved Post-Closure Plan. This request must be in accordance with applicable requirements of Permit condition 1.2, and must include a copy of the proposed amended Post-Closure Plan for approval by the Director. US Ecology shall request a Permit modification whenever changes in operating plans or facility design affect the approved Post-Closure Plan, there is a change in the expected year of final closure, or other events occur during the active life of the facility that affect the approved Post-Closure Plan. US Ecology must submit a written request for a Permit modification at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the Post-Closure Plan. [40 CFR §264.118(d)]

14. SUMMARY

US Ecology shall comply with the Financial Assurance requirements of this section, and establish and/or maintain a funding mechanism for the facility for Closure, Post Closure and any required Corrective Action measures including an Insurance Policy to cover Sudden/Non-Sudden Liability for the facility. At this time, the facility is proposed to be closed with post closure monitoring and care and as such shall include a funding mechanism for the post closure of the facility in accordance with the Closure Plan and state requirements.

14.1 APPLICABILITY

The facility is owned by the state of Nevada, and is leased to American Ecology, Inc.. As such, the facility is exempt from complying with 40 CFR §264 Subpart H requirements, except as provided otherwise in this Permit. Therefore, the Director has imposed alternative requirements for financial assurance set out in this Permit or in an enforceable document (as defined in 40 CFR §270.1(c)(7)), where the Director:

1. Prescribes alternative requirements for the regulated unit or units under § 264.90(f) and/or § 264.110(d) as adopted by NAC 444.8632; or
2. Finds NAC 444.846 applies.

14.2 MODIFICATIONS

14.2.1. Changes or modifications to the Financial Assurance requirements affecting the facility shall comply with the requirement of Permit Condition 1.2.

Definitions:

1. *Closure plan* means the plan for closure prepared in accordance with the requirements of §264.112.
2. *Current closure cost estimate* means the most recent of the estimates prepared in accordance with §264.142 (a), (b), and (c).
3. *Current post-closure cost estimate* means the most recent of the estimates prepared in accordance with §264.144 (a), (b), and (c).
4. *Post-closure plan* means the plan for post-closure care prepared in accordance with the requirements of §§264.117 through 264.120.

14.3 FINANCIAL ASSURANCE FOR FACILITY CLOSURE, POST-CLOSURE AND CORRECTIVE ACTION

US Ecology shall demonstrate continuous compliance with 40 CFR §264.143, §264.145, §264.146 by following the Financial Assurance procedures of the Permit Application and by providing documentation of financial assurance, as required by 40 CFR §264.151 or §264.149, in at least the amount of the cost estimates required by Permit Condition 2.13. Changes in financial assurance mechanisms must be approved by the Director pursuant to 40 CFR §264.143, §264.145 or §264.149 and NAC 444.8632 in accordance with Permit Condition 1.2. US Ecology shall comply with both the Financial Assurance section of the Permit Application and those requirements below.

14.4 INCAPACITY OF OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS

14.4.1. US Ecology must notify the Regional Administrator by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming US Ecology or American Ecology as a debtor, within 10 days after commencement of the proceeding.

14.4.2. US Ecology will be deemed to be without the required financial assurance or liability coverage in the event of: bankruptcy of the issuing institution, or a suspension or revocation of the authority of the institution to issue the surety bond, letter of credit, or insurance policy. In this event, US Ecology shall establish other financial assurance or liability coverage within 60 days after notification as specified in Permit condition 14.4.1.

14.5 COST ESTIMATE FOR CLOSURE

US Ecology shall maintain a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in §§264.111 through 264.115 and applicable closure requirements in §§264.178, 264.197, 264.228, 264.258, 264.280, 264.310, 264.351, 264.601 through 264.603, and 264.1102.

1. The estimate shall equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see §264.112(b)); and
2. The closure cost estimate shall be based on the costs to US Ecology of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of Parent Corporation in §264.141(d)). US Ecology may use costs for on-site disposal if it can be demonstrated that on-site disposal capacity will exist at all times over the life of the facility.
3. The closure cost estimate may not incorporate any salvage value that may be realized with the sale of hazardous wastes, or non-hazardous wastes if applicable under §264.113(d), facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure.
4. US Ecology may not incorporate a zero cost for hazardous wastes, or non-hazardous wastes if applicable under §264.113(d), that might have economic value.

14.5.1.1. During the active life of the facility, US Ecology must adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with §264.143 and this section. The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its Survey of Current Business, as specified in §264.142(b).

1. Adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.
2. During the active life of the facility, US Ecology shall revise the closure cost estimate no later than 30 days after the Director has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in 14.5.5.1.

14.5.1.2. US Ecology must keep the following at the facility during the operating life of the facility:

1. The latest closure cost estimate prepared in accordance with 14.5 and, when this estimate has been adjusted in accordance with 14.5.1.1.

14.6 FINANCIAL ASSURANCE FOR CLOSURE

US Ecology must establish financial assurance for closure of the facility and comply with the requirements specified below.

14.6.1. Closure Fund

14.6.1.1. US Ecology may satisfy the requirements of this section by establishing a closure fund, which conforms to the requirements of this section, and submitting an originally signed duplicate of any agreement to the Director.

14.6.1.2. Payments into the fund must be made by US Ecology over the term of the current RCRA permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period complies with the Directors requirements; this period is hereafter referred to as the "pay-in period." The payments into the closure fund must be made as follows:

- i. If US Ecology establishes a fund, and the value of that fund is less than the current closure cost estimate. The amount of the current closure cost estimate still to be paid into the fund must be paid in over the pay-in period as defined by the Director. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made.

- 14.6.1.3. US Ecology may accelerate payments into the fund or he may deposit the full amount of the current closure cost estimate at the time the fund is established. However, he must maintain the value of the fund at no less than the value that the fund would have if payments were made as specified in paragraph 14.6.1.2 of this section.
- 14.6.1.4. After the pay-in period is completed, or whenever the current closure cost estimate changes, US Ecology must compare the new estimate with the most recent annual valuation of the fund. If the value of the fund is less than the amount of the new estimate then US Ecology, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit equals the amount of the current closure cost estimate, or obtain other financial assurance as necessary to cover the difference.
- 14.6.1.5. If the value of the fund is greater than the total amount of the current closure cost estimate, US Ecology may submit a written request to the Director for release of the amount in excess of the current closure cost estimate.
- 14.6.1.6. If US Ecology substitutes other financial assurance as specified in this section for all or part of the fund, he may submit a written request to the Director for release of the amount in excess of the current closure cost estimate covered by the fund.
- 14.6.1.7. Within 60 days after receiving a request from US Ecology for release of funds as specified in 14.6.1.8 of this section, the Director will release to US Ecology such funds as the Director specifies in writing.
- 14.6.1.8. After beginning partial or final closure, US Ecology or another person authorized to conduct partial or final closure may request reimbursements for partial or final closure expenditures by submitting itemized bills to the Director. Reimbursements may be only be made for partial closure if sufficient funds are remaining in the fund to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for partial or final closure activities, the Director will make reimbursements in those amounts as the Director specifies in writing, if the Director determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the Director has reason to believe that the maximum cost of closure over the remaining life of the facility will be greater than the value of the fund, he may withhold reimbursements of such amounts, as he deems prudent. Until he determines, in accordance with §264.143(i) that US Ecology is no longer required to maintain financial assurance for final closure of the facility. If the Director does not make such reimbursements, he will provide US Ecology with a detailed written statement of reasons.
- 14.6.1.9. The Director will agree to termination of the fund when:
- i. US Ecology substitutes alternate financial assurance; or

- ii. The Director releases US Ecology from the requirements of this section in accordance with §264.143(i).

14.6.2. Use of multiple financial mechanisms

US Ecology may satisfy the requirements of this section by establishing more than one financial mechanism for the facility. These mechanisms must be limited to funds, surety bonds guaranteeing payment into a fund, and insurance. The Director may use any or all of the mechanisms detailed in 40 CFR §264.143 or NAC 444.846 to provide for closure of the facility.

14.6.3. Release of US Ecology from the requirements of this section

Within 60 days after receiving certifications from US Ecology and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the Director will notify US Ecology in writing that US Ecology is no longer required by this section to maintain financial assurance for final closure of the facility. Unless the Director has reason to believe that final closure has not been in accordance with the approved closure plan. The Director shall provide US Ecology a detailed written statement of any such reason to believe that closure has not been in accordance with the approved closure plan.

14.7 COST ESTIMATE FOR POST-CLOSURE

14.7.1. The post-closure cost estimate must be based on the costs to US Ecology of hiring a third party to conduct post-closure care activities. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of Parent Corporation in §264.141(d)).

14.7.2. The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under §264.117.

14.7.3. During the active life of the facility, US Ecology must adjust the post-closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with this section. Adjustment is made by multiplying the post-closure cost estimate by the inflation factor. The result is the adjusted post-closure cost estimate.

14.7.4. During the active life of the facility, US Ecology must revise the post-closure cost estimate within 30 days after the Director has approved the request to modify the post-closure plan, if the change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in §264.144(b).

14.7.5. US Ecology must keep the following at the facility during the operating life of the facility:

1. The latest post-closure cost estimate prepared in accordance with 14.7 and,
2. When this estimate has been adjusted in accordance with 14.7.4, the latest adjusted post-closure cost estimate.

14.8 FINANCIAL ASSURANCE FOR POST-CLOSURE

US Ecology is the operator of a hazardous waste management unit subject to the requirements of §264.144 and as such must establish financial assurance for post-closure care in accordance with the approved post-closure plan for the facility 60 days prior to the initial receipt of hazardous waste or the effective date of the regulation, whichever is later. US Ecology must choose from the following options:

14.8.1.1. Post-Closure fund

1. US Ecology must satisfy the requirements of this section by establishing a post-closure fund to comply with NAC 444.846, which conforms to the requirements of this section, and submitting an originally signed duplicate of any agreement to the Director.
2. The wording of the agreement must be approved by the Director.

14.8.1.2. Payments into the fund must be made by US Ecology over the term of the pay in period or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter. The payments into the post-closure fund must be as required by the Director.

1. If US Ecology establishes a fund as described in §265.145(a), and the value of that fund is less than the current post-closure cost estimate when a permit is issued for the facility, the amount of the current post-closure cost estimate still to be paid into the fund must be paid in over the pay-in period as defined in 14.6.1.2. Payments must continue to be made no later than 30 days after each anniversary date of the first payment as required by the Director.
2. US Ecology may accelerate payments into the fund or he may deposit the full amount of the current post-closure cost estimate at the time the fund is established. However, he must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in 1 of this section.
3. If US Ecology establishes a post-closure fund after having used one or more alternate mechanisms specified in this section or in §265.145, the first payment must be in at least the amount that the fund would contain if the fund were established initially and annual payments made according to specifications of this paragraph and §265.145(a) of this chapter, as applicable.
4. After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, US Ecology must compare the new estimate with the most recent annual valuation of the fund. If the value of the fund is less than the amount of the new estimate, US Ecology, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance as to cover the difference.

5. During the operating life of the facility, if the value of the fund is greater than the total amount of the current post-closure cost estimate, US Ecology may submit a written request to the Director for release of the amount in excess of the current post-closure cost estimate.
6. If US Ecology substitutes other financial assurance as specified in this section for all or part of the fund, he may submit a written request to the Director for release of the amount in excess of the current post-closure cost estimate covered by the fund.
7. Within 60 days after receiving a request from US Ecology for release of funds as specified in paragraph 6 or 7 of this section, the Director may release to US Ecology such funds as the Director specifies in writing.
8. During the period of post-closure care, the Director may approve a release of funds if US Ecology demonstrates to the Director that the value of the fund exceeds the remaining cost of post-closure care.
9. US Ecology or any other person authorized to conduct post-closure care may request reimbursements for post-closure care expenditures by submitting itemized bills to the Director. Within 60 days after receiving bills for post-closure care activities, the Director will make reimbursements in those amounts as the Director specifies in writing, if the Director determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Director does make such reimbursements, he will provide US Ecology with a detailed written statement of reasons.

14.8.2. The Director will agree to termination of the fund when:

- i. US Ecology substitutes alternate financial assurance as specified in this section; or
- ii. The Director releases US Ecology from the requirements of this section in accordance with 14.8.5.

14.8.3. Post-closure insurance

1. US Ecology may satisfy the requirements of this section by obtaining post-closure insurance, which conforms to the requirements of 40 CFR Subpart H, and submitting a certificate of such insurance to the Director. US Ecology must submit the certificate of insurance to the Director at least 60 days before the anniversary date of any permit renewal. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.
2. The wording of the certificate of insurance must be identical to the wording specified in §264.151(e).
3. The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in §264.145(g). The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual

payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

4. The post-closure insurance policy must guarantee that funds will be available to provide post-closure care of the facility whenever the post-closure period begins. The policy must also guarantee that once post-closure care begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Director, to such party or parties as the Director specifies.
5. US Ecology or any other person authorized to conduct post-closure care may request reimbursements for post-closure care expenditures by submitting itemized bills to the Director. Within 60 days after receiving bills for post-closure care activities, the Director will instruct the insurer to make reimbursements in those amounts as the Director specifies in writing, if the Director determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Director does not instruct the insurer to make such reimbursements, he will provide US Ecology with a detailed written statement of reasons.
6. US Ecology must maintain the policy in full force and effect until the Director consents to termination of the policy by US Ecology. Failure to pay the premium, without substitution of alternate financial assurance as specified in this section, will constitute a significant violation of these regulations, warranting such remedy as the Director deems necessary. Such violation will be deemed to begin upon receipt by the Director of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.
7. Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.
8. The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to US Ecology and the Director. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Director and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration:
 - i. The Director deems the facility abandoned; or
 - ii. The permit is terminated or revoked or a new permit is denied; or

- iii. Closure is ordered by the Director or a U.S. District court or other court of competent jurisdiction; or
- iv. The US Ecology is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or
- v. The premium due is paid.

9. Whenever the current post-closure cost estimate increases to an amount greater than the face amount of the policy during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Director, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the Director.

10. Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer will thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.

14.8.4. The Director will give written consent to US Ecology that he may terminate the insurance policy when:

- i. US Ecology substitutes alternate financial assurance as specified in this section; or
- ii. The Director releases US Ecology from the requirements of this section in accordance with 14.8.5.

14.8.5. Release of US Ecology from the requirements of this section

Within 60 days after receiving certifications from US Ecology and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the Director will notify US Ecology in writing that US Ecology is no longer required by this section to maintain financial assurance for final closure of the facility. Unless the Director has reason to believe that final closure has not been in accordance with the approved closure plan. The Director shall provide US Ecology a detailed written statement of any such reason to believe that closure has not been in accordance with the approved closure plan.

14.9 COST ESTIMATE FOR CORRECTIVE ACTION

14.9.1. The cost estimate for corrective action must be based on the costs to US Ecology of hiring a third party to conduct corrective action activities. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of Parent Corporation in §264.141(d)).

14.9.2. The corrective action cost estimate is calculated by multiplying the annual corrective action cost estimate by the number of years of corrective action required by the Director.

14.9.3. During the active life of the facility, US Ecology must adjust the corrective action cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with this section. Adjustment is made by multiplying the corrective action cost estimate by the inflation factor. The result is the adjusted corrective action cost estimate.

14.9.4. During the active life of the facility, US Ecology must revise the corrective action cost estimate within 30 days after the Director has approved the request to modify the corrective action plan, if the change in the corrective action plan increases the cost of corrective action. The revised corrective action cost estimate must be adjusted for inflation as specified in §264.144(b).

14.9.5. US Ecology must keep the following at the facility during the operating life of the facility:

1. The latest corrective action cost estimate prepared in accordance with §264.144 (a) and (c) and,
2. When this estimate has been adjusted in accordance with § 264.144(b), the latest adjusted corrective action cost estimate.

14.9.6. Use of multiple financial mechanisms

US Ecology may satisfy the requirements of this section by establishing more than one financial mechanism. These mechanisms are limited financial mechanisms approved by the Director. The mechanisms must be approved by the Director, which must provide financial assurance for an amount at least equal to the current corrective action cost estimate. The Director may use any or all of the mechanisms in 40 CFR Subpart H to provide for corrective action at the facility.

14.9.7. Release of US Ecology from the requirements of this section

After receiving certifications from US Ecology and an independent registered professional engineer that corrective action has been completed corrective action in accordance with the approved plan, and has been approved by the Director. The Director will notify US Ecology that he is no longer required to maintain financial assurance for corrective action. Unless the Director has reason to believe that corrective action has not been in accordance with the approved corrective action plan. The Director shall provide US Ecology with a detailed written statement of any such reason to believe that corrective action care has not been in accordance with the approved corrective action plan.

14.10 USE OF A MECHANISM FOR FINANCIAL ASSURANCE OF CLOSURE, POST-CLOSURE CARE AND CORRECTIVE ACTION

US Ecology may satisfy the requirements for financial assurance for closure, post-closure care and corrective action for the facility by using a combination of either a fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee that meets the specifications for the

mechanisms in both §§264.143 and 264.145 or a equitable state mechanism approved by the Director. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial assurance of closure and of post-closure care.

14.11 LIABILITY REQUIREMENTS

US Ecology shall demonstrate continuous compliance with the requirement of 40 CFR §264.147(a) and NAC 444.8632 to have and maintain liability coverage for sudden and accidental occurrences in the amount of at least \$1 million per occurrence, with an annual aggregate of at least \$2 million, exclusive of legal defense costs. US Ecology also shall demonstrate continuous compliance with the 40 CFR §264.147(b) requirement to have and maintain liability coverage for non-sudden accidental occurrences in the amount of at least \$3 million per occurrence, with an annual aggregate of at least \$6 million, exclusive of legal defense costs. [NAC 444.8632]

14.11.1. Coverage for sudden accidental occurrences

14.11.1.1. US Ecology must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. US Ecology must have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs. This liability coverage may be demonstrated as specified in this section:

1. US Ecology may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.
 - i. Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in §264.151(i). The wording of the certificate of insurance must be identical to the wording specified in §264.151(j). The US Ecology must submit a signed duplicate original of the endorsement or the certificate of insurance to the Director. If requested by the Director, US Ecology must provide a signed duplicate original of the insurance policy.
 - ii. Each insurance policy must be issued by an insurer, which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

14.11.1.2. US Ecology shall notify the Director in writing within 30 days whenever:

- i. A claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in 14.11.1 of this section;
or

- ii. A Certification of Valid Claim for bodily injury or property damages caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between US Ecology and third-party claimant for liability coverage under 14.11.1 of this section; or
- iii. A final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against US Ecology or an instrument that is providing financial assurance for liability coverage under 14.11.1 of this section.

14.11.2. Coverage for nonsudden accidental occurrences

US Ecology must have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs. As US Ecology must meet the requirements of this section he may combine the required per-occurrence coverage levels for sudden and nonsudden accidental occurrences into a single per-occurrence level, and combine the required annual aggregate coverage levels for sudden and nonsudden accidental occurrences into a single annual aggregate level. Owners or operators who combine coverage levels for sudden and nonsudden accidental occurrences must maintain liability coverage in the amount of at least \$4 million per occurrence and \$8 million annual aggregate. This liability coverage may be demonstrated as specified below:

1. US Ecology may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.
 - i. Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in §264.151(i). The wording of the certificate of insurance must be identical to the wording specified in §264.151(j). US Ecology must submit a signed duplicate original of the endorsement or the certificate of insurance to the Director. If requested by the Director, US Ecology must provide a signed duplicate original of the insurance policy.
 - ii. Each insurance policy must be issued by an insurer, which at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.
2. US Ecology shall notify the Director in writing within 30 days whenever:

- i. A Claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in 14.11 of this section; or
- ii. A Certification of Valid Claim for bodily injury or property damages caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between US Ecology and third-party claimant for liability coverage under 14.11 of this section; or
- iii. A final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against US Ecology or an instrument that is providing financial assurance for liability coverage under 14.11 of this section.

14.11.3. Adjustments by the Director

If the Director determines that the levels of financial responsibility required by his section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility, the Director may adjust the level of financial responsibility required under this section as may be necessary to protect human health and the environment. This adjusted level will be based on the Director's assessment of the degree and duration of risk associated with the operation of the facility. In addition, if the Director determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, he may require that US Ecology comply with paragraph 14.11.2. US Ecology must furnish to the Director, within a reasonable time, any information, which the Director requests to determine whether cause exists for such adjustments of level or type of coverage. Any adjustment of the level or type of coverage for a facility that has a permit will be treated as a permit modification under 40 CFR §§270.41(a)(5) and §124.5 and comply with Permit Condition 1.2.

14.11.4. Period of coverage

Within 60 days after receiving certifications from US Ecology and an independent registered professional engineer, that final closure has been completed in accordance with the approved closure plan. The Director will notify US Ecology in writing that he is no longer required by this section to maintain liability coverage for the facility, unless the Director has reason to believe that closure has not been in accordance with the approved closure plan.

14.12 USE OF STATE-REQUIRED MECHANISMS

- 14.12.1.1. Should the Director determine State mechanisms are equivalent to the financial mechanism(s) specified in 40 CFR §264 Subpart H, or any of the above requirements. The Director may then evaluate the equivalency of the mechanisms principally in terms of the certainty of the availability of funds for the required closure and/or post-closure or corrective measure activities or liability coverage and (2) the amount of funds that will be made available.

The Director may also consider other factors, as he deems appropriate. US Ecology must submit to the Director evidence of the establishment of the mechanism together with a letter requesting that the State-required mechanism be considered acceptable for meeting the requirements of this section. The submission must include the following information:

- ✍ The facility's EPA Identification Number,
- ✍ Name, and address, and
- ✍ The amount of funds for closure or post-closure care or liability coverage assured by the mechanism

14.12.1.2. The Director will notify US Ecology of his determination regarding the mechanism's acceptability in lieu of financial mechanisms specified in 40 CFR Subpart H. The Director may require US Ecology to submit additional information as is deemed necessary to make this determination. Pending this determination, US Ecology will be deemed to be in compliance with the requirements of § 264.143, §264.145, or §264.147, as applicable.

14.12.1.3. If a State-required mechanism is found acceptable as specified in 14.12 of this section except for the amount of funds available, US Ecology may satisfy the requirements of this subpart by increasing the funds available through the State-required mechanism or using additional financial mechanisms as specified in this section or approved by the Director. The amount of funds available through the State and Federal mechanisms must at least equal the amount required by this section.