

Revised June 17, 1999

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
PERMIT FOR HAZARDOUS WASTE STORAGE AND TREATMENT

Permittee: Aptus, Incorporated  
Location: Tooele County, Utah  
EPA ID #: UTD981552177

This permit is issued by the United States Environmental Protection Agency (EPA) under authority of the Hazardous and Solid Waste Amendments (HSWA) of the Resource Conservation and Recovery Act (RCRA), Subtitle C, 42 U.S.C. 6901 et seq. and EPA regulations to Aptus, Inc. (hereafter called the Permittee), to carry out several activities associated with the operation of a hazardous waste incinerator. The facility will be located in Tooele County, 34 miles west of Grantsville, adjacent to I-80 and known as the Aragonite site. Aptus, Inc. plans to construct and operate a commercial hazardous waste incinerator.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein and the regulations specifically contained in this permit.

This permit is based on the assumption that the information submitted in the permit application submitted on July 22, 1987, and modified on April 25, 1988, and July 25, 1989, (hereafter referred to as the application) is accurate and that the facility will be constructed and operated as specified in the application. Any inaccuracies found in this information may be grounds for the termination or modification of this permit (see 40 CFR 270.41, 270.42, and 270.43) and potential enforcement action (42 U.S.C. 6925 and 6928). The Permittee must inform EPA 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.

This permit shall be effective thirty days from the service of notice of this permit, unless review is requested pursuant to 40 CFR 124.19. Once effective, this permit shall remain in effect until May 5, 2000, unless revoked and reissued under 40 CFR 270.41, terminated under 40 CFR 270.43, or continued in accordance with 270.51(a).

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Date

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Signature

Robert L. Duprey, Director  
Hazardous Waste Management Division

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HAZARDOUS AND SOLID WASTE AMENDMENTS (HWSA) PERMIT  
FOR  
SAFETY-KLEEN, ARAGONITE

I. GENERAL PERMIT CONDITIONS

I.A. EFFECT OF PERMIT

The Permittee is allowed to store and treat hazardous waste in accordance with the conditions of this permit. Any storage and treatment of hazardous waste not authorized in this permit or the Resource Conservation and Recovery Act (RCRA) Permit issued by the Utah Department of Health on March 30, 1990, is prohibited. 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 conditions 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, or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or any other federal or state law providing for protection of public health or the environment.

I.B. PERMIT ACTIONS

I.B.1. Permit modification, Revocation and Reissuance, and Termination

This permit may be modified, revoked, and reissued, or terminated, as provided 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 the Permittee, does not stay the applicability or enforceability of any permit condition.

I.B.2. Permit Renewal

This permit may be renewed as specified in 40 CFR 270.30(b) and permit condition I.D.2. 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.

I.C. 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.

I.D. DUTIES AND REQUIREMENTS

I.D.1. Duty to Comply

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit (40 CFR 270.61). Compliance with this permit does not relieve the Permittee from its duty to comply with the Land Disposal Restrictions in 40 CFR 268 or other requirements promulgated pursuant to HSWA. 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.

I.D.2. Duty to Reapply

If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee shall submit a complete application for a new permit at least 180 days prior to permit expiration.

I.D.3. Permit Expiration

Pursuant to 40 CFR 270.50, this permit shall be effective for a fixed term not to exceed ten years. As long as EPA is the permit-issuing authority, this permit and all conditions herein will remain in effect beyond the permit's expiration date, if the Permittee has submitted a timely, complete application and, through no fault of the Permittee, the Regional Administrator has not issued a new permit, as set forth in 40 CFR 270.51.

I.D.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee, 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.

I.D.5. Duty to Mitigate

In the event of noncompliance with this permit, the Permittee shall take all reasonable steps to minimize releases of hazardous wastes and constituents to the environment and shall carry out such measures, as are reasonable, to prevent significant adverse impacts on human health or the environment (270.32(b)(2)).

I.D.6. Proper Operation and Maintenance

The Permittee 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 the Permittee 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.

I.D.7. Storage

The Permittee shall comply with the storage requirements in 40 CFR 268.50 at all times.

I.D.8. Duty to Provide Information

The Permittee shall furnish, within the time specified by the Regional Administrator, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.

I.D.9. Inspection and Entry

Pursuant to 40 CFR 270.30(I), the Permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents, as may be required by law, to:

I.D.9.a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

I.D.9.b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

I.D.9.c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

I.D.9.d. 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.

I.D.10. Reporting Planned Changes

The Permittee shall give notice to the Regional Administrator, as soon as possible, of any planned physical alterations or additions to the permitted facility which may affect this permit. The Permittee must comply with the permit modification requirements concerning such alterations or additions as specified in 40 CFR 270.41.

I.D.11. Reporting Anticipated Noncompliance

The Permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

I.D.12. Transfer of Permits

This permit is not transferable, except as provided in 40 CFR 270.40. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270 and of this permit.

I.D.13. Additional wastes

If the Permittee disposes off-site any wastes subject to Subtitle C of RCRA, other than those addressed in this permit, it must notify EPA within 24 hours. EPA may modify this permit to require additional sampling and analysis of those wastes to comply with the LDR or other related activities.

I.D.14. Twenty-four Hour Reporting

I.D.14.a. The Permittee shall report to the Regional Administrator any noncompliance with this permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. The report shall include the following:

- I. Information concerning the release of any hazardous waste that may endanger public drinking water supplies.

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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 outside the facility.

I.D.14.b. 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.

I.D.14.c. A written submission shall also be provided to the Regional Administrator within five days of the time the Permittee becomes aware of the circumstances of the noncompliance. 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 Regional Administrator may waive the five-day written notice requirement in favor of a written report within 15 days.

I.D.15. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above within seven days from the time the Permittee becomes aware of the noncompliance. These instances of noncompliance include any noncompliance with the requirements of this permit and the operating requirements in the State RCRA Permit as defined in Section II.B.d. This report shall be submitted to the Regional Administrator in writing.

I.D.16. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information to the Regional Administrator, the Permittee shall promptly submit such facts or correct information.

I.E. SIGNATORY REQUIREMENT

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

I.F. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE REGIONAL ADMINISTRATOR

All reports, notifications, or other submissions which are required by this permit to be sent or given to the Regional Administrator should be sent by certified mail or hand delivered to:

Kerrigan G. Clough  
Assistant Regional Administrator  
Office of Pollution Prevention,  
State and Tribal Assistance  
Environmental Protection Agency  
999 18th Street  
Denver, Colorado 80202

I.G. CONFIDENTIAL INFORMATION

In accordance with 40 CFR 270.12, the Permittee may claim confidential any information required to be submitted by this permit.

II. DEFINITIONS

[RESERVED]

III. RECORDKEEPING

[RESERVED]

IV. WASTE RESTRICTIONS

[RESERVED]

V. SAMPLING AND ANALYSIS

[RESERVED]

VI. HSWA WASTE CODES

VI.A. The Permittee may store and treat the following HSWA waste codes:

F032 F037 F038 F039  
K140 K149 K150 K151 K156 K157 K158 K159 K160 K161  
K169 K170 K171 K172  
P127 P128 P185 P188 P189 P190 P191 P192 P194 P196  
P197 P198 P199 P201 P202 P203 P204 P205  
U271 U277 U278 U279 U280 U364 U365 U366 U367 U372  
U373 U375 U376 U377 U378 U379 U381 U382 U383 U384  
U385 U386 U387 U389 U390 U391 U392 U393 U394 U395  
U396 U400 U401 U402 U403 U404 U407 U408 U409 U410  
U411

Storage and treatment of HSWA waste codes must be in compliance with the permit conditions specified in this Permit and the State RCRA Permit.

VII. TREATMENT, STORAGE, & DISPOSAL FACILITY (TSDF)  
ORGANIC AIR EMISSIONS REQUIREMENTS

The Permittee must comply with the applicable requirements of 40 CFR Part 264, Subparts AA, BB, and CC as modified by the operating requirements specified below.

VII.A. Bulk Solids Tanks:

The bulk solids tanks (T404 A/B and T403) will normally comply with tank level 2 control requirements specified by 40 CFR 264.1084(d)(5), for a tank located inside an enclosure that is vented through a closed vent system to an enclosed combustion device. However, when the



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incinerator afterburner chamber (ABC) is less than 1400 degrees F., a backup carbon adsorption system must be used. The sludge receiving tank (T406) shall comply with the tank level 2 control requirements specified by 40 CFR 264.1084(d)(3). The Permittee shall operate the bulk solids building and tanks and the associated carbon adsorption system as follows:

1. The roll up doors of the bulk solids building must remain in the closed position at all times except for the following conditions: a) unloading waste into tanks b) managing waste with external equipment c) emergencies, and maintenance activities.

2. All other doors and openings in the bulk solids building, except designated Natural Draft Openings (NDOs), must be kept closed at all times except for maintenance and operations activities and emergencies. The list of designated NDOs is attached to this Permit (Attachment 1 of this Permit).

3. The doors on the sludge receiving tank (T406) must be kept closed at all times except for adding waste, sampling, cleaning of grizzly screens, and performing maintenance and operations activities. When pumping waste into the tank, the smallest opening that is feasible must be used to minimize fugitive VOC emissions.

4. The VOC emissions from the bulk solids tanks (T404 A/B and T403) must be captured and controlled at all times (except as allowed elsewhere in this Permit). When the incinerator is in operation at a temperature greater than or equal to 1400 deg. F. as measured in the afterburner chamber (ABC), these tanks shall be vented to the incinerator. When the temperature in the ABC is less than 1400 deg. F. (for greater than 10 minutes), the tanks must be vented through a closed vent system to the bulk solids carbon adsorption unit. This condition supersedes the requirements of 40 CFR 264.1084(d)(5). The periods when the carbon adsorption unit is utilized must be noted in the operating record.

5a. The sludge receiving tank (T406) shall be ventilated through a closed vent system to the kiln and ABC during normal plant operations (when ABC temperature is 1400 deg. F. or greater), as required under 40 CFR 264.1084(d)(3) (tank level 2 control - tanks that are vented through a closed vent system to a control device).

5b. During backup operations (when the ABC temperature is less than 1400 deg. F.) the sludge receiving tank shall not be vented through the combustion air system, but

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instead, shall be vented through the bulk solids carbon adsorption unit. The sludge receiving tank (T406) shall comply with the tank level 2 control requirements specified by 40 CFR 264.1084(d)(3).

6. The bulk solids carbon adsorption unit is a duplex, single stage design. The duplex arrangement (two single-stage absorbers in parallel operated one at a time) allows for changing out or regenerating the spent carbon of one unit, while the other unit is in operation.

The Permittee must replace Calgon BPL carbon (or equivalent specification) on an interval not to exceed the following:

43 days (1,032 hours) of operation if any operating day occurs in the months of June, July, or August.

61 days (1,464 hours) of operation for all other months.

The Permittee must replace Calgon React carbon (or equivalent specification) on an interval not to exceed the following:

22 days (528 hours) of operation if any operating day occurs in the months of June, July, or August.

37 days (888 hours) of operation for all other months.

The carbon replacement frequency is based on the April 7, 1998 Engineering Design Analysis for Backup Emissions Control Unit Report. The Permittee is prohibited from using any other type of carbon specification, unless authorized by a permit modification approved by EPA.

7. Procedure "T" testing to verify that the bulk solids building meets the criteria for a Permanent Total Enclosure, must be conducted in accordance with the procedure specified in 40 CFR 52.741, Appendix B. This testing, initially conducted on April 14, 1998, must be re-conducted annually, as specified by 40 CFR 264.1084(i)(1).

8. Carbon adsorption unit inlet VOC concentrations must be monitored by an FID detector annually to verify that the inlet VOC concentration remains similar to the concentration used in the April 7, 1998 Design Analysis Report. The annual monitoring shall consist of daily one-hour tests for a period of one week.

9. All spent carbon shall be incinerated on-site in the kiln/ABC, or at another approved incineration or recycling facility. Records of the dates the carbon is removed, placed in permitted storage, and treated must be maintained in the operating record.

10. The Permittee is not allowed the 240 hours of control device downtime for planned maintenance specified in 40 CFR 264.1087(c)(2)(i). During planned maintenance either the ABC or the carbon adsorption system must be operational and on-line.

VII.B. Liquid Tanks (T-321, T-322, T-323, T-324, T-301, T-302, T-303, T-304, T-305, T-306, T-307, T-308, T-309, T-310, T-311, T-312, and T-401):

The liquid tanks must comply with the control requirements specified by 40 CFR 264.1084(d)(3) (tank level 2 controls - tanks that are vented through a closed vent system to a control device). Two control devices will be used, the ABC and carbon adsorption canisters. When the incinerator afterburner chamber (ABC) is less than 1400 degrees F. or when the fume management system cannot accept the volume of vapor generated from the liquid tanks, the backup carbon adsorption canisters must be used.

1. The carbon adsorption canister outlets must be monitored for breakthrough every three hours of accumulated control device operation. This includes periods when vapors from the liquid tanks are vented to both the ABC and the carbon canisters. A result of 100 ppm or greater of total hydrocarbons will indicate breakthrough.

2. The Permittee must immediately replace (not to exceed 30 minutes) any carbon adsorption canisters in which breakthrough has occurred.

VII.C. Container Storage Areas

1. Level 2 containers not in DOT approved containers must be verified as having no detectable emissions (as defined in 40 CFR 265.1081) within 24 hours of receipt and every 3 months thereafter. Containers that have been demonstrated, within the preceding 12 months, to be vapor-tight, as specified by 40 CFR 264.1086(h), are exempt from this condition (e.g., tankers, direct burn vessels, etc.).

2. The addition of solidification agent to containers must not involve the active mixing of waste and agent, unless authorized by a permit modification approved by EPA.

#### VII.D. Inspection and Monitoring Requirements

1. The closed vent system between the outlet of the bulk solids and sludge receiving tanks and the inlet of the ID fans (both kiln/ABC combustion air fans and bulk solids carbon adsorption unit ID fan) will be inspected in accordance with the requirements of 40 CFR 264.1033(1)(2). These sections of the closed vent system are operated below atmospheric pressure.

2. The closed vent system between the outlet of the ID fans (both kiln/ABC combustion air fans and the bulk solids carbon absorption unit ID fan) and the control devices (ABC and carbon adsorption unit) will be inspected in accordance with the requirements of 40 CFR 264.1033(1)(1). These sections of the closed vent systems are operated at, or above, atmospheric pressure.

3. The closed vent system between the outlet of the liquid tanks (T-321, T-322, T-323, T-324, T-301, T-302, T-303, T-304, T-305, T-306, T-307, T-308, T-309, T-310, T-311, T-312, T-401) and the control devices (carbon adsorption canisters and the ABC) will be inspected in accordance with the requirements of 40 CFR 264.1033(1)(1). These sections of the closed vent systems are operated at, or above, atmospheric pressure.

4. Any defects detected by inspections and monitoring conducted under conditions VII.D.1 through 4 must be repaired in accordance with the requirements of 40 CFR 264.1033(1)(3).

#### VII.E. Record Keeping Requirements

1. The air emission control equipment design documentation must be maintained in the operating record until it is replaced or otherwise no longer in service.

2. The Permittee must maintain the records specified by 40 CFR 264.1089 (b) and (e) in the operating record for a period of at least three years.

#### VII.F. Reporting Requirements

1. As specified by 40 CFR 264.1090(b), the Permittee must submit a written report within 15 calendar days of the time that the Permittee becomes aware of any instances in which hazardous waste is managed in tanks not in compliance with the air emission controls of subpart CC,.

2. As specified by 40 CFR 264.1090(b), the Permittee must submit a semi-annual written report describing each

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occurrence of non-compliance with the operating values specified by 40 CFR 264.1035(c)(4). A report is not required for the six month period if no non-compliance with 40 CFR 264.1035(c)(4) has occurred.

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## **ATTACHMENT 1**

### **LIST OF NATURAL DRAFT OPENINGS FOR NORMAL AND BACKUP OPERATIONS**