

PERMIT NO. HW-052(D&S)-2
ISSUANCE DATE: NOV 2 2020



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

HAZARDOUS WASTE FACILITY PERMIT

In accordance with the provisions of the Georgia Hazardous Waste Management Act and the Rules, Chapter 391-3-11, (as amended through September 28, 2017), adopted pursuant to that Act,

HERCULES LLC & PINOVA, INC.

I.D. No. GAD004065520

is issued a Permit for the following:

- (1) Hazardous Waste Central Accumulation Area**
- (2) Post-Closure Care for Closed Surface Impoundments**
- (3) Groundwater Monitoring**
- (4) Post Closure Care and Corrective Action for Solid Waste Management Units and Areas of Concern**

at the following location:

**2801 Cook St
Brunswick, GA 31520**

This Permit is conditioned upon compliance with all provisions of the Georgia Hazardous Waste Management Act, the Rules, Chapter 391-3-11 (as amended through September 28, 2017), adopted pursuant to that Act, and any other condition of this Permit.

This Permit is subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in the application(s) dated April 2, 2018 supporting data entered therein or attached thereto, or any subsequent submittals or supporting data; or for failure to disclose fully all relevant facts; or when the facility poses a threat to the environment or the health of humans.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached 32 pages, which pages are a part of this Permit. This Permit expires ten years from the Issuance Date above.



Richard E. Dunn, Director
Environmental Protection Division

Permit Number: HW-052(D&S)-2
Brunswick, Georgia, GAD004065520
Hercules LLC & Pinova, Inc. are hereinafter referred to as the Permittees.

SECTION I. GENERAL PERMIT CONDITIONS

I.A. Scope and Effect of Permit

1. This permit is intended to be a comprehensive document that addresses all hazardous waste management activities currently occurring as well as those anticipated to occur at the facility. The Permit is divided into 5 Sections covering the following topics:

Section I. - General Permit Conditions
Section II. - Hazardous Waste Central Accumulation Area
Section III. – Post-Closure Care for Closed Surface Impoundments
Section IV. – Groundwater Monitoring
Section V. – Post Closure Care and Corrective Action for Solid Waste Management Units and Areas of Concern

Under this Permit, the Permittees are allowed to treat, store, or dispose of hazardous waste only in accordance with the conditions of this permit. Any hazardous waste treatment, storage or disposal not authorized in this permit is prohibited. The Permittees must comply with the Georgia Hazardous Waste Management Act and the Rules for Hazardous Waste Management, Chapter 391-3-11, which Rules include certain portions of the Federal Hazardous Waste Regulations (found at 40 CFR Parts 260-268, 270, and 124). Where a citation to the Federal Regulations is made in this permit, it refers to the specific regulations adopted by the EPD. Permittees are expressly authorized under this permit to treat, store or dispose of hazardous waste to the extent that those activities are permissible under 40 CFR Parts 260-270 as incorporated in the Georgia Rules for Hazardous Waste Management. By way of example but not limitation, as described in the permit application dated April 2, 2018, and as further amended, the Permittees may temporarily store hazardous waste for 90 days or less in accordance with the hazardous waste generator requirements set forth in 40 CFR Part 262.

2. The issuance of this permit does not convey any property rights in either real or personal property, nor any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringements of Federal, State or local laws or regulations.
3. Compliance with this permit does not constitute a defense to any action brought by the Director under Section 18, Emergency Powers, of the Georgia Hazardous Waste Management Act, O.C.G.A. §12-8-75, as amended.

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

4. Nothing in this permit shall be construed to preclude the institution of any legal action under Section 3008 of the Federal Resource Conservation and Recovery Act (RCRA) (except Section 3008(h) of RCRA) or under the Georgia Hazardous Waste Management Act, O.C.G.A. §12-8-60 - §12-8-83, as amended.
5. This permit may be modified, revoked and reissued, or terminated for cause as specified in Rule 391-3-11-.11(7) and 40 CFR 270.41, 270.42, 270.43, 270.50(d) and 270.51(a). The filing of a request for a permit modification, revocation and reissuance, or termination; or the notification of planned changes or anticipated non-compliance on the part of the Permittees, does not stay the applicability of any permit condition.
6. 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.B. Management Requirements

1. The Permittees must follow the procedures and plans described in detail in the permit application dated April 2, 2018, and as further amended, which are hereby incorporated by reference. The permit application dated April 2, 2018, is a revised version of the complete permit application that was submitted in a timely and complete manner on April 26, 2017 and incorporates changes to that permit application to address comments and questions from EPD.
2. The Permittees shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility, which changes the performance of the permitted facility with respect to any regulated activities (such as temporary storage of hazardous wastes), or would adversely impact any solid waste management unit, area of concern or the areas contaminated by them, including voluntary corrective measures.
3. The Permittees shall maintain at the facility until termination of this permit, and have available upon request the following documents and amendments, revisions and modifications to these documents:
 - (a) Complete copy of this permit and permit application;
 - (b) Personal training documents and records;
 - (c) Contingency Plan;
 - (d) Closure and Post-Closure Care Plans;

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

- (e) Cost estimate for facility closure and post-closure care;
 - (f) Financial Assurance instrument for closure and post-closure care;
 - (g) Inspection logs; and
 - (h) Groundwater sampling and analysis plan.
4. All amendments, revisions and modifications to any plan or cost estimates required by this permit shall be submitted to the Director for approval and permit modification as required by applicable rules.
 5. When the Permittees become aware that the Permittees 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, the Permittees shall promptly submit corrected facts or information.
 6. The Permittees shall at all times properly operate and maintain all facilities which are installed or used by the Permittees 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 procedures. This provision requires the operation of a back-up or auxiliary facility or similar systems only when necessary to achieve compliance with the conditions of this permit.
 7. The Permittees may not commence treatment, storage or disposal of hazardous waste at any new or substantially modified portion of the facility until the Permittees have submitted to the Director by certified mail, or hand delivery, a letter signed by the Permittees and a registered professional engineer or, when appropriate, registered professional geologist, stating that the facility has been constructed or modified in compliance with the permit where appropriate; and the Director has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or the Director has either waived the inspection of, or within fifteen (15) days has not notified the Permittees of his or her intent to inspect.
 8. The Permittees shall treat, store and dispose of all contaminated groundwater and other contaminated environmental media in accordance with all applicable Federal, State and local laws.
 9. The Permittees must comply with 40 CFR 264.148 whenever necessary.

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

I.C. Monitoring and Reporting

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 261. Laboratory methods for evaluating a waste sample must be those specified in the most recent editions of Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW 846 or Standard Methods for the Examination of Water and Wastewater; (or an equivalent method as specified in the Waste Analysis Plan). Sampling and analyses of soil, groundwater, sediment and/or surface water samples shall be conducted in accordance with methods and procedures acceptable to the Director.
2. The Permittees shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report, or record. These periods are automatically extended during the course of any unresolved enforcement action regarding this facility and also may be extended at any time at the Director's discretion.
3. The Permittees shall maintain on-site records for all groundwater monitoring wells noted in the permit and associated groundwater surface elevations, including groundwater flow rate and direction for the active life of the facility and for the post closure care period as well.
4. Records of monitoring information shall include:
 - (a) The date, exact place, and time of sampling or measurements;
 - (b) The individual(s) who performed the sampling or measurements;
 - (c) The date(s) analyses were performed;
 - (d) The individual(s) who performed the analyses;
 - (e) The analytical techniques or methods used and the method of sample preservation and quality assurance methods; and
 - (f) The results of such analyses and measurements.
5. The Permittees shall report to the Director or his representatives orally as soon as possible, but no later than twenty-four (24) hours from the time the Permittees become aware of any circumstances resulting from the operation of the hazardous waste management facility (including periods of non-compliance) which may endanger human health or the environment, including but not limited to:

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

- (a) Release of any hazardous waste, hazardous waste constituents, or hazardous constituents that may cause an endangerment to public drinking water supplies;
- (b) Release or discharge of hazardous waste, hazardous waste constituents, or hazardous constituents, or a fire or explosion, which could threaten human health or the environment outside the facility.

The description of the occurrence 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.
6. Within fifteen (15) days of becoming aware of any reportable incident as in Condition I.C.5. above which may endanger human health or the environment, the Permittees shall submit a written report of the incident covering the following:
- (a) Description of occurrence as in Condition I.C.5. above;
 - (b) Cause of occurrence;
 - (c) Period of occurrence, including exact dates and times;
 - (d) Time occurrence expected to continue (if not already corrected); and
 - (e) Steps taken or planned to reduce, eliminate and prevent recurrence.
7. Reports of noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.
8. The Permittees shall report instances of non-compliance, other than those described in Conditions I.C.5. and I.C.7., semi-annually on July 15 (covering January 1 - June 30) and January 15 (covering July 1 – December 31). The report shall cover the information requested in Condition I.C.5. for each incident.
9. All reports or other information requested by the Director shall be signed and certified according to the requirements in 40 CFR 270.11.

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

10. All geologic and engineering reports required by this permit shall be signed and sealed by the appropriate Georgia registered professional as defined by state law. Additionally, the following certification statement shall accompany reports containing groundwater data or interpretation:

I certify that I am a qualified groundwater scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgements regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared by myself or by a subordinate working under my direction.

I.D. Responsibilities

1. Right of Entry. The Permittees shall allow the Director of EPD, the Regional Administrator of EPA, and/or their authorized representatives, agents, or employees, upon the presentation of credentials and other documents as may be required by law to:
 - (a) Enter at reasonable times upon the Permittees' premise where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - (d) Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Georgia Hazardous Waste Management Act, any substances or parameters at any location.
2. Transfer of Permits. This permit is not transferable to any persons except after notice to the Director. This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to 40 CFR 270.40(b) or 270.41(b)(2). Before transferring ownership or operation of the facility, the Permittees shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270.
3. Duty to Comply. The Permittees shall comply with all conditions of this permit, except to the extent and for the duration such non-compliance is authorized by an

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

emergency permit. Any other non-compliance with this permit constitutes a violation of the Georgia Hazardous Waste Management Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification or denial of a permit renewal application.

4. Duty to Reapply. If the Permittees wish to continue an activity regulated by this permit after the expiration date of this permit, the Permittees must submit a complete application for a new permit at least one hundred eighty (180) days before this permit expires. Pursuant to 40 CFR 270.51, this permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittees have submitted a timely and complete application for a new permit and, through no fault of the Permittees, the Director has not issued a new permit on or before the expiration date of this permit.
5. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the Permittees 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.
6. Duty to Mitigate. The Permittees shall take all reasonable steps to minimize or correct any adverse impact on the environment or human health resulting from non-compliance with this permit.
7. Duty to Provide Information. The Permittees 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 the permit. The Permittees shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
8. Anticipated Non-Compliance. The Permittees shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in non-compliance with permit requirements.
9. Electronic Records. Where this permit requires Permittees to maintain records or documents at the facility, the Permittees may satisfy such a requirement through the use of electronic records that are readily accessible at the facility, provided that the Permittees notify EPD in writing of the type of records or documents that the Permittees intend to maintain electronically, the format of those files and the steps that Permittees will take to ensure that the electronic versions of the records or documents reflect the final version such records or documents (as opposed to superseded drafts).

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

I.E. Definitions

For purposes of this permit, terms used herein shall have the same meaning as those in 40 CFR Parts 124, 260, 264 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.

1. Area of Concern (AOC) for the purpose of this permit includes any area having a probable release of a hazardous waste, hazardous constituent, or hazardous waste constituent which is not from a Solid Waste Management Unit and is determined by the Director to pose a current or potential threat to human health or the environment. Such areas of concern may require investigations and remedial action as required under the Georgia Hazardous Waste Management Act, §12-8-60, *et seq.* and 40 CFR 270.32(b)(2) in order to ensure adequate protection of human health and the environment.
2. Contamination for the purposes of this permit refers to the presence of any hazardous waste, hazardous waste constituents or hazardous constituents in a concentration which exceeds the naturally or anthropogenic occurring concentrations of that waste or constituent in the immediate vicinity of the facility (in areas not affected by the facility).
3. Corrective Action for prior or continuing releases from solid waste management units, as well as for other releases as described in Condition I.E.8., below, for the purposes of this permit shall be as specified in 40 CFR 264.101 and may include "corrective action" as provided for in 40 CFR 264.100 and other remedial actions for any environmental media as deemed appropriate by the Director to protect public health or the environment. The terms "releases" and "other releases", when used in reference to corrective action requirements of this permit, shall not include releases that the Permittees can demonstrate have been fully remediated within 30 days of discovery.
4. Director shall mean the director of the EPD or his/her authorized representative.
5. EPD shall mean the Georgia Environmental Protection Division of the Department of Natural Resources and any successor departments or agencies of the State of Georgia.
6. Facility for purposes of this Permit includes all contiguous land and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage,

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

or disposal operational units (e.g., one or more landfills, surface impoundments, or combination of them). The facility is described in the Permit Application dated April 2, 2018, and as further amended, in the site description in Section B and Figure B-1. For the purposes of implementing corrective action under 40 CFR 264.101, a facility includes all contiguous property under control of the owner or operator seeking a permit under the Georgia Hazardous Waste Management Act.

7. Hazardous Constituents for the purpose of this permit are those substances listed in 40 CFR 261 Appendix VIII and 40 CFR 264 Appendix IX, as revised or superseded.
8. Release for the purposes of this permit includes any unpermitted spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any hazardous waste, hazardous waste constituents or hazardous constituents.
9. Solid Waste Management Unit for the purposes of this permit includes, but is not limited to, any landfill, surface impoundment, waste pile, land treatment unit, incinerator, injection well, tank (including storage, treatment, and accumulation tanks), container storage unit, wastewater treatment unit, including all conveyances and appurtenances used in waste management or storm water handling, elementary neutralization unit, transfer station, or recycling unit from which hazardous waste, hazardous waste constituents or hazardous constituents might migrate, irrespective of whether the units were intended for the management of solid and/or hazardous waste.

SECTION II. HAZARDOUS WASTE CENTRAL ACCUMULATION AREA

II.A. General

The conditions in this section apply to the hazardous waste storage building and concrete slab that has been converted to a less than ninety (90) day Hazardous Waste Central Accumulation Area depicted in Figure B-1 and Figure E-1 of the April 2, 2018 permit application, and as further amended.

II.B. Conditions Related to the Central Accumulation Area

1. Hazardous waste may be stored in the Central Accumulation Area for no longer than ninety (90) days.
2. Operation of the Central Accumulation Area is subject to 40 CFR Part 262.

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

3. Closure of the Central Accumulation Area must be conducted in accordance with Conditions II.B.4 through II.B.9 as described below. Compliance with Conditions II.B.4 through II.B.9 is deemed to satisfy the requirements of 40 CFR 262.17(a)(8).
4. The following activities must be carried out as prescribed in 40 CFR Part 264 Subparts G and H:
 - (a) Closure performance standard - 40 CFR 264.111 and 40 CFR 264.112;
 - (b) Closure in accordance with approved plan - 40 CFR 264.113;
 - (c) Amendment of closure plan and notification of closure - 40 CFR 264.112(b) and (c);
 - (d) Disposal or decontamination of equipment - 40 CFR 264.114;
 - (e) Certification of Closure - 40 CFR 264.115;
 - (f) Financial Assurance for closure. Continuous compliance with 40 CFR 264.143 (or 40 CFR 264.146) must be maintained by the Permittees for the amount of the cost estimate for closure as required by 40 CFR 264.142 until released by the Director as provided in 40 CFR 264.143(i); and
 - (g) Revision of closure cost estimate- 40 CFR 264.142.
5. In accordance with 40 CFR 264.112(d), the Permittees must notify the Director in writing at least forty-five (45) days prior to the date on which the Permittees expect to begin final closure. The date when the Permittees “expect to begin closure” must be no later than thirty (30) days after the date on which the Central Accumulation Area receives the known final volume of hazardous wastes.
6. Removal of hazardous wastes from the Central Accumulation Area must be completed no later than ninety (90) days after the final receipt of hazardous wastes.
7. Closure of the Central Accumulation Area must be completed within one hundred and eighty (180) days after the final receipt of hazardous wastes. The Permittees must close the Central Accumulation Area in accordance with the closure provisions for container storage areas in 40 CFR Part 264, Subpart G, 40 CFR 264.178, and the closure plan in Section E of the permit application, dated April 2, 2018, and as further amended.
8. If the Permittees are unable to meet the closure performance standards in 40 CFR 264.178, then the Permittees must comply with the requirements contained in 40 CFR 264.117-120.
9. In accordance with 40 CFR 264.115, within sixty (60) days after completion of closure, the Permittees must submit to the Director, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

in Section E of the permit application dated April 2, 2018, and as further amended. The certification must be signed by the Permittees and by a qualified Professional Engineer.

SECTION III. POST-CLOSURE CARE FOR CLOSED SURFACE IMPOUNDMENTS

III.A. Unit Identification

The Permittees shall provide post-closure care for five closed surface impoundments collectively known as the Closed Surface Impoundments. The locations of the closed impoundments are identified on Figure B-1 of the April 2, 2018 permit application, and as further amended.

The surface impoundments were historically used to hold wastewater resulting from the production of toxaphene. Production of toxaphene at the facility ceased in 1980. The impoundments were subsequently “closed by removal” in accordance with applicable standards under 40 CFR Part 265.

III.B. Waste Identification

Hazardous waste D015 was managed in the surface impoundments until closure in 1984. All sludges, wastes and waste residues were removed from the unsaturated zone beneath the impoundments during closure.

III.C. Monitoring and Inspection

The Permittees shall follow the inspection schedule for the closed surface impoundments as discussed in Sections D and E of the permit application dated April 2, 2018, and as further amended.

III.D. Post-Closure Care Period

During the facility’s post-closure care/compliance period, the Director may, in accordance with the permit modification procedures in 40 CFR Parts 124 and 270, extend the post-closure period for the Closed Surface Impoundments if he or she finds that the extended period is necessary to protect human health and the environment pursuant to 40 CFR 264.117(a)(2)(ii).

III.E. Conditions Related to the Closed Surface Impoundments

The following activities must be carried out for the closed surface impoundments as prescribed in 40 CFR Part 264, Subparts G and H:

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

1. Post-closure care and use of property - 40 CFR 264.117;
2. Post-closure plan and amendment of plan - 40 CFR 264.118;
3. Post-closure notices - 40 CFR 264.119;
4. Certification of completion of post-closure care - 40 CFR 264.120;
5. Financial Assurance for post-closure. Continuous compliance with 40 CFR 264.145 (or 40 CFR 264.146) must be maintained by the Permittees for the amount of the cost estimate for post-closure as required by 40 CFR 264.144 until the released by the Director as provided in 40 CFR 264.145(i); and
6. Revision post-closure cost estimate - 40 CFR 264.144.

SECTION IV. GROUNDWATER MONITORING

IV.A. Monitoring Well Location and Construction

1. The Permittees shall install and/or maintain a groundwater monitoring system at the facility consistent with the requirements of 40 CFR 264.95 and 264.97 as specified below:
 - (a) The Permittees shall maintain the groundwater monitoring wells identified on Figure C-2 of the April 2, 2018 permit application, and as further amended.
 - (b) The Director has determined that monitoring wells POC-1S, POC-1D, POC-2S, POC-2D, POC-3S, and POC-3D shall define the point of compliance as described in 40 CFR 264.95 for the closed surface impoundments.
2. The Permittees shall install and maintain additional monitoring wells as necessary to assess changes in the rate and extent of any plume of contamination, or as deemed necessary to be consistent with 40 CFR 264.95 and 264.97. A plan for the design, location and installation of any additional monitoring wells shall be submitted ninety (90) days prior to installation which, at a minimum, shall include:
 - (a) Well construction techniques including casing depth and proposed total depth of well(s);
 - (b) Well development method(s);
 - (c) A description of well construction materials;
 - (d) A schedule of implementation for construction; and
 - (e) Provisions for determining the hydraulic conductivity of the applicable aquifer unit(s) at the location of the new well(s).

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

IV.B. Monitoring Program

The Permittees shall implement the groundwater monitoring program at the facility as required to demonstrate the effectiveness of the groundwater monitoring as specified below:

1. The Permittees shall collect, preserve and analyze all groundwater samples as required by Condition IV.C.
2. The Permittees shall determine groundwater quality in accordance with the monitoring program identified in Table 2.
3. The groundwater monitoring program must include a determination of the groundwater surface elevation from all monitoring wells identified in Condition IV.A. each time groundwater is sampled.
4. The Permittees shall determine the groundwater flow rate and direction in the uppermost aquifer at least semi-annually.
5. For those constituent(s) specified in Table 1 for which background concentrations are listed, the Permittees shall establish background concentrations in accordance with 40 CFR 264.97(g).
6. Pursuant to 40 CFR 264.99(g), the Permittees shall analyze samples from one of the point of compliance wells: POC-1S, POC-2S, or POC-3S, plus any additional wells specified by the Director, for all constituents in Appendix IX of 40 CFR Part 264 at least annually to determine whether additional hazardous constituents are present in the uppermost aquifer and, if so, at what concentrations. The Appendix IX sampling shall be rotated among the point of compliance wells so that each well is sampled every three years. The Appendix IX results must be submitted within 120 days of the sampling. If the Permittees find Appendix IX constituents in the groundwater that are not identified in Table 1, then the Permittees may resample within one (1) month of receiving the results of the initial analysis, repeating the analysis. If the second analysis confirms the presence of new hazardous constituents, then the Permittees must report the concentrations of these additional hazardous constituents to the Director within seven (7) days of receiving the results of the second analysis, and add them to Table 1. Alternately, if the second analysis confirms the presence of the new Appendix IX constituents, the Permittees may, at the time of the next sampling event required by Condition IV.B.2., sample the well that the new Appendix IX constituents were detected in, the nearest down-gradient well, and any additional down-gradient wells to which groundwater may have traveled (based upon the evaluation required by Condition IV.B.4.) for the new Appendix IX constituents. If the new Appendix IX constituents are not identified

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

in any of these wells, the Permittees are relieved of the requirement to add the new constituents to Table 1. If the Permittees choose not to resample under either of the above regimes, then the Permittees must report the concentrations of those additional hazardous constituents to the Director within seven (7) days after receiving the results of the initial analysis and request that these hazardous constituents be added to Table 1.

IV.C. Sampling and Analysis Procedures

The Permittees shall use the following techniques and procedures when obtaining and analyzing samples from the groundwater monitoring wells described in Condition IV.A. to provide a reliable indication of the quality of the groundwater:

1. Samples shall be collected in accordance with the latest version of the US EPA, Region 4, SESD, Field Branches Quality System and Technical Procedures for Groundwater Sampling.
2. Samples shall be preserved, shipped, and analyzed in accordance with the latest version of the US EPA, Region 4, SESD, Field Branches Quality System and Technical Procedures and the latest version of US EPA, Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846.
3. Samples shall be tracked and controlled using the chain of custody procedures specified in Appendix C-4 of the April 2, 2018 permit application, and as further amended.

IV.D. Reporting, Recordkeeping and Response

1. The Permittees shall maintain at the facility and have available upon request all monitoring, testing and analytical data obtained pursuant to Condition IV.B. and Section V. of this permit. The Permittees shall submit a report to the Director on a semi-annual basis that includes all monitoring, testing and analytical data obtained under Condition IV.B. The report shall be submitted within one hundred twenty (120) days after the date of the completion of the sampling event. The following information must be provided in the report:
 - (a) A clear indication of those hazardous constituents which exceed the groundwater protection standard established under Condition V.I.;
 - (b) A comparison with previous monitoring data;
 - (c) A discussion of trends toward improvement or degradation of groundwater quality; and
 - (d) The assessment of groundwater flow rate and direction required under Condition IV.B.4.

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

SECTION V. POST CLOSURE CARE AND CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS AND AREAS OF CONCERN

V.A. Applicability

1. The requirements of this section apply to the determination of the need for and subsequent implementations of corrective action for releases from all solid waste management units (SWMUs), including the Closed Surface Impoundments described in Condition III.A., and areas of concern (AOC) contained within the facility property boundary as required by 40 CFR 264.101(a) and, as required by 40 CFR 264.101(c), those extending beyond the facility property boundary. The requirements of this section apply specifically to the following SWMUs and AOC identified by the RCRA Facility Assessment Report conducted by EPD and dated May 1992:
 - (a) The SWMUs and AOC identified in Appendix A-1, which require further investigations.
 - (b) The SWMUs and AOC identified in Appendix A-2, which require no further investigations at this time.
 - (c) The SWMUs and AOC identified in Appendix A-3, which are regulated units as defined by 40 CFR 264.90(a)(2).
 - (d) The SWMUs and AOC identified in Appendix A-4, which require Corrective Action.
 - (e) Any additional SWMUs or AOC discovered after the date of issuance of this permit due to groundwater monitoring, on-going field investigations, environmental audits and other means.

V.B. Notification and Assessment Requirements for Newly Identified SWMUs and AOCs

1. Within fifteen (15) days of the Permittees' discovery of any SWMU or AOC under Condition V.A.1.(e), the Permittees shall notify the Director in writing of such discovery.
2. The Director shall notify the Permittees in writing of the discovery of any SWMU or AOC under Conditions V.A.1.(e).
3. Within thirty (30) days of the Permittees' discovery pursuant to Condition V.B.1. or within thirty (30) days of receipt of the Director's notification under Condition V.B.2., the Permittees shall submit to the Director the following information for each SWMU or AOC:

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

- (a) Location on a topographic map of appropriate scale as required under 40 CFR 40 CFR 270.14(b)(19);
 - (b) Designation of type and function of the unit;
 - (c) General dimensions capacities and structural description (supply any available plans/drawings);
 - (d) Dates that the unit was operated;
 - (e) Specifications of all wastes that have been managed at/in the SWMU or AOC to the extent available; and
 - (f) All available information pertaining to any release of hazardous waste, hazardous constituents or hazardous wastes constituents (to include groundwater data, soil analyses, air and/or surface water data) from the SWMU or AOC.
4. The Director shall review the information submitted pursuant to Condition V.B.3. and notify the Permittees in writing as to the need for further investigation and/or corrective action as required by Conditions V.D., V.F. or V.G.

V.C. Notification Requirements for Newly Discovered Releases at Previously Identified SWMUs and AOCs

1. Within thirty (30) days of the Permittees' discovery of a previously unidentified release(s) from any SWMU or AOC identified under Condition V.A.1., the Permittees shall notify the Director in writing of such discovery.
2. The Director shall notify the Permittees in writing of the discovery of any previously unidentified release(s) from any SWMU or AOC previously discovered under Condition V.A.1.
3. Within ninety (90) days of the date of the Permittees' discovery under Condition V.C.1. or within ninety (90) days of the date of receipt of the Director's notification under Condition V.C.2., the Permittees, if requested by the Director, shall submit to the Director a RCRA Facility Investigation Work Plan pursuant to Condition V.F.

V.D. Verification Investigation

1. The Director may require the Permittees to submit a Verification Investigation (VI) Work Plan for any SWMU or AOC discovered under Condition V.A.1.(e). on a schedule to be determined by the Director. The VI Work Plan shall describe all actions necessary to verify the presence or absence of a release from any SWMU or AOC. The VI Work Plan shall include a schedule of implementation, which includes intermediate milestones beginning with the Permittees' receipt of the

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

Director's written approval of the VI Work Plan continuing through submission of the VI Report required by Condition V.D.3.

2. Upon receipt of the Director's written approval of the VI Work Plan, the Permittees shall implement the Work Plan in accordance with the schedule of implementation contained therein.
3. The Permittees shall submit a VI Report in accordance with the schedule of implementation contained within the approved VI Work Plan. The VI Report shall describe all actions taken to verify the presence or absence of releases including all data collected during the VI. The Director shall review the VI Report and notify the Permittees in writing of the need for further investigation and/or corrective action pursuant to Condition V.F. and/or V.G.

V.E. Interim Measures (IM)

1. Upon the Director's concurrence, the Permittees may conduct interim measures to contain, remove or treat contamination resulting from releases from any SWMU or AOC as necessary to protect human health and the environment. Such interim measures may be conducted concurrently with any investigations required by this permit.
2. Within ninety (90) days of the Permittees' determination that interim measures are appropriate and should be implemented, the Permittees shall submit to the Director an Interim Measures (IM) Workplan. The IM Workplan shall describe the measures that will be taken on an interim basis to contain, remove or treat contamination resulting from releases from the SWMU or AOC that is the subject to the IM Workplan. The IM Workplan shall include a schedule of implementation which includes intermediate milestones beginning with the Permittees' receipt of the Director's written approval of the IM Workplan and continuing through submission of the IM Report required by Condition V.E.5.
3. Upon receipt of the Director's written approval of the IM Workplan, the Permittees shall implement the Workplan in accordance with the schedule of implementation contained therein.
4. The Permittees shall provide written notice to the Director as soon as practicable of any planned changes, reductions or additions to the interim measures described in the IM Workplan.
5. The Permittees shall submit an IM Report in accordance with the schedule of implementation contained in the approved IM Workplan. The IM Report shall

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

describe all interim measures taken to contain, remove or treat contamination resulting from releases from any SWMU or AOC pursuant to the IM Workplan. The IM Report shall also provide a summary of all data or other information obtained during implementation of the IM Workplan and a summary of the effectiveness of the interim measures in achieving the objectives of the interim measures.

V.F. RCRA Facility Investigation (RFI)

1. By letter dated April 29, 2015, EPD approved the Final RCRA Facility Investigation Report for Soils and the Brunswick Groundwater RFI III Report submitted on behalf of the Permittees. Since that time, the Permittees have conducted additional activities and investigations pursuant to this Permit. Conditions V.F.2 through V.F.7, below, describe requirements in the event that the Director issues a written notice to the Permittees pursuant to Conditions V.B.4., V.C.3. and/or V.D.3., above.
2. Within ninety (90) days of the date of receipt of the Director's written notice pursuant to Conditions V.B.4., V.C.3. and/or V.D.3., the Permittees shall submit to the Director a complete RFI Work Plan for the SWMU or AOC that is the subject of the written notice.
3. The RFI Work Plan shall provide a description of the specific actions necessary to determine the nature and extent of releases from the SWMU or AOC that is the subject of the written notice provided by the Director pursuant to Condition V.F.2, including potential migration pathways for those releases (e.g., air, land, surface water, and groundwater), actual or potential receptors and applicable background concentrations. The Permittees must provide sufficient justification that migration through a potential pathway is not likely if a potential migration pathway associated with a release is not included in the RFI Work Plan. Such deletions are subject to the approval of the Director.
4. The RFI Work Plan shall include a schedule of implementation, which includes intermediate milestones beginning with the Permittees' receipt of the Director's written approval of the RFI Work Plan and continuing through submission of the RFI Report required by Condition V.F.5. Upon approval by the Director, the Permittees shall implement the RFI Work Plan in accordance with the schedule contained in the approved Work Plan.
5. The Permittees shall submit a complete RFI Report in accordance with the schedule of implementation contained in the approved RFI Work Plan. The Report shall provide a summary of all activities undertaken during the RFI to implement the

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

approved RFI Work Plan. The RFI Report shall provide a complete description of the nature and extent of all releases evaluated during the RFI including sources, migration pathways, actual or potential receptors and applicable background concentrations. The RFI Report shall address all releases which extend beyond the facility property boundary unless the Permittees demonstrate to the Director's satisfaction that despite the Permittees' best efforts, the Permittees were unable to obtain permission to undertake actions required by the Work Plan, or such action is not necessary to protect public health and the environment.

6. The Director shall review the RFI Report required under Condition V.F.5. and notify the Permittees in writing of the need for further investigation and/or corrective action as required by Condition V.G. and 40 CFR 264.101(a) and 40 CFR 264.101(c).
7. Within sixty (60) days of the Permittees' receipt of the Director's written notice for further investigation referenced in Condition V.F.6., the Permittee must address, to the Director's satisfaction, all comments and concerns included in the Director's written notice referenced in Condition V.F.6.

V.G. Corrective Action for SWMUs and /or AOCs

1. Within ninety (90) days after the date of execution of this permit, the Permittees shall submit to the Director a Corrective Action Plan (CAP) pursuant to 40 CFR 264.101. The CAP shall provide a description of the corrective measures to be taken with regard to releases from any SWMU and AOC identified in Appendix A of this permit as necessary to protect human health and the environment. The CAP shall be submitted as a request for permit modification in accordance with 40 CFR 270.41 and 40 CFR 270.42. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility's boundary where offsite access is denied as required under 40 CFR 264.101(c).
2. Because releases to groundwater from the Closed Surface Impoundments have commingled with releases to groundwater from one or more of the SWMUs and AOCs described in Condition V.A.1., upon approval by the Director of the CAP described in Condition V.G.1., the CAP will satisfy the requirements of 40 CFR 264.91 through 264.100 and Sections V.H., V.I. and V.J. of this permit.
3. Within ninety (90) days of the Permittees' receipt of the Director's written notice referenced in Condition V.F.6. that a CAP is required for the SWMU or AOC covered by the notice, the Permittees shall submit a CAP to EPD. The CAP shall provide a description of the corrective measures to be taken with regard to releases

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

from any SWMU and/or AOC identified in Condition V.F.5. as necessary to protect human health and the environment. The CAP shall be submitted as a request for permit modification in accordance with 40 CFR 270.41 and 40 CFR 270.42.

4. Any CAP required by this section shall include a schedule of implementation, intermediate milestones beginning with the issuance of the permit modification requested pursuant to Condition V.G.1. or V.G.3. and continuing through the compliance period.
5. Any CAP required by this section shall include a cost estimate and demonstration of financial responsibility for such corrective action, as required by 40 CFR 264.101(b), O.C.G.A. §12-8-68, and Rule 391-3-11-.05.
6. The Director shall review the CAP and notify the Permittees in writing of the need for further corrective action measures as required by 40 CFR 264.101(a) and 40 CFR 264.101(c), or of an approval of the CAP.
7. Within sixty (60) days of Permittees' receipt of Director's written notice for further corrective action measures referenced in Condition V.G.6., the Permittees must address, to the Director's satisfaction, all comments and concerns included in the Director's written notice referenced in Condition V.G.6.

V.H. Post Closure Care Corrective Action Program for Closed Surface Impoundments

1. Until the Director approves a CAP pursuant to Condition V.G.1., the Permittees shall comply with the Post Closure Care Plan contained in the April 2, 2018 permit application, and as further amended.
2. If Permittees do not submit a CAP pursuant to Condition V.G.1, or the Director disapproves the CAP that is submitted (including revisions to address comments from the Director), then Permittees shall:
 - (a) Conduct a corrective action program for releases to groundwater originating from the Closed Surface Impoundments to remove or treat in place any hazardous constituents that exceed concentration limits in Table 1 in groundwater between the point of compliance and the downgradient property boundary as required under 40 CFR 264.100(e)(1); and
 - (b) Conduct corrective action for releases to groundwater originating from the Closed Surface Impoundments beyond the property boundary as required under 40 CFR 264.100(e)(2), unless the Permittees can demonstrate to the satisfaction of the Director that, despite the Permittees' best efforts, the

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

Permittees were unable to obtain the necessary permission to undertake such action beyond the property boundary, or such action is not necessary to protect public health or the environment.

3. Compliance Period for Closed Surface Impoundments
 - (a) The compliance period under 40 CFR 264.96 shall continue until the end of the post-closure care period established by Condition III.D. and defined in 40 CFR 264.117.
 - (b) The Permittees shall assure that groundwater monitoring and corrective action measures necessary to achieve compliance with 40 CFR 264.100 and the groundwater protection standard are taken during the compliance period.
 - (c) If the Permittees are engaged in a corrective action program at the end of the compliance period as defined in Condition V.H.3.(a) above, the compliance period is extended until corrective action as required under 40 CFR 264.100 has been terminated, as specified in Condition V.H.9.
4. The Permittees are not relieved of all responsibility to clean up a release to groundwater from the Closed Surface Impoundments that has migrated beyond the facility's boundary where off-site access is denied as required under 40 CFR 264.100(e)(2).
5. The corrective action system for the Closed Surface Impoundments must be installed and operated in such a manner as to mitigate the release of any hazardous waste, hazardous constituent(s) or hazardous waste constituent(s) to the environment.
6. The corrective action system for the Closed Surface Impoundments must be installed and operated in a manner so as to preclude further migration of the contaminant plume.
7. The Permittees shall treat, store, and dispose of all contaminated groundwater in accordance with all applicable federal, state and local laws.
8. Compliance with the groundwater protection standard, as defined under Condition V.I. will be based upon groundwater monitoring data obtained under Condition IV.B.2 that indicate that all constituents listed in Table 1 no longer exceed the groundwater protection standard at the point of compliance and throughout the

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

contaminant plume. Comparisons for the purpose of determining compliance shall be made utilizing the statistical procedure described in 40 CFR 264.97(h) and (i).

9. If the groundwater protection standard is not met during the compliance period, the Permittees must continue corrective action for the Closed Surface Impoundments to the extent necessary to ensure that the groundwater protection standard is not exceeded. Corrective action must continue until the groundwater protection standard has not been exceeded for three consecutive years, as required under 40 CFR 264.100(f).

V.I. Groundwater Protection Standard

1. The groundwater protection standard as required under 40 CFR 264.92 is set forth in Table 1 which lists the hazardous constituents and their respective concentration limits as required under 40 CFR 264.93 and 264.94, respectively.
2. The groundwater protection standard further applies to all hazardous waste, hazardous waste constituent, or hazardous constituent releases from the Closed Surface Impoundments as deemed appropriate by the Director to protect human health and the environment.

V.J. Permit Modification

1. If the Permittees at any time determine that the corrective action program no longer satisfies the requirements of 40 CFR 264.100 or Condition V.H. for releases of hazardous waste, hazardous waste constituents, or hazardous constituents that originate from the Closed Surface Impoundments, the Permittees must, within ninety (90) days, submit an application for a permit modification to make any appropriate changes in the program.
2. If the Permittees meet or exceed the requirements of 40 CFR 264.100 and meet the groundwater protection standard at the point of compliance and throughout the contaminant plume for three consecutive years, the Permittees may submit an application for a permit modification pursuant to 40 CFR 270.41 and 40 CFR 270.42 to terminate corrective action for the Closed Surface Impoundments.

V.K. Schedule of Compliance

1. All plans and reports required by this Section are subject to the approval of the Director prior to implementation. The Director shall specify in writing any deficiencies of any plan and/or report submitted by the Permittees pursuant to this

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

Section of the permit, including a schedule for resubmission of revised documents to address said deficiencies. The Permittees shall address all comments and concerns included in the Director's written notice of deficiency and submit revised documents in accordance with the schedule approved by the Director.

2. For any schedule of implementation required by this Section, if the time required to complete any interim activity is more than one (1) year, the schedule shall specify interim dates for the submission of reports of progress towards satisfaction of the interim requirements.
3. All plans and reports shall be submitted in accordance with the approved schedule. Extensions of the due date for the submittal of any plan or report pursuant to the approved schedule or otherwise required by the permit may be granted by the Director based on the Permittees' demonstration that sufficient justification for the extension exists. Extensions of over thirty (30) days must be requested in writing.
4. Upon approval by the Director, all plans and reports shall be enforceable as Conditions of this Permit. If at any time the Permittees determine that any plan, report or schedule required under this Section no longer satisfies the requirements of this permit or 40 CFR 264.101, the Permittees must submit an amended plan, report or schedule to the Director within thirty (30) days of such determination.
5. If at any time the Director determines that any plan, report or schedule required under this Section no longer satisfies the requirement of this permit or 40 CFR 264.101, the Director will so notify the Permittees in writing and request that an amended plan, report or schedule be submitted within sixty (60) days of such determination.

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

TABLE 1. GROUNDWATER PROTECTION STANDARD

<u>Hazardous Constituent</u>	<u>Concentration Limit (mg/L)</u>
<i>Volatile organics</i>	
acetone	Background*
benzene	"
2-butanone (MEK)	"
chlorobenzene	"
chloroform	"
carbon disulfide	"
carbon tetrachloride	"
1,2- dichlorobenzene	"
1,4- dichlorobenzene	"
1,1-dichloroethane	"
1,1-dichloroethene	"
cis-1,2-dichloroethene	"
1,2-dichloropropane	"
ethyl benzene	"
methyl isobutyl ketone (MIBK)	"
methylene chloride	"
p-isopropyltoluene (p-cymene)	"
tetrachloroethene	"
toluene	"
1,2,4-trichlorobenzene	"
Trichlorethylene	"
1,2,3-trichloropropane	"
vinyl chloride	"
xylenes	"
<i>Semi-Volatile organics</i>	
acetophenone	Background*
benzo(g,h,i)perylene	"
bis(2-ethylhexyl)phthalate	"
2-chlorophenol	"
dibenz(a,h)anthracene	"
2,4-dimethylphenol	"
indeno(1,2,3-cd)pyrene	"
m & p cresol (3 & 4 methylphenol)	"
naphthalene	"
phenol	"
2,4,6-trichlorophenol	"

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

<i>Pesticides</i>	
alpha BHC	Background*
delta BHC	"
gamma BHC (lindane)	0.004**
toxaphene (technical)	0.005**
toxaphene (TAUC)	0.005**
<i>Inorganics</i>	
barium	1.0**
beryllium	Background*
chromium	0.05**
cobalt	0.0077***
copper	Background*
nickel	0.0091***
selenium	0.01**
vanadium	Detection Limit***
zinc	0.0645***
<i>Dioxins/Furans</i>	
Hexachlorodibenzofurans (HxCDF), Total	Background*
Hexachlorodibenzo-p-dioxins (HxCDD), Total	"
Pentachlorodibenzofurans (PeCDF), Total	"
Pentachlorodibenzo-p-dioxin (PeCDD), Total	"
Tetrachlorodibenzofuran (TCDF), Total	"
Tetrachlorodibenzodioxin (TCDD), Total	"
2,3,7,8-TCDD	"
<i>Miscellaneous</i>	
formaldehyde	Background*
sulfide	Background*

* To be determined according to procedures specified in 40 CFR 264.97

** Concentration limit derived from 40 CFR 264.94 Table 1.

*** Derived from site-specific background data

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

TABLE 2. GROUNDWATER MONITORING PROGRAM

<u>Well</u>	<u>Monitoring Schedule</u>	<u>Required Analysis*</u>
MW-3S	Annual	Volatile Organics, Toxaphene
MW-9S	Annual	Volatile Organics, Toxaphene
MW-12S	Annual	Volatile Organics, Toxaphene
MW-25S	Annual	Volatile Organics, Toxaphene
MW-39I	Annual	Volatile Organics, Toxaphene
MW-42I	Annual	Volatile Organics, Toxaphene
MW-55I	Annual	Volatile Organics, Toxaphene
MW-28D	Annual	Volatile Organics, Toxaphene
MW-39D	Annual	Volatile Organics, Toxaphene
MW-51D	Annual	Volatile Organics, Toxaphene
MW-52D	Annual	Volatile Organics, Toxaphene
MW-55D	Annual	Volatile Organics, Toxaphene
MW-13	Annual	Volatile Organics, Toxaphene
MW-44D	Annual	Volatile Organics, Toxaphene
MW-23	Semi-Annual	Volatile Organics, Semi-Volatile Organics, Pesticides
POC-1S	Annual	Volatile Organics, Semi-Volatile Organics, Pesticides
POC-2S	Annual	Volatile Organics, Semi-Volatile Organics, Pesticides
MW-11DD	Annual	Volatile Organics, Semi-Volatile Organics, Pesticides
MW-12D	Annual	Volatile Organics, Semi-Volatile Organics, Pesticides
MW-15D	Annual	Volatile Organics, Semi-Volatile Organics, Pesticides
MW-43D	Annual	Volatile Organics, Semi-Volatile Organics, Pesticides
POC-2D	Annual	Volatile Organics, Semi-Volatile Organics, Pesticides, Metals
POC-3D	Annual	Volatile Organics, Semi-Volatile Organics, Pesticides, Metals
UP-1DR	Annual	Volatile Organics, Semi-Volatile Organics, Pesticides, Metals
MW-1D	Annual	All Table 1 Constituents
POC-3S	Annual	All Table 1 Constituents
UP-1S	Annual	All Table 1 Constituents
MW-2D	Annual	All Table 1 Constituents
MW-41I	Annual	All Table 1 Constituents

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

* Required Analysis – Constituents listed in Table 1

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

APPENDIX A-1

List of Solid Waste Management Units (SWMUs) which require further investigations:

<u>SWMU Number</u>	<u>SWMU Name</u>
--------------------	------------------

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

APPENDIX A-2

List of Solid Waste Management Units that require no further action at this time:

<u>SWMU Number</u>	<u>SWMU Name</u>
13	Residual Fuel Tank Area

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

APPENDIX A-3

List of Solid Waste Management Units which are regulated units as defined by 40 CFR 264.90(a)(2):

<u>SWMU Number</u>	<u>SWMU Name</u>
10	Former Toxaphene Surface Impoundments
40	Central Accumulation Area (Former Hazardous Waste Storage Area)

Permit Number: HW-052(D&S)-2
 Hercules LLC & Pinova, Inc. - Brunswick, Georgia

APPENDIX A-4

List of Solid Waste Management Units requiring Corrective Action:

SWMU Number	SWMU Name
1	Mill Room Pond
2	Plant Clarifier
3	Former Truck Dumper Area
4	Drum Crushing Unit
5	Former Toxaphene Plant Site
6	Y Tank Farm
7	Vinsol [®] Bins
8	Y-1, Y-2, Y-3 Tank Farm
9	Chemical Plant
11	Former Equalization Basin
12	Former Tank Car Percolation Pits
14	Stillhouse Railcar Loading Area
15	Old Extractor Bldg & Tank Area
16	Sawdust Pile
17	Former Sand Blasting Area
18	Former Sludge Tank Area
19	Sand Filter Drying Bed and Pads
20	Former Amberlite Treatment System
21	Hard Resins Tank Farm Area
22	Terpene Resins Area
23	Pexite Plant Blowdown Area
24	Toxaphene Stormwater Collection Sump
25	Tank Car Cleaning Area
26	Pexite Building Area
27	Resin Remelt & Drum Storage
28	Intermediate Vinsol [®] Bin
29	N-Street Ditch, South Ditch, & Small Branch Ditch
30	Non-Hazardous Waste Storage
31	Former Mercury Absorber Area
32	Staybellite Area
33	Tank Truck Liquid Loading Area
34	Product & Wastewater Piping
35	Former Drum Storage Area
36	Former Kymene Production Area and Tank Farm
37	Basin/Impoundments West of Lift Station 17
38	ICM Recovery Well Area

Permit Number: HW-052(D&S)-2
Hercules LLC & Pinova, Inc. - Brunswick, Georgia

39

Refinery Process Building