

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT

Facility Name and Location: Sunoco Chemicals - Haverhill Plant
1019 Haverhill-Ohio Furnace Road
Haverhill, Ohio 45636

Owner(s): Aristech Chemical Corporation
1801 Market Street
Philadelphia, PA 19103

Operator(s): Sunoco, Inc. R&M
1801 Market Street
Philadelphia, PA 19103

U.S. EPA Identification Number: OHD 005 108 477

Effective Date: _____

Expiration Date: October 21, 2009

Authorized Activities:

The United States Environmental Protection Agency ("U.S. EPA") hereby issues a modified Resource Conservation and Recovery Act (RCRA) permit (hereinafter referred to as the "permit") to **Aristech Chemical Corporation (Owner) and Sunoco, Inc. (Operator)** (hereinafter referred to as the "Permittees" or addressed in the second person as "you") in connection with the hazardous waste treatment, storage, and disposal, with boilers burning hazardous waste, and associated activities at Haverhill facility in Ohio.

This permit is issued under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984 (42 USC § 6901 *et seq.*) (collectively referred to as RCRA) and U.S. EPA's regulations promulgated thereunder (codified, and to be codified, in Title 40 of the Code of Federal Regulations (40 CFR)).

Specifically, this permit addresses: (1) boilers and industrial furnaces burning hazardous wastes (40 CFR Part 266, Subpart H), (2) air emissions standards for equipment leaks

(40 CFR Part 264, Subpart BB), tanks and containers (40 CFR Part 264, Subpart CC), and (3) certain restrictions and prohibitions on land disposal of hazardous wastes in accordance with 40 CFR Part 268; and (4) other federal RCRA regulations for which the state has not yet been authorized.

The RCRA permit is comprised of both this permit, which contains the effective federal RCRA permit conditions, and the effective state RCRA permit conditions issued by the State of Ohio's RCRA program authorized under 40 CFR Part 271 (hereinafter called the "state-issued portion of the RCRA permit"). Any hazardous waste activity which requires a RCRA permit and is not included in the RCRA permit is prohibited.

Permit Approval:

On June 30, 1989, the State of Ohio received final authorization pursuant to Section 3006 of RCRA, 42 USC § 6926, and 40 CFR Part 271, to administer the pre-HSWA RCRA hazardous waste program. The State of Ohio has also received final authorization to administer certain additional RCRA requirements on several occasions since then. However, because the U.S. EPA has not yet authorized the State of Ohio to administer certain regulations, including the air emission standards for the storage facility handling hazardous wastes, recent additions to the regulations covering the land disposal restrictions (40 CFR Part 268), changes to other sections of applicable regulations, and the requirements for boilers burning hazardous fuel (known as the BIF Rule) the U.S. EPA Region 5 is issuing the RCRA permit requirements for operations at the Permittees' facility which fall under these regulations.

You must comply with all terms and conditions contained in this permit. This permit consists of all the conditions contained herein, all documents attached hereto and all documents listed or cross-referenced in these documents, approved submittals (including plans, schedules and other documents), and the applicable regulations contained in 40 CFR Parts 124, 260, 261, 262, 264, 266, 268, 270, and applicable provisions of RCRA.

This permit is based on the assumptions that the information submitted: (1) in the Permittees' Class 3 permit modification request for BIFs, and (2) in the RCRA permit renewal application dated October 10, 2002, and in any subsequent modifications to that application (hereinafter referred to as the "Application"), is accurate, and that the facility is configured, operated and maintained as specified in the permit, and as described in the permit application.

Any inaccuracies in the submitted information may be grounds for the U.S. EPA to terminate, revoke and reissue, or modify this permit in accordance with 40 CFR §§ 270.41, 270.42 and 270.43; and for enforcement action. You must inform the U.S. EPA of any deviation from, or changes in, the information in the Application that might affect your ability to comply with the applicable regulations or conditions of this permit.

Opportunity to Appeal:

Petitions for review must be submitted within 30 days after the U.S. EPA serves notice of the final permit decision. Any person who filed comments on the draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may file a petition for review only to the extent of the changes from the draft to the final permit decision. The procedures for permit appeals are found in 40 CFR § 124.19.

Effective Date:

This permit is effective as of _____ and will remain in effect until October 21, 2009, unless revoked and reissued under 40 CFR § 270.41, terminated under 40 CFR § 270.43, or continued in accordance with 40 CFR § 270.51(a).

By: _____ Date: _____
Margaret M. Guerriero, Director
Waste, Pesticides and Toxics Division

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SECTION I -- STANDARD PERMIT CONDITIONS

I.A EFFECT OF PERMIT

The RCRA permit is comprised of both this permit, which contains the effective federal RCRA permit conditions, and the effective state RCRA permit. You are hereby allowed to manage hazardous waste in accordance with this permit. Under this permit, the storage and treatment of RCRA hazardous waste must comply with all terms and conditions in this permit. Other aspects of the storage and treatment of RCRA hazardous wastes are subject to the conditions in the state-issued portion of the RCRA permit. Any hazardous waste activity, which requires a RCRA permit and is not included in the RCRA permit, is prohibited.

Subject to 40 CFR § 270.4, compliance with the RCRA permit during its term constitutes compliance for purposes of enforcement with Subtitle C of RCRA except for those requirements not included in the permit which: (1) become effective by statute; (2) are promulgated under part 40 CFR Part 268 restricting the placement of hazardous waste in or on the land; (3) are promulgated under 40 CFR Part 264 regarding leak detection systems; or (4) promulgated under subparts AA, BB, or CC of 40 CFR Part 265 limiting air emissions. (40 CFR § 270.4)

This permit does not: (1) convey any property rights or any exclusive privilege (40 CFR § 270.30(g)); (2) authorize any injury to persons or property, or invasion of other private rights; or (3) authorize 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: (1) Section 3013 or 7003 of RCRA; (2) Sections 104, 106(a), or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 USC §§ 9601 *et seq.* (commonly known as CERCLA); or (3) any other law protecting human health, welfare, or the environment.

I.B PERMIT ACTIONS

I.B.1 Permit Review, Modification, Revocation and Reissuance, and Termination

The U.S. EPA may review and modify, revoke and reissue, or terminate this permit for cause, as specified in 40 CFR § 270.41, § 270.42, and § 270.43. The U.S. EPA may also review and modify this permit, consistent with 40 CFR § 270.41, to include any terms and conditions it determines are necessary to

protect human health and the environment under Section 3005(c)(3) of RCRA. The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance on your part will not stay the applicability or enforceability of any permit condition. (40 CFR § 270.30(f))

You may request a modification of this permit under the procedures specified in 40 CFR § 270.42. You must not perform any construction associated with a Class 3 permit modification request until such modification request is granted and the modification becomes effective. You may perform construction associated with a Class 2 permit modification request beginning 60 days after submission of the request unless the Director, Waste Pesticides and Toxics Division, U.S. EPA Region 5 (Director), establishes a later date. (40 CFR § 270.42(b)(8))

I.B.2 Permit Renewal

This permit may be renewed as specified in 40 CFR § 270.30(b) and Condition I.E.2 of this permit. In reviewing any application for a permit renewal, the U.S. EPA will consider improvements in the state of control and measurement technology, and changes in applicable regulations. (40 CFR § 270.30(b) and RCRA Section 3005(c)(3))

I.C SEVERABILITY

This permit's provisions are severable; if any permit provision, or the application of any permit provision to any circumstance, is held invalid, such provision's application to other circumstances and the remainder of this permit will not be affected. Invalidity of any statutory or regulatory provision on which any condition of this permit is based does not affect the validity of any other statutory or regulatory basis for that condition. (40 CFR § 124.16(a))

I.D DEFINITIONS

The terms used in this permit will have the same meaning as in 40 CFR Parts 124, 260 through 266, 268 and 270, unless this permit specifically provides otherwise. Where neither the regulations nor the permit define a term, the term's definition will be the standard dictionary definition or its generally accepted scientific or industrial meaning.

I.E DUTIES AND REQUIREMENTS

1.E.1 Duty to Comply

You must comply with all conditions of this permit, except to the extent and for the duration for which an emergency permit authorizes such noncompliance (40 CFR § 270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of RCRA and will be grounds for: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (40 CFR § 270.30(a))

I.E.2 Duty to Reapply

If you wish to continue the permit regulated activities after the expiration date, you must apply for and obtain a new permit. You must submit a complete application for a new permit at least 180 days before the permit expiration date, unless the Director grants permission for a later submittal date. The Director will not grant permission to submit the complete application for a new permit later than the permit's expiration date. (40 CFR § 270.10(h) and § 270.30(b))

I.E.3 Permit Expiration

Unless revoked or terminated, this permit and all conditions herein will be effective for a fixed term not to exceed 10 years from this permit's effective date.

This permit and all conditions herein will remain in effect beyond the permit's expiration date if you have submitted a timely, complete application (40 CFR § 270.10 and §§ 270.13 through 270.29), and, through no fault of your own, the Director has not made a final determination regarding permit reissuance. (40 CFR §§ 270.50 and 270.51)

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

In an enforcement action, you are not entitled to a defense that it would have been necessary to halt or reduce the permitted activity to maintain compliance with this permit. (40 CFR § 270.30(c))

I.E.5 Duty to Mitigate

In the event of noncompliance with this permit, you must take all reasonable steps to minimize releases to the environment resulting from the noncompliance and must implement all reasonable measures to prevent significant adverse impacts on human health or the environment. (40 CFR § 270.30(d))

I.E.6 Proper Operation and Maintenance

You must always properly operate and maintain all facilities and treatment and control systems (and related appurtenances) that you install or use to comply with 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 you to operate back-up or auxiliary facilities or similar systems only when necessary to comply with this permit. (40 CFR § 270.30(e))

I.E.7 Duty to Provide Information

You must provide the Director, within a reasonable time, any relevant information that the Director requests to determine whether there is cause to modify, revoke and reissue, or terminate this permit, or to determine permit compliance. You must also provide the Director, upon request, with copies of any records this permit requires. The information you must maintain under this permit is not subject to the Paperwork Reduction Act of 1980, 44 USC §§ 3501 *et seq.* (40 CFR §§ 264.74(a) and 270.30(h))

I.E.8 Inspection and Entry

Upon the presentation of credentials and other legally required documents, you must allow the Director or an authorized representative to (40 CFR § 270.30(i)):

I.E.8.a Enter at reasonable times upon your premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;

I.E.8.b Have access to and copy, at reasonable times, any records that you must keep under the conditions of this permit;

I.E.8.c Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

I.E.8.d Sample or monitor, at reasonable times, any substances at any location to ensure permit compliance or as RCRA otherwise authorizes.

Notwithstanding any provision of this permit, U.S. EPA retains the inspection and access authority which it has under RCRA and other applicable laws.

I.E.9 Monitoring and Records

I.E.9.a Samples and measurements taken for monitoring purposes must be representative of the monitored activity. The methods used to obtain a representative sample of the wastes, contaminated media, treatment residue, or other waste to be analyzed must be the appropriate methods from Appendix I of 40 CFR Part 261, or the methods specified in the state-

approved and/or U.S. EPA-approved waste analysis plan, 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, latest edition), *Methods for Chemical Analysis of Water and Wastes* (EPA 600/4-79-020), or an equivalent method, as specified in the referenced waste analysis plan. (40 CFR § 270.30(j)(1))

I.E.9.b You must retain, at the facility, all records as specified in 40 CFR § 264.74.

I.E.9.c You must submit all monitoring results at the intervals specified in this permit.

I.E.9.d You must retain all reports, records, or other documents, required by this permit, 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 reports, records, or other documents, unless a different period is specified in this permit. The 3-year period may be extended by request of the Director at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility. (40 CFR §§ 270.30(j), 270.31, and 264.74(b))

I.E.10 Reporting Planned Changes

You must notify the Director as soon as possible of any planned physical alterations or additions to the permitted facility. (40 CFR § 270.30(l)(1))

I.E.11 Reporting Anticipated Noncompliance

You must notify the Director, in advance, of any planned changes in the permitted facility or activity that may result in permit noncompliance. Advance notice will not constitute a defense for any noncompliance. (40 CFR § 270.30(l)(2))

I.E.12 Certification of Construction

Subject to the requirements of 40 CFR § 270.32(b)(2) and § 270.42 Appendix I, you must not operate any RCRA air emission control devices completed after the effective date of this permit until you have submitted to the Director, by certified mail or hand-delivery, a letter signed both by your authorized representative and by a registered professional engineer. That letter must state that the portions of the facility covered by this permit (including all air emission control devices required by this permit) have been constructed in compliance with the applicable

conditions of this permit. In addition, you must not operate the permitted control devices until either:

I.E.12a The Director or his/her representative has inspected those portions of the facility and finds them in compliance with the conditions of the permit; or

I.E.12b The Director waives the inspection, if the inspection is not conducted within 30 days from the receipt of the certification.

I.E.13 Transfer of Permits

This permit is not transferable to any person, except after notice to the Director. You must inform the Director and obtain prior approval of the Director before transferring ownership or operational control of the facility (40 CFR § 270.42, Appendix I). Under 40 CFR § 270.40, the Director may require permit modification, or revocation and reissuance to change the Permittee's name and incorporate other RCRA requirements. Before transferring ownership or operation of the facility during its operating life, you must notify the Director and obtain prior approval and notify the new owner or operator in writing of the requirements of this permit and the requirements of 40 CFR Parts 264, 268, and 270. (40 CFR §§ 264.12(c), 270.30(l)(3), and 270.40(a))

I.E.14 Twenty-Four Hour Reporting

I.E.14.a You must report to the Director any noncompliance with this permit that may endanger human health or the environment. Any such information must be promptly reported orally, but no later than 24 hours after you become aware of the noncompliance.

I.E.14.b The oral report discussing the occurrence and its cause must include the following information (40 CFR §§ 270.30(l)(6) and 270.33): (1) release of any hazardous waste that may endanger public drinking water supplies; (2) release or discharge of hazardous waste; or (3) fire or explosion from the hazardous waste management facility. You must include the following information:

- (1) Name, title and telephone number of the person making the report;
- (2) Name, address and telephone number of the facility;
- (3) Name, address and telephone number of owner or operator;

- (4) Date, time and type of incident;
- (5) Location and cause of incident;
- (6) Identification and quantity of material(s) involved;
- (7) Extent of injuries, if any;
- (8) Assessment of actual or potential hazards to the environment and human health outside the facility, where applicable;
- (9) Description of any emergency action taken to minimize the threat to human health and the environment; and
- (10) Estimated quantity and disposition of recovered material that resulted from the incident.

I.E.14.c In addition to the oral notification required under Conditions I.E.14.a and I.E.14.b of this permit, a written report must also be provided within 5 calendar days after you become aware of the circumstances. The written report must include, but is not limited to, the following:

- (1) Name, address and telephone number of the person reporting;
- (2) Incident description (noncompliance including any release or discharge of hazardous waste), including cause, location, extent of injuries, if any, and an assessment of actual or potential hazards to the environment and human health outside the facility, where applicable;
- (3) Period(s) in which the incident (noncompliance including any release or discharge of hazardous waste) occurred, including exact dates and times;
- (4) Whether the incident's results continue to threaten human health and the environment, which will depend on whether the noncompliance has been corrected and/or the release or discharge of hazardous waste has been adequately cleaned up; and
- (5) If the noncompliance has not been corrected, the anticipated period for which it is expected to continue, and the steps taken or planned

to reduce, eliminate, and prevent the recurrence of the noncompliance.

The Director may waive the requirement that written notice be provided within 5 calendar days; however, you will then be required to submit a written report within 15 calendar days of the day on which you must provide oral notice, in accordance with Conditions I.E.14.a and I.E.14.b of this permit. (40 CFR § 270.30(1)(6))

I.E.15 Other Noncompliance

You must report all instances of noncompliance not reported under Condition I.E.14 of this permit, when any other reports this permit requires are submitted. The reports must contain the information listed in Condition I.E.14. (40 CFR § 270.30(l)(10))

I.E.16 Other Information

I.E.16.a Whenever you become aware that you failed to submit or otherwise omitted any relevant facts in the permit application or other submittal, or submitted incorrect information in the permit application or other submittal, you must promptly notify the Director of any incorrect information or previously omitted information, submit the correct facts or information, and explain in writing the circumstances of the incomplete or inaccurate submittal. (40 CFR § 270.30(l)(11))

I.E.16.b All other requirements contained in 40 CFR § 270.30 not specifically described in this permit are incorporated into this permit and you must comply with all those requirements.

I.F SIGNATORY REQUIREMENT

You must sign and certify all applications, reports, or information this permit requires, or which are otherwise submitted to the Director, in accordance with 40 CFR § 270.11. (40 CFR § 270.30(k))

I.G REPORTS, NOTIFICATIONS AND SUBMITTALS TO THE DIRECTOR

Except as otherwise specified in this permit, all reports, notifications, or other submittals that this permit requires to be submitted to the Director should be sent by certified mail, express mail, or hand-delivered to the U.S. Environmental Protection Agency, Region 5, at the following address:

Waste Management Branch, DW-8J
Waste, Pesticides and Toxics Division
U.S. EPA Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

I.H CONFIDENTIAL INFORMATION

In accordance with 40 CFR Part 2 Subpart B, you may claim any information this permit requires, or is otherwise submitted to the Director, as confidential. You must assert any such claim at the time of submittal in the manner prescribed on the application form or instructions, or, in the case of other submittals, by stamping the words "Confidential Business Information" on each page containing such information. If you made no claim at the time of submittal, the Director may make the information available to the public without further notice. If you assert a claim, the information will be treated in accordance with the procedures in 40 CFR Part 2. (40 CFR § 270.12)

I.I DOCUMENTS TO BE MAINTAINED AT THE FACILITY

You must maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and all amendments, revisions, and modifications to them.

I.I.1 Operating Record

You must maintain in the facility's operating record the documents required by this permit, and by the applicable portions of 40 CFR §§ 264.1035, 264.1064, 264.1084, 264.1088, 264.1089 and 40 CFR § 264.73 (as they apply to the equipment used to comply with this permit).

I.I.2 Notifications

If you receive hazardous waste(s) from off-site generator(s), you must maintain notifications from generators accompanying initial incoming shipment of wastes subject to 40 CFR Part 268 Subpart C, that specify treatment standards, as required by 40 CFR §§ 264.73, 268.7, and this permit.

I.I.3 Copy of Permit

You must keep a copy of this permit on site, including all the documents listed in any attachments, and you must update it as necessary to incorporate any official

permit modifications.

I.J ATTACHMENTS AND DOCUMENTS INCORPORATED BY REFERENCE

I.J.1 All attachments and documents that this permit requires to be submitted, if any, including all plans and schedules are, upon the Director's approval, incorporated into this permit by reference and become an enforceable part of this permit. Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject you to enforcement action under Section 3008 of RCRA. This action may include fines, or permit suspension or revocation.

I.J.2 This permit also includes the documents attached hereto, all documents cross-referenced in these documents, and the applicable regulations contained in 40 CFR Parts 124, 260, 261, 262, 264, 268, 270, and the applicable provisions of RCRA, all of which are incorporated herein by reference.

I.J.3 Any inconsistency or deviation from the approved designs, plans and schedules is a permit noncompliance. The Director may grant written requests for extensions of due dates for submittals required in this permit.

I.J.4 If the Director determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Director may modify this permit according to procedures in Condition I.B of this permit.

I.J.5 If any documents attached to this permit are found to conflict with any of the Conditions in this permit, the Condition will take precedence.

I.K COORDINATION WITH THE CLEAN AIR ACT

You must fully comply with all applicable Clean Air Act (CAA) and RCRA permit limits. Where two or more operating limitations apply, the most stringent operating limitations take precedence.

SECTION II -- LAND DISPOSAL RESTRICTIONS

You must comply with the following Conditions only to the extent that the parallel Conditions of the state-issued portion of the RCRA permit were not issued under the authority of RCRA.

II.A GENERAL CONDITIONS

II.A.1 You must comply with all the applicable self-implementing requirements of 40 CFR Part 268 and all applicable land disposal requirements which become effective by statute. (42 U.S.C. § 6924)

II.A.2 A mixture of any restricted waste with nonrestricted waste(s) is a restricted waste under 40 CFR Part 268.

II.A.3 Except as expressly allowed under 40 CFR Part 268, you must not in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with 40 CFR Part 268, Subpart D, to circumvent the effective date of a prohibition in 40 CFR Part 268, Subpart C, to otherwise avoid a prohibition in 40 CFR Part 268, Subpart C, or to circumvent a land disposal prohibition imposed by Section 3004 of RCRA.

II.A.4 You must maintain a current list of the EPA hazardous waste numbers handled by the facility that are identified in 40 CFR Part 268, Subparts B and C. The list must include all waste numbers handled by the facility, and any associated treatment standards, and shall be updated through the inclusion of new treatment standards, as promulgated or amended. This list must be provided to the U.S. EPA representatives, or their designees, upon request.

II.B TESTING AND RELATED REQUIREMENTS

II.B.1 In accordance with 40 CFR § 268.7(a), you must test any waste generated at the facility, or use knowledge of the waste, to determine if the waste is restricted from land disposal.

II.B.2 You must comply with all applicable treatment standards provided in 40 CFR Part 268, Subpart D.

II.B.3 You must comply with all the applicable notification, certification, and recordkeeping requirements described in 40 CFR § 268.7(a) and (b).

II.C STORAGE PROHIBITIONS

II.C.1 You must comply with all the applicable prohibitions on storage of restricted wastes specified in 40 CFR Part 268, Subpart E.

II.C.2 Except as otherwise provided in 40 CFR § 268.50, you may store restricted wastes in tanks and containers solely for the purpose of the accumulation of such quantities of hazardous wastes as necessary to facilitate

proper recovery, treatment, or disposal provided that:

II.C.2.a Each container is clearly marked to identify its contents and the date each period of accumulation begins; and

II.C.2.b Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating record at the facility.

II.C.3 You may store restricted wastes for up to 1 year unless the U.S. EPA or its authorized agent can demonstrate that such storage was not solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

II.C.4 You may store restricted wastes beyond 1 year; however, you bear the burden of proving that such storage was solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

II.C.5 You must not store any liquid hazardous waste containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm unless the waste is stored in a storage facility that meets the requirements of 40 CFR § 761.65(b). This waste must be removed from storage and treated or disposed as required by 40 CFR Part 268 within 1 year of the date when such wastes are first put into storage.

II.D BLENDING OF METAL WASTES

You must not dilute metal-bearing wastes (listed in Appendix XI of 40 CFR Part 268), if the diluted waste will be used as fuel in any RCRA permitted combustion facility, unless you have demonstrated that the diluted waste complies with one or more of the criteria specified in 40 CFR § 268.3(c).

SECTION III -- OTHER FEDERAL RCRA REQUIREMENTS

III.A ADDITIONAL HAZARDOUS WASTE NUMBERS

In addition to the hazardous waste numbers listed in the state-issued portion of the RCRA permit, you may handle the newly listed hazardous wastes, promulgated under the HSWA, at your facility only if you have processed a Class

2 permit modification in accordance with 40 CFR § 270.42(g) and received approval from the Director. All handling of these wastes must comply with the applicable provisions of both the state-issued portion and the federally-issued portion of the RCRA permit.

SECTION IV -- AIR EMISSIONS STANDARDS (40 CFR Part 264, Subparts BB and CC)

IV.A EQUIPMENT LEAKS (40 CFR Part 264, Subpart BB)

IV.A.1 Waste Determination and Equipment

The Permittees must determine each hazardous waste stream for which (1) the hazardous waste is *"In light liquid service"* as defined in 40 CFR § 264.1031 and (2) the hazardous waste has an organic concentration of at least 10 percent by weight.

You must comply with all applicable requirements of 40 CFR § 264.1050 through 40 CFR § 264.1065, regarding air emission standards for equipment leaks. The equipment includes, but is not limited to, (1) heavy hydrocarbon (HHC) pumps, (2) light hydrocarbon (LHC) pumps, (3) piping system including valves and connectors, (4) HHC preheaters, and (5) pumps delivering hazardous wastes to the storage tanks.

IV.A.2 Pumps in Light Liquid Service (40 CFR § 264.1052)

IV.A.2.a Each pump in light liquid service must be monitored monthly to detect leaks by the methods specified in 40 CFR § 264.1063(b), except: when each pump is (1) equipped with dual mechanical seal system satisfying the requirements of 40 CFR 264.1052(d), (2) designated, as described in 40 CFR § 264.1064(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, and meeting the requirements of 40 CFR § 264.1052(e), or (3) equipped with a closed vent system complying with the requirements of 40 CFR § 264.1052(f).

IV.A.2.b Each pump shall be checked by visual inspection each calendar week for seal leaks.

IV.A.2.c A leak is detected if: (1) an instrument reading of 10,000 ppm or greater is measured, or (2) there is an indication of liquid dripping from the

pump seal.

IV.A.2.d When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §264.1059 - Standards: Delay of repair. The first attempt at repair must be made no later than 5 calendar days after each leak is detected.

IV.A.3 Compressors (40 CFR § 264.1053)

IV.A.3.a Each compressor shall be equipped with a seal system in accordance with 40 CFR §§ 264.1053(a) through (f).

IV.A.3.b When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR § 264.1059. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

IV.A.3.c A compressor is exempt from the seal requirements only if: (1) it is equipped with a closed-vent system pursuant to 40 CFR § 264.1053(h); or (2) it is designated for no detectable emissions as provided in 40 CFR § 264.1053(i).

IV.A.4 Pressure Relief Devices in Gas/Vapor Service (40 CFR § 264.1054)

IV.A.4.a Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, based on the method specified in 40 CFR § 264.1063(c). (40 CFR § 264.1054(a))

IV.A.4.b After each pressure release, the pressure relief valve shall be returned to a condition of no detectable emissions (i.e., less than 500 ppm above background based on the method specified in 40 CFR § 264.1063(c)), as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR § 264.1059. (40 CFR § 1054(b)(1))

IV.A.4.c No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions. (40 CFR § 264.1054(b)(2))

IV.A.4.d Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure

relief device to a control device as described in 40 CFR § 264.1060 is exempt from the requirements in Condition IV.A.4.a through IV.A.4.c.

IV.A.5 Sampling Connection Systems (40 CFR § 264.1055)

Each sampling connection system, except *in-situ* sampling systems and sampling systems without purges, shall be equipped with a closed-purge, closed-loop, or closed-vent system which meets one of the following requirements:

IV.A.5.a Return the purged process fluid directly to the process line;

IV.A.5.b Collect and recycle the purged process fluid; or

IV.A.5.c Be designed and operated to capture and transport all the purged process fluid to a waste management unit that complies with applicable sections of 40 CFR § 264.1084 through § 264.1086 or a control device that complies with 40 CFR § 264.1060, Standards for Closed-Vent Systems and Control Devices.

IV.A.6 Open-ended Valves or Lines (40 CFR § 264.1056)

IV.A.6.a Each open-ended valve or line must be equipped with a: (1) cap, (2) blind flange, (3) plug, or (4) second valve, which seals the open end at all times except during operations requiring hazardous waste stream flow through the open-ended valve or line.

IV.A.6.b When a double block and bleed system is used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall seal the open end at all other times.

IV.A.7 Valves in Gas/Vapor Service or in Light Liquid Service (40 CFR § 264.1057)

IV.A.7.a Each valve shall be monitored monthly to detect leaks in accordance with 40 CFR § 264.1057(a) and (c), except as provided in 40 CFR §§ 264.1057(f), (g), and (h).

IV.A.7.b If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

IV.A.8 Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light

**Liquid or Heavy Liquid Service, and Flanges and Other Connectors
(40 CFR § 264.1058)**

IV.A.8.a Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors must be monitored within 5 days by the method specified in 40 CFR § 264.1063(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

IV.A.8.b When a leak is detected, you must repair the leak as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR § 264.1059. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

IV.A.8.c First attempts at repair include, but are limited to, the best practices described under 40 CFR § 264.1057(e).

IV.A.9 Delay of Repair (40 CFR § 264.1059)

IV.A.9.a Delay of repair of equipment for which leaks have been detected will be allowed if: (1) the repair is technically infeasible without a hazardous waste management unit shutdown; or (2) the equipment is isolated from the hazardous waste management unit and does not continue to contain or contact hazardous waste with organic concentrations at least 10 % by weight .

IV.A.9.b Delay of repair for valves will be allowed if: (1) emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair; and (2) when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR § 264.1060.

IV.A.9.c Delay of repair for pumps will be allowed if: (1) repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and (2) repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

IV.A.9.d Delay of repair beyond a hazardous waste management unit shutdown will be allowed for a valve only if it meets the provisions of 40 CFR § 264.1059(e).

IV.A.10 Closed-Vent Systems and Control Devices (40 CFR § 264.1060)

Closed-vent systems and control devices shall comply with the provisions of 40 CFR §§ 264.1033 and 264.1060.

IV.A.11 Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid

Service; Percentage of Valves Allowed to Leak (40 CFR § 264.1061)

You may elect to have all valves within a hazardous waste management unit comply with an alternative standard that allows no greater than 2 % of the valves to leak if the provisions of 40 CFR §§ 264.1061(b) and (c) are met. You must notify the Director in writing, if you decide to discontinue the election of the alternative standards, that the work practice standards described in 40 CFR §§ 264.1057(a) through (e) will be followed.

IV.A.12 Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid

Service: Skip Period Leak Detection and Repair (40 CFR § 264.1062)

You may elect for all valves subject to the requirements of 40 CFR § 264.1057 and Condition IV.A.7 within a hazardous waste management unit to comply with one of the alternative work practices specified below. You must notify the Director before implementing one of the alternative work practices.

IV.A.12.a After 2 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 %, you may begin to skip one of the quarterly leak detection periods for the valves.

IV.A.12.b After 5 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2 %, you may begin to skip 3 of the quarterly leak detection periods for the valves.

You must monitor valve leaks monthly in accordance with 40 CFR § 264.1057, if the percentage of valves leaking is greater than 2 %, but you may again elect to use the alternative standards after meeting the requirements of 40 CFR § 264.1057(c)(1).

IV.A.13 Test Methods and Procedures (40 CFR § 264.1063)

The leak test methods and procedures must be as specified in 40 CFR § 264.1063.

IV.A.14 Recordkeeping and Reporting Requirements (40 CFR §§ 264.1064 and 264.1065)

You must comply with the recordkeeping and reporting requirements of 40 CFR § 264.1064 and 264.1065.

IV.B TANKS (40 CFR Part 264, Subpart CC)

IV.B.1 General

You must control air pollutant emissions from each hazardous waste storage tank in accordance with standards specified in 40 CFR §§ 264.1084 and 264.1087 through 264.1090. The tanks used for storage of hazardous waste must be designed, constructed, and maintained consistent with applicable industrial standards to ensure their integrity and safety.

IV.B.2 Tanks 2104-F and 2105-F

Tanks 2104-F and 2105-F are fixed roof tanks used for storing phenol distillation bottom tars (K022) and miscellaneous heavy hydrocarbon waste (D018), referred to as Heavy Hydrocarbons fuel or HHC, and must meet the following requirements:

IV.B.2.a The design capacities of Tank 2104-F and Tank 2105-F must be 200,000 gallons and 250,000 gallons respectively.

IV.B.2.b The maximum temperature of HHC shall not exceed 300 °F.

IV.B.2.c The tank design and construction shall meet the applicable standards of American Petroleum Institute and be so stamped.

IV.B.2.d Tank controls, which include level elements, transmitters, level alarms, pressure safety valves, must be routinely inspected and maintained to assure safe and proper operations of these tanks.

Each tank shall be equipped with inert gas blanketing, a closed-vent system, and a control device as follows:

IV.B.2.e The inert gas blanketing must be supplied from a centrally located nitrogen supply system with a complete piping and instrumentation system to each tank.

IV.B.2.f The closed-vent and control device shall meet the requirements of 40 CFR § 264.1087 and shall include:

- (1) Vent Piping,
- (2) Fume Scrubber (2502-L),
- (3) Separation Tank (2502-LF),
- (4) Fume Scrubber Circulating Pumps (2502-LJA and LJB), and
- (5) Vent Condenser (2105-CVC)

IV.B.2.g The fume scrubber shall be designed to accept a vent flow of 65 actual cubic feet per minute (ACFM) at 300 °F and 14.84 psia.

IV.B.2.h The separation tank shall have a minimum capacity of 220 gallons and shall be operated in conjunction with the circulating pumps and the scrubber.

IV.B.2.i The vent control device shall reduce the total organic content of the inlet vapor stream vented to the control device by at least 95 % by weight in accordance with 40 CFR § 264.1087(c)(1)(i). The vent condenser must meet the following requirements.

(1) The vent condenser shall be operated with ammonia refrigerant, compressor, condenser, liquid accumulator, and oil separator.

(2) The vent condenser performance shall be monitored through the shell side ammonia temperature. The maximum ammonia temperature shall be determined from the approved vent control field test plan you proposed in conjunction with the permit application. You must process a permit modification, following the approval of the field test results by the Director, for setting the maximum allowable ammonia temperature in this permit

IV.B.2.j The closed-vent system and the control device shall comply with the following requirements:

(1) Periods of planned routine maintenance of the control device, during which the control device does not meet the control efficiency required under IV.B.2.i.(2) shall not exceed 240 hours per year.

(2) Compliance with IV.B.2.j.(1) shall be demonstrated by recording the information specified in 40 CFR § 1089(e)(1)(v), Recordkeeping Requirements.

(3) Malfunctions of the control device must be corrected as soon as

practicable after their occurrence to minimize emissions of air pollutants.
(40 CFR § 264.1087(c)(2)(v))

IV.B.3 Tank 2003-F

Tank 2003-F is used for storing Light Hydrocarbon waste and used oil (D001, D018, and D035), referred to as LHC fuel. Tank 2003-F is an internal floating roof tank in accordance with the requirements specified in 40 CFR § 264.1084(e). The design and construction of Tank 2003-F shall meet the requirements of API 650 and the following:.

IV.B.3.a Roof Design and Specifications (40 CFR § 264.1084(e)(1))

The internal floating tank (2003-F) shall be equipped with a fixed roof and an internal floating roof in accordance with the following requirements.

- (1) The internal floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.
- (2) The internal floating roof shall be equipped with two continuous seals mounted one above the other.
- (3) The internal floating roof must meet the following specifications:
 - (A) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
 - (B) Each opening in the internal floating roof shall be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.
 - (C) Each penetration of the internal floating roof for the purpose of sampling shall have a slit fabric cover that covers at least 90 % of the opening.
 - (D) Each automatic bleeder vent and rim space vent shall be gasketed.
 - (E) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(F) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(G) The tank shall be equipped with anti-static system, anti-rotation systems, floating guide, and other appurtenances as required by API.

IV.B.3.b Operations (40 CFR § 264.1084(e)(2))

(1) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.

(2) Automatic bleeder vents shall be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(3) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof shall be bolted or fastened closed (i.e., no visible gaps). Rim space vents are to be set open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.

IV.B.3.c Inspections (40 CFR §§ 264.1084(e)(3) and 264.1084(I))

(1) You must visually inspect the floating roof and its closure devices for defects that could result in air pollutant emissions in accordance with the requirements found in 40 CFR § 264.1084(e)(3)(i).

(2) You must visually inspect the internal floating roof components at least once every 12 months after initial fill, and visually inspect the internal floating roof, primary seal, secondary seal, and gaskets each time the tank is emptied and degassed and at least every 10 years, in accordance with 40 CFR § 264.1084(e)(3)(ii).

Alternatively, If the tank is equipped with 2 continuous seals mounted one above the other, you may visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 5 years in accordance with 40 CFR § 264.1084(e)(3)(iii).

(3) Prior to each inspection required by 40 CFR § 264.1084(e)(3)(ii), you must notify the Director to provide the opportunity to have an observer present during the inspection. Prior to each inspection, written notification must be prepared and sent by you so that it is received by the Director at least 30 calendar days before refilling the tank except when an inspection is not planned. You must follow the procedures described in 40 CFR § 264.1084(e)(iv)(B) when a visual inspection is not planned.

(4) In the event that a defect is detected, you must repair the defect in accordance with 40 CFR § 264.1084(k).

(5) You must maintain a record of the inspections in accordance with the requirements specified in 40 CFR § 264.1089(b).

(6) Following the initial inspection and monitoring of the cover as required by the applicable provisions, subsequent inspection and monitoring may be performed at intervals longer than 1 year only under the special conditions stipulated in 40 CFR § 264.1084(l).

IV.B.3.d Repairs (40 CFR § 264.1084(k))

(1) You must make first efforts at repair of the defect no later than 5 calendar days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided below.

(2) Repair of a defect may be delayed beyond 45 calendar days if you determine that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous waste normally managed in the tank. In this case, you must repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

IV.B.3.e Safety devices, as defined in 40 CFR § 265.1081, may be installed and operated as necessary on the tank complying with the requirements stipulated for internal floating roof tank pursuant to 40 CFR § 264.1084(e)(4).

IV.B.4 Recordkeeping and Reporting Requirements (40 CFR §§ 264.1089 and 264.1090)

You must comply with the recordkeeping requirement of 40 CFR § 264.1089.

IV.B.4.a The fixed roof tanks (2104-F and 2105-F) must comply with the recordkeeping requirements of 40 CFR § 264.1089(b)(1).

IV.B.4.b The internal floating roof tank (2003-F) must comply with the recordkeeping requirements of 40 CFR § 264.1089(b)(2)(ii).

IV.B.4.c You must prepare and maintain records that include those requirements specified in 40 CFR § 264.1089(e) for the closed-vent and control device.

IV.B.4.d You must comply with the reporting requirements of 40 CFR § 264.1090.

SECTION V - BOILERS AND INDUSTRIAL FURNACES (BIF RULE) (40 CFR Part 266, Subpart H)

V.A GENERAL

You must meet the applicable requirements of 40 CFR Part 266, Subpart H (§ 266.100 through § 266.112) - Hazardous Waste Burned in Boilers and Industrial Furnaces (BIF Rule). You must also meet the applicable requirements of 40 CFR Part 264 standards regarding:

V.A.1 Imminent Hazard Action. (40 CFR § 264.4)

V.A.2 General Facility Standards. (40 CFR §§ 264.11-264.18)

V.A.3 Preparedness and Prevention. (40 CFR §§ 264.31-264.37)

V.A.4 Contingency Plan and Emergency Procedures. (40 CFR §§ 264.51-264.56)

V.A.5 Manifest System, Recordkeeping, and Reporting. (40 CFR §§ 264.71-264.77)

V.A.6 Closure. (40 CFR § 264.111-264.115)

V.A.7 Financial Requirements. (40 CFR Part 264, Subpart H, §§ 264.142, 264.143, and 264.147-264.151)

You must process a permit modification request in accordance with 40 CFR § 270.42, if any of the proposed changes meet one of the definitions contained in Appendix I to § 270.42.

V.B HAZARDOUS WASTE FUELS

The hazardous wastes fuels burned in the boilers must either be heavy hydrocarbons (HHC) or light hydrocarbons (LHC) as defined herein. These two (2) hazardous fuel streams shall be separately handled, stored, and tested prior to firing in the boilers. The waste analysis plan shall be as described in the approved Part B application.

V.B.1 Heavy Hydrocarbons (HHC)

The HHC, stored in Tanks 2104-F and 2105-F may be generated from the following sources:

V.B.1.a Phenol distillation column bottom tars from 328-F (K022),

V.B.1.b Used compressor oil from ammonia compressor J-10 (D018),

V.B.1.c Aniline distillation column bottoms from E-50

V.B.1.d Phenol vaporizer hydrocarbon purge from C-16 (D018),

V.B.1.e Aniline process vessel hydrocarbon purges from E-30 and E-40 columns, and

V.B.1.f BPA (bis-phenol A) purification system column bottom tars from D-802.

V.B.2. Light Hydrocarbons (LHC)

The LHC, generated from phenol process, aniline process, and waste lubricating oil, must be stored in Tank 2003-F. The LHC fuel may include the following sources:

V.B.2.a Condensable organics, 334-F purge from 304-F and 307-F emission control systems (D001 and D018),

V.B.2.b Organic waste, 325-F purge from 308-EA overhead accumulator (D001 and D018),

V.B.2.c Spent emissions scrubber fluid from 2502-LF (D001 and D018),

V.B.2.d AMS distillation column bottoms from 501-E (D001)

V.B.2.e Condensable organics from scrubber outlet condenser 2105-CVC (D001. D018),

V.B.2.f Phenol wastewater treatment system skimmed oil from 2421-F (D001 and D018),

V.B.2.g Waste lubricating oils,

V.B.2.h Waste hydrocarbon from the aniline/ammonia recovery system F-

113 (D001, D018). and

V.B.2.i Purification system light hydrocarbons from 503-E ethylbenzene removal column overhead (D001, D018, and D035).

V.B.3 Hazardous Waste Fuel Analysis

V.B.3.a HHC and LHC must be managed in on-site tanks and in accordance with the approved waste analysis plan included in the Part B Application. Samples shall be taken and analyzed to determine: (1) the average higher heating value in Btu/pound, (2) metals concentrations, (3) ash content, (4) chlorine/chloride, and (5) other factors limiting the boiler operation to comply with the regulatory requirements.

V.B.3.b The sample analysis results should be used for computing the required hazardous waste fuel input to each boiler for the purpose of meeting the boiler operating conditions and the emission limits, hereinafter stipulated.

V.B.4 Hazardous Waste Fuel Feed Limits

V.B.4.a The hazardous waste fuel feed rate limits on metals and on total chloride and chlorine set forth herein are based on the approved trial burn report and the Adjusted Tier I feed rate screening limits in 40 CFR §§ 266.106 and 266.107. For any significant changes in the hazardous waste fuel characteristics due to changes in the manufacturing process which may affect the compliance to the BIF Rule (40 CFR §§ 266.106 and 266.107), you must process a Class 3 permit modification in accordance with 40 CFR § 270.42.

V.B.4.b The hourly rolling average (HRA) total ash feed rate to each boiler and ash concentrations in waste fuel, based on each mode of operation as defined in Section V.C of this permit, shall not exceed the following.

Mode of Operation	Fuel	Max. Ash Feed Rate	Max. Ash Concentration
A	HHC and LHC	12,000 gram/hour	1.0 %
B	HHC	11,500 gram/hr/boiler	1.5 %
	LHC	10,030 gram/hr/boiler	1.5 %

Under Mode of Operation A, both HHC and LHC are permitted to fire in Boiler UC

simultaneously upon completion of boiler burner modification in accordance with the revised trial burn plan submitted in July 2005.

V.B.4.c The maximum allowable feed rates and concentrations for metals and chlorine/chloride in fuel, based on each mode of operation as defined in Section V.C of this permit, shall be as listed in the following Table V-1. The basis for fuel metal and chlorine/chloride concentrations is as follows:

Mode of Operation	HHC Feed Rate	LHC Feed Rate
A (Normal Operation)	186.0 pound/minute	9.0 pound/minute
B (Back-up Operation)	93.0 pound/min//boiler	73.1 pound/min/boiler

TABLE V-1

No	Constituents	Maximum Allowable Feed Rate (HRA)					
		Mode A: Normal		Mode B: Back-up			
		HHC and LHC		HHC		LHC	
		gram/hr	ppm	gram/hr	ppm	gram/hr	ppm
1	Arsenic (As)	3.07	0.58	2.55	1.0	1.01	0.75
2	Beryllium (Be)	1.12	0.21	0.56	0.5	0.24	0.25
3	Cadmium (Cd)	1.49	0.28	1.19	1.8	0.25	0.25
4	Total Chromium (Cr)	17.2	3.24	16.34	7.0	0.54	1.0
5	Antimony (Sb)	4,000	754	2,000	100	1,688	100
6	Barium (Ba)	666,600	125,000	333,333	100	281,250	100
7	Lead (Pb)	1,200	226	600	100	506	100
8	Mercury (Hg)	1,067	201	533	100	450	100
9	Silver (Ag)	40,000	7,537	20,000	100	16,875	100
10	Thallium (Ti)	4,000	754	2,000	100	1,688	100
11	Cl ₂ /Chloride	5,333	1,005	2,667	100	2,250	100

V.B.4.d Maximum allowable feed rates listed in Table V-1 should be adjusted according to the actual mass feed rate to the boilers to ensure that the allowable emissions for the regulated metals and chlorine/chloride

will not be exceeded.

V.B.5 HHC and LHC Management and Analysis

The flow of HHC and LHC fuels must be managed as described in the flow diagrams attached hereinafter as Attachments A and B respectively.

Hazardous fuels sampling strategies, analytical parameters, methods and rationale must be in accordance with: (1) 40 CFR § 266.102, (2) the Waste Analysis for BIF Rule Compliance submitted to the U.S. EPA in July 2001, (3) Section C of Part B Application, entitled "Waste Characteristics and Waste Analysis Plan," and (4) Table C-4 of the Waste Analysis Plan submitted as a Class 2 permit modification request in July 2005.

V.B.6 HHC Preheating System (2105-C, 2007-C)

HHC supplied from the storage tanks must be preheated through a fuel heater preset at a temperature no less than 180 degree F. prior to firing in the boilers. The fuel temperature must be recorded at least 2 times a day in the boiler operating record.

V.C Boilers (UA, UB, UC, and UE)

Hazardous waste fuels may be burned in boilers designated as UA, UB, UC, and UE. No. 2 or No. 6 fuel oils may be used for the boiler operations, only when hazardous waste fuel (HHC or LHC) is not co-fired with the fuel oil.

V.C.1 Special Requirements for Burning Hazardous Waste Fuels

You must operate the boilers under either Mode A or Mode B operation. Mode A operation is defined as: "Normal Operation" and must be conducted in Boiler UC only. Mode B is defined as: "Back-up Operation."

Mode A Operation - Normal Operation:

V.C.1.a Under Mode A operation, HHC and LHC are allowed to be co-fired in Boiler UC. The operating conditions must be in accordance with the trial burn plan and herein specified.

V.C.1.b Boilers UA, UB, and UE must not burn HHC or LHC during Mode A operation.

Mode B Operation - Back-up Operation:

V.C.1.c HHC can only be fired in Boilers UA and UB. The maximum feed rate to a boiler shall be as hereinbefore specified.

V.C.1.d LHC can be burned in all boilers with a maximum feed rate of 73.1 pounds/minute. Only one boiler is allowed to burn LHC at any given time.

V.C.1.e Boiler UE is not allowed to burn HHC.

V.C.1.f HHC and LHC cannot be co-fired in Boilers UA, UB, and UE at the same time.

V.C.1.g No hazardous waste fuel shall be used in cold start up of any boiler. Hazardous waste fuel is allowed only when the boiler has reached its minimum combustion chamber temperature.

V.C.1.h Hazardous waste fuel should primarily be used for base-load boiler operations. When load-following operation is needed, natural gas should be used.

V.C.1.i During a boiler shut down, the hazardous waste fuel feed must be discontinued first before the natural gas fuel is throttled down and shut off except during the boiler trip.

V.C.1.j During a boiler trip for emergency shut down, the hazardous waste fuel supply to the boiler shall be automatically shut off or at its fail safe position (closed).

V.C.1.k No hazardous waste should be fired with fuel oil (No.2 or No.6).

V.C.2 Boiler Operating Conditions

V.C.2.a You must operate the boilers when burning hazardous waste fuel in accordance with the limits listed in Table V-2.

V.C.2.b The parameters listed in Table V-2 (noted as MR), which are not part of the DCS, must be monitored at least once per 12 hours and recorded in a boiler operating log. You must adjust the boiler operation such that it returns to compliance with the limit within 6 hours from the discovery of the deviation from the limit established herein. If you are

unable to correct the operational problems which cause such deviation within 6 hours, you must discontinue burning hazardous waste in the boiler, until all monitoring parameters are within the permitted ranges.

TABLE V-2

No .	Parameters	Monitoring ⁽¹⁾	Mode A	Mode B	
			UC	UA/UB	UE
1	Normal Steam Header Pressure, psig	MR	420 -480	420-480	420 - 480
2	Minimum Feedwater Supply Temperature, ° F	MR	220 ⁽²⁾	220 ⁽²⁾	220 ⁽²⁾
3	Min. Atomizing Steam Differential Pressure, psi	MR	7	7	7
4	Min. Soot Blowing Frequency, times/day	MR	1	1	1
5	Min. Fuel Preheater Outlet Temperature, ° F	MR	180	180	NA ⁽³⁾
6	Max. Total Heat Input firing with HHC, MM Btu/hr	DAS	NA	171	NA
7	Max. Total Heat Input firing with LHC, MM Btu/hr	DAS	NA	174	NA
8	Max. Total Heat Input firing with HHC and LHC combined, MM Btu/hr	DAS	186.4	NA	NA
9	Max. HHC Input, pounds/minute	DAS	NA	93	0
10	Max. LHC Input, pounds/minute	DAS	NA	73.1	73.1
11	Max. Steam Output firing with HHC, pounds/hr	DAS	NA	137,300	NA
12	Max. Steam Output firing with LHC, pounds/hr	DAS	NA	139,800	132,900
13	Max. Steam Output firing with HHC and LHC combined, pounds/hr	DAS	150,000	NA	NA
14	Min. Steam Output firing with HHC, pounds/hr	DAS	NA	81,300	NA
15	Minimum Steam Output firing with LHC, pounds/hr	DAS	NA	81,300	65,500
16	Min. Steam Output firing with HHC and LHC combined, pounds/hr	DAS	28,500	NA	NA
17	Max. Combustion Air Flow firing with HHC, scfm	DAS	NA	34,809	NA
18	Max. Combustion Air Flow firing with LHC, scfm	DAS	NA	34,809	38,403
19	Max. Combustion Air Flow with HHC and LHC combined, scfm	DAS	38,700	NA	NA
20	Max Boiler Firebox Temperature firing with HHC, °F	DAS	NA	2,072	NA
21	Max. Boiler Firebox Temperature firing with LHC, °F	DAS	NA	2,092	1,962
22	Max. Boiler Firebox Temperature firing with HHC and LHC combined, °F	DAS	2,100	NA	NA

23	Min. Boiler Firebox Temperature firing with HHC, °F	DAS	NA	1,641	NA
24	Min. Boiler Firebox Temperature firing with LHC, °F	DAS	NA	1,641	1,698
25	Min. Boiler Firebox Temperature firing with HHC and LHC combined, °F	DAS	1,500	NA	NA
26	Max. CO Conc. (60-min.average), ppmv dry @ 7 % O ₂	DAS	100	100	100

(1) MR = Manual Recordkeeping; DAS = Data Acquisition System

(2) Lower temperature is allowed only in case of emergency (e.g., boiler low water level alarm) when feedwater must be fed into the boiler by bypassing the deaerating feedwater heater.

(3) NA: Not Applicable

V.C.3 Automatic Waste Feed Cutoffs (AWFCOs) Requirements

The parameters listed in Table V-2 (noted as DAS) for which signals are transmitted and displayed through the DAS must be monitored continuously. When any one of these limits is exceeded, it must actuate the automatic waste feed cut off system.

V.C.4 Boiler Ancillary Equipment

The deaerating feedwater heater, chemical feed system, continuous blow-down, blow-off system, boiler trims, high and low level alarms, feedwater regulator, and instrumentation and control systems must be properly maintained to safeguard the operations of the boilers.

V.C.5 Boiler System Maintenance Requirements

V.C.5.a Each boiler must be cleaned, as required, by removing, to the extent practicable, all accumulated ash in the boiler. The boiler ash from burning HHC must be handled, transported and disposed of as hazardous waste.

V.C.5.b Each boiler must meet the requirements of the American Society of Mechanical Engineers' (ASME) Pressure Vessel Code or equivalent standards.

V.C.5.c The Distributed Control System (DCS) including the data acquisition system must be maintained as recommended by the instrumentation suppliers or in a technically equivalent manner, and calibrated as necessary to maintain the design accuracies.

V.C.5.d Each boiler must be maintained to meet the definition of boiler as per 40 CFR § 260.10.

V.C.5.e The mass flow meters for HHC and LHC must be calibrated/adjusted annually to maintain their required accuracy.

V.C.6 Modification to Boiler UC and Trial Burn

V.C.6.a You must modify Boiler UC in accordance with the Class 3 permit modification request that you submitted to U.S. EPA Region 5 in July 2005. The trial burn plan submitted in July 2005 is hereby incorporated into this permit by reference.

V.C.6.b Upon completion of the Boiler UC modification, you may start up and operate the boiler under Mode A, as described in Section V.C. of this permit, for a period no longer than 720 hours for the purpose of testing, adjusting, setting the associated equipment, and preparing for the trial burn. Extension may be granted by the Director, provided a written request is submitted and approved by the Director.

V.C.6.c You must conduct a trial burn for Boiler UC, in accordance with the approved trial burn plan within 6 months from the date U.S. EPA approved the temporary authorization. You must operate Boiler UC within the limits specified in the approved trial burn plan and must operate the AWFCO system in accordance with the set-points specified in the trial burn plan.

V.C.6.d Within 90 days from the completion of the trial burn, you must submit to U.S. EPA a complete trial burn report. Prior to U.S. EPA's approval of the trial burn report, you may operate Boiler UC under Mode A with maximum limits no greater than 95 % of those specified in Section V of this permit.

V.C.6.e U.S. EPA may impose additional conditions or change Condition V.C.6.d, if U.S. EPA determines that Boiler UC should operate under more stringent conditions than those specified in Section V of this permit. U.S. EPA's determination will be based on the conditions observed during the trial burn.

V.C.6.f Upon completion of U.S. EPA's review of the trial burn results, final permit conditions for the boiler operations will be established by U.S. EPA. You must submit a Class 1 permit modification request to revise and/or incorporate operating conditions to the conditions described in Section V of this permit.

V.C.7 Permit Modification

V.C.7.a You must submit a Class 2 permit modification to include changes and/or additional permit conditions, if the Director determines that the results from the Human Health Risk Assessment and the Ecological Risk Assessment, which may be conducted by U.S. EPA, warrant such modification.

V.C.7.b Upon completion of the field test on the closed-vent system and control device, you must submit a final report within 3 months to the Director for approval. You must also submit a Class 2 permit modification to include new permit conditions, if the Director determines that additional permit conditions are required to ascertain that the closed-vent system and control device meet the requirements of 40 CFR § 264.1087.

V.D RECORDKEEPING

You must keep in the operating record of the facility all information and data which indicate that the operations of the boilers are in compliance with the limits established in this permit in accordance with 40 CFR § 266.102(e)(10).